Department of Industrial Engineering and Management

# Boundary activities and readiness for change during change program initiation

Päivi Hoverfält

Aalto University

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**Päivi Hoverfält**

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**Abstract**

Multi-project change programs have become increasingly common in both private and public sector organizations. The special characteristics of large and complex programs pose novel kinds of managerial challenges, which prior project management research has not adequately addressed. Furthermore, previous research has mainly viewed projects and other temporary organizations as isolated and independent entities, whereas programs that aim at large-scale change are in many ways embedded in their organizational context.

This dissertation, positioned in the field of project and program management, examines the initiation and planning of change programs. The study explores the activities that the key actors of an emerging program employ in managing the program's interaction with its organizational environment. Viewing programs as temporary organizations, the study adopts the concepts of organizational boundaries and boundary activities from organization theory and applies them to examine the connections between a change program and its parent organization.

The research is conducted as an abductive case study of three large service sector organizations initiating significant change programs. The primary data consists of 58 interviews with people involved in program initiation. The findings show how an emerging change program is in constant interaction with its organizational context. The analysis reveals ten types of boundary activities that the key program actors employ to build, shape, cross and guard the program's boundaries.

The results suggest that active boundary management is associated with establishing readiness for change program implementation, and further propose that the different types of boundary activities contribute to the different aspects of this readiness. The findings specifically highlight the emerging change program's need for autonomy. The study also brings to the fore contextual factors that are proposed as affecting the progress and the success of the early program stages.

The study contributes to the theoretical understanding of how temporary organizations are initiated and how they interact with their context. The findings shed light into the logic of how the boundaries of a temporary organization are formed and how they evolve. The results also extend the concept of readiness for change using evidence from large-scale change programs. For organizations establishing change programs, the findings direct attention to the early program stages and particularly to the means of linking the emerging program to other organizational structures and activities.

**Keywords** program management, project management, temporary organizations, organizational change, organizational boundaries, boundary activities

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**Tiivistelmä**

Monesta toisiinsa liittyvästä projektista koostuvat muutosohjelmat yleistyvät sekä yrityksissä että julkisissa organisaatioissa. Projektijohtamisen tutkimus on tunnistanut monimutkaisten muutosohjelmien erityispiirteitä, mutta niiden vaikutusta muutosohjelmien johtamiseen ei toistaiseksi ole käsitelty riittävästi. Aiempi tutkimus on lisäksi tarkastellut projekteja ja muita tilapäisiä organisaatioita pääosin ympäristöstään irrallisina ja eristettyinä, vaikka etenkin laajaan muutokseen tähtäävät ohjelmat ovat monin tavoin kytköksissä kontekstiinsa.

Tämä projekti- ja ohjelmajohtamisen kenttään sijoittuva väitöstutkimus tarkastelee muutosohjelmien käynnistys- ja suunnitteluvaiheen johtamista. Tutkimus keskittyy ohjelman keskeisten toimijoiden aktiviteetteihin, joilla he hallitsevan ohjelman vuorovaikutusta sen organisaatioympäristön kanssa. Muutosohjelmaa tarkastellaan tilapäisenä organisaationa, ja tutkimuksessa sovelletaan organisaatioteorian käsitteitä organisatorisista rajoista ja rajojen hallinnan aktiviteeteista ohjelman ja sen emo-organisaation välisen yhteyden tarkasteluun.

Abduktiivisena monitapaustutkimuksena toteutetussa tutkimuksessa tarkastellaan kolmea suurta palvelualan organisaatiota, jotka ovat käynnistäneet merkittävän muutosohjelman. Pääasiallisen aineiston muodostavat 58 ohjelmien alkuvaiheeseen osallistuneiden henkilöiden haastattelua. Tulokset osoittavat, että käynnistyvä muutosohjelma on jatkuvassa vuorovaikutuksessa ympäristönsä kanssa. Analyysin perusteella tunnistetaan kymmenen erityyppistä aktiviteettia, joilla ohjelman toimijat muodostavat, muovaavat, ylittävät ja sulkevat käynnistyvän ohjelman rajoja.

Tulosten valossa aktiivinen muutosohjelman rajojen hallinta on yhteydessä ohjelman toteuttamisvalmiuden muodostumiseen. Tulosten perusteella eri rajojen hallinnan aktiviteetit edistävät ohjelman toteuttamisvalmiutta eri näkökulmista. Erityisesti nousee esiin käynnistyvän muutosohjelman tarve autonomialle. Lisäksi tutkimus nostaa esiin kontekstitekijöitä, joiden ehdotetaan vaikuttavan muutosohjelman varhaisen vaiheen etenemiseen ja onnistumiseen.

Tutkimuksen löydökset lisäävät ymmärrystä tilapäisten organisaatioiden syntymisestä ja niiden vuorovaikutuksesta kontekstinsa kanssa. Tulokset havainnollistavat tilapäisen organisaation rajojen muodostumista ja kehitystä. Lisäksi tulokset täydentävät muutosvalmiuden käsitettä muutosohjelman toteuttamisvalmiuden näkökulmasta. Muutosohjelmia toteuttavien organisaatioiden näkökulmasta tulokset kannustavat kiinnittämään huomiota ohjelman alkuvaiheeseen ja erityisesti keinoihin, joilla käynnistyvä ohjelma kytketään organisaation muihin rakenteisiin ja toimintaan.

**Avainsanat** ohjelmajohtaminen, projektijohtaminen, tilapäiset organisaatiot, organisatorinen muutos, organisaation rajat, rajojen hallinnan aktiviteetit

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This dissertation has been a part of a larger research project, STRAP–PPO (Strategic linking of programs for public and private organizations) at Project Business research group, at BIT Research Centre of Aalto University. I would like to thank all the participating organizations and the Finnish Funding Agency for Technology and Innovation (TEKES) for funding the project. I also wish to cordially thank the representatives of the three case organizations for their kind cooperation that has made this dissertation possible.

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Helsinki, April 2012
Päivi Hoverfält

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# 1. Introduction

This chapter provides an introduction to the topic of the dissertation. The theoretical background for the study is discussed, after which the focus of the study and the initial research question are presented. The personal motivation for the study is also discussed. Finally, the structure of the dissertation is described.

## 1.1 Background

Contemporary organizations are characterized by change. Organizational change takes place with increasing frequency and magnitude, and various kinds of change projects are encountered both in the private and the public sector. While small-scale changes occur constantly, many organizations choose to or are forced to go through large and significant changes. As single projects and traditional project management approaches may not measure up to large-scale transformations, complex multi-project change programs have become increasingly common. To give a few examples, such change programs may aim at renewing the organizational governance model or infrastructure, making organizations more customer-oriented, changing the way products and services are produced, establishing new lines of business, or responding to the turbulent economic conditions through organization-wide cost-cutting initiatives. A common feature across the different types of change programs is that they tend to represent a unique and significant challenge for the organization. The future well-being, competitiveness and even survival of the organization may depend on the success of such a program.

To respond to the needs of contemporary organizations, project management research has expanded during the past 15 years from the management of single projects to managing programs that consist of multiple, interrelated projects that together aim at significant change and renewal (e.g. Artto, Martinsuo, Gemünden, & Murtoaro, 2009; Dietrich, 2007; Nieminen & Lehtonen, 2008; Pellegrinelli, 1997, 2002; Thiry, 2002; 2004a, 2004b). Compared to single projects, programs are longer in duration, more complex, involve higher levels of uncertainty, and also

require different management approaches and practices (Artto et al., 2009; Graham, 2000; Pellegrinelli, 1997). To date, empirically rooted research evidence concerning the management of multi-project change programs remains scarce, and processes and practices for program management are still underdeveloped. Although there is a limited amount of prior research on change programs within the project management discipline, organizational change in general has attracted considerable research attention for decades. The literature on organizational change has suggested various models, guidelines and best practices for managing change in organizations (e.g. Fernandez & Rainey, 2006; Greiner, 1967; Kotter, 1995; Lewin, 1947; Phillips, 1983), but it has not traditionally paid much attention to the project or program nature of the change endeavors.

This dissertation examines the management of large-scale change efforts by taking the perspective of a change program. A change program is viewed as a temporary organization (Andersen, 2006; Lundin & Söderholm, 1995) established by the program's parent organization to deliver significant organizational change.

The study focuses on the critical initiation stage of a change program, where the specific features of a program, in contrast to a smaller project, are particularly evident. Whereas project management literature has traditionally emphasized a well-defined task as a starting point for a project, a change program may be started with very little knowledge about the eventual outputs of the program or the appropriate means of delivering them (e.g. Pellegrinelli, 1997; Thiry, 2004b). There is a clear gap in the project management research in terms of how change programs are initiated. Although the importance of the early stages of a project or a program has been acknowledged (e.g. Morris, 1989; Dvir, Raz, & Shenhar, 2003), project and program management research has tended to overlook the initiation stage and focused on detailed planning and execution (Atkinson, Crawford, & Ward, 2006). In examining early project stages, project management literature has focused mainly on rational planning tools and optimization methods which are unlikely to be feasible in the early stages of change programs, characterized by high levels of uncertainty and ambiguity (Thiry, 2004a, 2004b). The goals and the content of a change program are likely to evolve during the program lifecycle in close interaction with the program's organizational context (Pellegrinelli, 1997; Thiry, 2004b). Furthermore, programs pursue changes that deal largely with peoples' behaviors and the whole socio-technical system, not just with tangible deliverables (e.g. Pellegrinelli, 2002). The early program stages may be less concerned with producing detailed plans and schedules, and more concerned with making sense of the program's purpose, establishing

structures and processes for program implementation, in addition to linking the emerging program with the wider organizational context.

This study is based on the notion that change programs are embedded in their parent organizations and in constant interaction with their organizational context. Although project management research has traditionally viewed projects as isolated entities, recent studies have encouraged researchers to examine projects and programs in their context (Engwall, 2003; Jensen, Johansson, & Löfström, 2006; Pellegrinelli, Partington, Hemingway, Mohdzain, & Shah, 2007). In particular, previous research has shown how projects and programs are linked to their parent organization through their goals, structures, locations, processes, technologies, resources, routines and knowledge (e.g. Heller, 1999; Lakemond & Berggren, 2006). The interaction between a change program and its parent organization is particularly interesting, since the program aims at changing the parent organization whilst receiving its resources and the entire reason for existence from the parent. Adding to the complexity, the participation in the program may be part-time, and the program staff may simultaneously act as the recipients of the changes generated by the program. Change programs are both influenced by and seek to influence their organizational contexts (Pellegrinelli et al., 2007), highlighting the need to actively manage the program's external relations.

The interplay between a change program and its parent organization is especially interesting during the early stage of a program. Large change efforts tend to be truly unique and there is often little prior experience guiding the activities (Ekstedt, Lundin, Söderholm, & Wirdenius, 1999). Different stakeholders within the parent organization have distinct interests and expectations towards the program, and aligning these views may be a considerable challenge (Thiry, 2004a). During the early program stage, the emerging program needs to be set up, assigned resources, distinguished as a legitimate organizational entity, and given its own place in the larger organizational context (Lundin & Söderholm, 1995). The key challenge of program initiation is to create a proper foundation for the forthcoming change.

Literature on organizational change management has recognized the importance of giving a change endeavor a proper start (e.g. Bruch, Gerber, & Maier, 2005; Gioia & Chittipeddi, 1991; Howes & Quinn, 1978; Kotter, 1995). In recent years, a growing number of studies have approached this challenge as ensuring readiness for change (e.g. Armenakis, Harris & Mossholder, 1993; Armenakis & Harris, 2002; By, 2007; Jones, Jimmieson, & Griffiths, 2005; Weiner, Amick, & Lee, 2008). Research has suggested that readiness for change may be created and promoted e.g. by providing

information on the planned changes and their progress and by engaging people in the change-related activities (Armenakis et al., 1993; Armenakis and Harris, 2002). The majority of studies on readiness for change have examined readiness either as a psychological state measured by surveying the employee attitudes and beliefs (e.g. Armenakis et al., 1993; Jones et al., 2005) or as the organization's general capacity for implementing changes (e.g. Jansen, 2000). In this dissertation, the concept of readiness for change is applied to the context of multi-project change programs by examining how the activities of program initiation build readiness for implementing the change program.

The current study takes the perspective of a program team that is put in charge of initiating, planning and managing a large-scale change program. The aim is to explore how readiness for change program implementation is promoted by this core team's actions. The program is viewed as an emerging temporary organization that interacts with its permanent parent organization (e.g. Andersen, 2006; 2008; Ekstedt et al., 1999). To study this interaction, the concepts of organizational boundaries (Leifer & Delbecq, 1978; Scott, 2003; Thompson, 1967) and boundary spanning (Aldrich & Herker, 1977; Jemison, 1984) are adopted from organization theory. Prior research has described how the boundaries of organizational entities must be constantly maintained and managed (e.g. Ancona & Caldwell, 1988; 1992a; Miller & Rice, 1967; Scott, 2003). The present study examines the activities that the key actors of an emerging temporary organization, a change program, employ in managing the program's relations with its parent organization. As these activities not only span the program's boundaries but also build and guard them (Yan & Louis, 1999), a term boundary activities is utilized to refer to all such actions. The aim of this dissertation is to explore the core program team's boundary activities through which the emerging program's boundaries are defined, strengthened, bridged and guarded. Boundary activities have been studied earlier in the contexts of product development teams (Ancona & Caldwell, 1992a), work teams led by external team leaders (Druskat & Wheeler, 2003), and community groups involved in delivery projects (Kellogg, Orlikowski, & Yates, 2006), but prior research has not explicitly addressed the boundary activities of change programs.

Although project management literature has mainly focused on interactions and integration within a project, the early publications already acknowledged the need to manage the project's external relations. Among the very earliest project management publications is the article "The project Manager" by Paul O. Gaddis, which was published in *Harvard Business Review* in 1959. Gaddis described the duties and qualities of project

managers and presented how project managers must constantly "sell" the project to fight for scarce funds, people, materials, and ultimately for the project's very existence. Gaddis further described how project managers must shield the experts of their project teams from external queries and pressures, while allowing them adequate freedom to develop their skills and advance their careers. Thus, project management is not only about managing the project's internal tasks but also about positioning the project in the wider organization and actively managing the project's boundaries. The early studies by Wilemon and his colleagues (Wilemon & Cicero, 1970; Wilemon & Gemmill, 1971) similarly noted how project and program managers have a central position as boundary spanners, linking the temporary organizations to their surroundings. The current study aims to explore this boundary spanning task in the context of change programs.

## 1.2 Focus, motivation and context of the research

This study is an in-depth exploration of how change programs emerge in their organizational context, and how the interplay between the change program and its context is managed. The focus is on large-scale change programs that consist of multiple projects and aim at significant changes in an organization's structures, processes, and conduct. The study examines the early program phases, from the emergence of the program idea to program planning and preparation. The focus is on the interaction between the program's key actors and the representatives of the surrounding parent organization. The dissertation is centered upon the boundary between the emerging program and the parent organization, focusing especially on boundary activities of the core program team that are employed to cross, build, shape, and guard the boundary in order to build a foundation for successful program implementation. The research relates to organizational project management (Andersen, 2008), as opposed to traditional perspectives that have viewed projects as vehicles for delivering well-specified assets and as isolated closed systems. The study is positioned within the field of project management research, but it aims to answer the call for multidisciplinary project research (Shenhar & Dvir, 2007a) by also drawing on organization theory, particularly on the studies of organizational change and organizational boundaries.

The aim of the study is to provide new theoretical and empirical insight by exploring how the relationship between a temporary change program and its parent organization is managed during the early program stage. The study describes activities that the key actors of a change program employ when defining and managing the emerging program's boundary with its parent organization. Additionally, the findings shed light on how these

activities contribute to the success of the change program by building readiness for change program implementation. In this dissertation, a qualitative methodology is employed to explore the initiation dynamics of change programs. The empirical study is based on qualitative data from three significant change programs. As described, the study is informed by research on organizational boundaries and organizational change, adopting the concepts of boundary activities and readiness for change from prior studies. The aim is to refine and extend the existing theoretical understanding by applying these concepts in the context of large, multi-project change programs. In doing this, the study follows the abductive multiple case study logic (Dubois & Gadde, 2002) that allows the development of the research frame in the interaction between existing theories and empirical observations.

The original motivation for the study arose from an attempt to understand what actually happens during the early phase of large-scale change programs. The research question guiding the study is: *How are the boundary activities concerning the boundary between the program and the parent organization associated with the success of change program initiation*? This main research question is further elaborated and more detailed questions are presented after the literature review in section 2.5.2, where the initial research framework is introduced.

This doctoral research has been a part of a larger research project on program management, STRAP–PPO (Strategic linking of programs for public and private organizations) at BIT Research Centre of Helsinki University of Technology (now Aalto University, School of Science) in 2004–2008. The project brought together academic researchers and representatives of several private and public sector organizations that were interested in the increasingly prominent topic within the project management discipline, program management. The aim of the STRAP–PPO project was to discover and develop effective management practices for programs in different organizational environments and in different situations and contexts. The goals of the research project directed the doctoral research to focus on program management. The author of the study decided to focus the study on program initiation based on discussions with other involved researchers and early observations on program management practice. In the early days of the STRAP–PPO project, in several seminars with the participating organizations and in the initial field interviews with program management practitioners, program initiation repeatedly came up as a particularly challenging stage. The early phases of large-scale change programs were viewed to require distinctively different measures than initiating smaller projects, and program management

practitioners felt that they lacked guidance and good practices on how to successfully initiate programs. The programs' interaction with their organizational context, in particular, manifested itself as a complex issue that deserved more exploration. These observations had a significant effect on the formulation of the current study. This doctoral research aims to provide new insight into how managers can provide a solid ground for change programs by skillfully managing the program in its context during the early program stage.

The author of the dissertation has independently designed the analytical framework of the study and conducted the analysis in the interaction between theory and empirical observation. Case selection and most of the data gathering has been conducted jointly with other STRAP–PPO researchers. Discussions with the supervisor and the instructor of the doctoral research have affected the choices concerning the theoretical foundation and the final focus of the study, and their comments on the preliminary findings have contributed to the development of the manuscript. Intermediary results and conclusions have been reported in articles and conference papers (e.g. Lehtonen, 2007; Lehtonen & Martinsuo, 2008, 2009; Martinsuo & Lehtonen, 2007).

## 1.3 Key contributions

The dissertation increases the existing understanding of the dynamics of change programs as a specific type of a temporary organization. The study extends recent research on program management (e.g. Dietrich, 2007; Nieminen & Lehtonen, 2008; Pellegrinelli, et al., 2007) by providing empirically based research evidence on the logics of program initiation. The study illustrates how skillful management of the early program stage is crucial, as the foundation for program success is already laid during program initiation. On the other hand, the study demonstrates how the successful launch of a change program requires considerable effort.

By approaching change programs as temporary organizations, the dissertation contributes to the development of the theory of temporary organizations (Lundin & Söderholm, 1995). The study draws attention to the boundaries of an emerging temporary organization (Ratcheva, 2009; Turner & Müller, 2003), providing research evidence on the elements that form a change program's boundary. Adding to recent studies (Manning, 2008; Modig, 2007; Sydow et al., 2004), the dissertation demonstrates how temporary organizations are both enabled and inhibited by their parent organizations. On the other hand, the study illustrates how the advocates of a change program may actively participate in defining its boundaries. The study demonstrates how the program's boundaries are formed, maintained,

spanned and protected by an array of different types of boundary activities, and how these activities contribute to the progress of the program. In this way, the study sheds light on the relationships between temporary and permanent organizations, which have been described as poorly developed (Ekstedt et al., 1999). The study proposes that change programs are in constant search for balance between integration and isolation, i.e. adapting to the structures, norms and rules of the parent organization and decoupling from its environment to protect its progress. By highlighting the contextuality and the open systems nature of temporary organizations (e.g. Engwall, 2003; Morris, 1988), the study adds to the understanding of the evolvement and interaction of temporary organizations in their wider organizational context.

From the perspective of studies on organizational boundaries and boundary activities (e.g. Ancona & Caldwell 1988, 1992a; Leifer & Delbecq, 1978), the present study extends the current understanding by providing evidence of boundary formation and boundary activities in temporary program organizations. The study also contributes to the field of organizational change management. Firstly, the study provides an alternative view to studying organizational change from the perspective of a change program, i.e. a temporary organization that is established to deliver significant change. The findings also contribute to the ongoing discussion on the concept of readiness for change (e.g. Armenakis et al., 1993; Jones et al., 2005). The findings propose dimensions for defining organization-level change readiness in the context of a specific large-scale change program. The findings particularly bring up the need to achieve the necessary level of autonomy (Gemünden, Salomo, & Krieger, 2005; Lampel & Jha, 2004) for the change effort in terms of the existence of a legitimate and authorized temporary organization that is dedicated to delivering the change. The results also join recent studies (e.g. Neves, 2009) in arguing that readiness for change is something that the leaders of a change effort need to actively promote to create a solid ground for change implementation. Finally, the findings illustrate how change readiness may be created through various types of boundary activities.

Although situated within the field of project management research, the study makes an ambitious attempt to bridge the gap between the research fields of project management and organizational change with the help of the concept of boundary activities adopted from organization theory. Many of the key contributions described above may be located in linking these traditionally separate fields of study.

## 1.4 Structure of the thesis

As the study has followed an abductive research process, there have been several iterative cycles of going back and forth between the empirical data and the literature. Some of the key concepts emerged from the data during the research process. For the convenience of the reader, the study is reported in a more traditional way, starting with a literature review and then introducing the empirical results. For the sake of both clarity and density, iteration cycles and their intermediary results are not reported in detail.

The dissertation consists of six chapters. Chapter 1 has provided an introduction to the study. Chapter 2 describes the key concepts and lays the theoretical foundation for the study by providing an overview of the extant literature on the selected key areas: temporary organizations, program management, large-scale organizational change, organizational boundaries and boundary activities. The literature review is summarized as an initial research framework that provides the basis for the empirical analysis.

The research process is described in the methodology chapter to provide an overview of the path the research process has taken. Chapter 3 begins with a discussion on the assumptions concerning the nature of the research, and then describes the selected research methods and the rationale behind the choices. Data gathering and analysis methods are described in detail and the three selected cases are briefly introduced.

Chapter 4 presents the results of the empirical study. The three cases are described in detail, and the findings concerning each research question are presented. Chapter 5 provides a discussion of the findings, contrasting and comparing them with earlier research, whilst also including an evaluation of the study and its limitations. In Chapter 6, the conclusions are presented and the contribution of the study is summarized. Managerial implications of the findings are discussed, and suggestions for further research are given.

# 2. Theoretical background

In this chapter, the theoretical basis of the research is introduced. In section 2.1, the special nature of temporary organizations is discussed and programs as a specific form of temporary organizations are examined. In line with the focus of the study, special emphasis is given to the early program stage. In section 2.2, literature on large-scale organizational change is reviewed and the concept of readiness for change program implementation is developed. In the following two sections, the attention is turned to the contextual interplay of temporary organizations. Section 2.3 examines the contextuality of change programs and provides an introduction to the organizational integration of temporary organizations. The concepts of organizational boundaries and boundary activities are elaborated in detail in section 2.4. Finally, a summary of the literature review is provided in section 2.5, where a preliminary framework is introduced and the more detailed research questions are presented.

## 2.1 Programs as temporary organizations

In this dissertation, change programs are viewed as temporary organizations. This section introduces this perspective to projects and programs. After that, the concepts of programs and program management are examined, and the current knowledge on how the early program stages are managed is reviewed.

### 2.1.1 Introduction to the temporary organization perspective

Projects and programs have become common features of organizational life. Literature on project management often points out that projects have been implemented for thousands of years, examples including the construction of pyramids and religious monuments, and the great journeys of exploration. However, as an academic discipline and as a profession, project management is a relatively young field (Kwak & Anbari, 2009; Shenhar, 2001). Modern project management emerged between the 1930s and 1950s as a response to the defense and process engineering industries' need to plan, control and manage large and complex series of activities, i.e.

projects, to produce complex products such as space shuttles and power plants (Morris, 1994). Quite rapidly the conception of project management diffused into the business world and beyond (Grabher, 2002).

Nowadays, projects may be found in all kinds of organizations. In some industries, such as in construction, consultancy and software development, projects are the main way of conducting business. Regardless of the industry, in most organizations new products and services are developed via project-like activities. Furthermore, both private and public organizations commonly establish change projects and programs to develop and renew their operations. Projects come in many shapes and types, and during the past decades projects have become increasingly common (e.g. Artto & Kujala, 2008; Whittington, Pettigrew, Peck, Fenton, & Conyon, 1999). The rise of the project form of organizing may be retraced to many inter-related global trends and developments, including the rapidly changing markets and technologies, the greater complexity of products and services, and the increased knowledge intensity of production processes in contemporary organizations (Hodgson & Cicmil, 2008). Alongside with this "projectification" (Midler, 1995) or "projectivization" (Lundin & Steinthórsson, 2003) in modern society, project management has grown both as a profession and as an academic discipline. Project management associations such as the US-based Project Management Institute (PMI) and the Europe-based International Project Management Association (IPMA) are actively educating and certifying project management professionals, organizing conferences, and publishing standards for project management. During the past few decades, academic interest in projects has also increased substantially (Söderlund, 2004b; Kwak & Anbari, 2009). In addition to the dedicated journals on project management research (*International Journal of Project Management*, *Project Management Journal*, and *International Journal of Managing Projects in Business* as the most prominent examples), projects and their management receive growing interest in general management journals.

As an academic field, project management is multi-faceted and fragmented (Söderlund, 2004a). Compared to many other management disciplines, the field is more applied and interdisciplinary (Kwak & Anbari, 2009). The development of the project management discipline has been more influenced by practical considerations and experiences than by scholarly theories of organizations (Ekstedt et al. 1999). Although the roots of project management are largely in engineering approaches and in operations management, the field has evolved to involve managerial, organizational and behavioral aspects and various theoretical bases (Grabher, 2002; Kwak & Anbari, 2009). Still, the theoretical basis of project

management is continuously described as weak, and rigorous theory development has been called for (e.g. Shenhar & Dvir, 1996; 2007a).

The fragmentation of the field is reflected in the multiple definitions presented for a project (Turner & Müller, 2003). The prominent view regards projects as vehicles or tools that aim at delivering specified outputs within the given budget and schedule. For example, Project Management Institute's Project Management Body of Knowledge (PMBOK, see Project Management Institute, 2004) defines a project as "a temporary endeavor undertaken to create a unique product, service, or result". The basic idea behind this task-oriented view is that a project is given a task which it must fulfill within the given resource limitations. In the beginning of the project, the goals are specified and the possible routes to achieving the goals are analyzed. After selecting the optimal alternative, a plan is made, a project team is established and resources are budgeted accordingly. The end result is delivered by executing the plan. Ideally, the project is detached from the environment and the project team can fully concentrate on the task. The project manager's task is to control the activities in order to efficiently deliver the project product.

The task or vehicle-oriented perspective described above has traditionally dominated the project management discipline (Andersen, 2008). This view regards project management mainly as planning, coordinating, monitoring and controlling (Cicmil, 2006), and these topics have also dominated in project management research (Themistocleous & Wearne, 2000). Much of the research has dealt with optimization, examining and developing tools such as the Work Breakdown Structure (WBS), the Critical Path Method (CPM), the Program Evaluation Review technique (PERT), and various cost estimation models (Packendorff, 1995; Söderlund, 2004b). Project management literature has been characterized by a functionalist, normative focus on optimization and "best practices" (Cicmil, 2006; Grabher, 2002).

Despite the extensive attempts to codify the best practice of project management, considerable evidence has been listed to show that projects still very often fail (Ives, 2005; Packendorff, 1995; Sauser, Reilly, & Shenhar, 2009). The traditional task-oriented perspective on projects has been subject to substantial criticism, as it does not seem to sufficiently explain the dynamics that are seen to take place in projects. The overly rational and mechanistic assumptions behind the task-oriented perspective have been questioned, and the view has been accused of focusing too much on the content (planned scope of work) and control (time and cost) of the project, and ignoring the messy, fragmented and political character of organizational reality (Cicmil, 2006; Cicmil & Hodgson, 2006). The critics describe how the task-oriented perspective is based around the assumption

of a given, clear and plannable task, i.e., that plans can be defined in detail at the beginning of the project. However, projects often involve high levels of uncertainty, especially in the beginning (Andersen, 2008). The project manager is given an initial assignment, but often a lot of interaction and negotiation is required both within the project team and with external stakeholders in order to refine the project goals and scope (Ives, 2005). Especially in truly unique projects, such as in organizational change efforts, it may be impossible to create detailed plans at the outset (Andersen, 2006; 2008). Particularly in turbulent environments, changes to the plans can be expected due to changing conditions and stakeholder requirements (Collyer & Warren, 2009).

As a further criticism, the task-oriented perspective has been described as too project-centric, viewing projects as isolated and independent "islands" (Engwall, 2003). The focus of the task-oriented project management tradition has been solely on projects, and their relations with permanent organizations and other elements of their organizational context have been largely neglected. In reality, projects do not and cannot exist in isolation, but are in many ways embedded in their context (Andersen, 2008; Ekstedt et al., 1999). Increasingly, researchers have acknowledged how projects are enabled and inhibited by their parent organizations, other stakeholders and the wider institutional context (e.g. Jensen et al., 2006; Manning, 2008; Modig, 2007; Sydow, Lindqvist, & DeFillippi, 2004).

Building on this criticism, especially Scandinavian scholars have called for an alternative perspective to the overly rationalistic and mechanistic project management, viewing projects as *temporary organizations* (Andersen, 2006; Ekstedt et al., 1999; Løvendahl, 1995; Lundin & Söderholm, 1995; Lundin & Steinthórsson, 2003; Packendorff, 1995). In line with this view, Andersen (2008: 10) defines a project as "a temporary organization, established by its base organization to carry out an assignment on its behalf". Similarly, Turner and Müller (2003: 4) define a project as "a temporary organization designed to deliver a specific set of change objectives". The proponents of the perspective examine the nature of projects and programs as temporary organizations (Ekstedt et al., 1999; Lundin & Söderholm, 1995). The parent organization of a project or a program, also called the base organization (Andersen, 2008), host organization (Heller, 1999), or mother organization (Shenhar & Dvir, 1996), is viewed as a permanent organization, since its lifetime is not limited beforehand (Andersen, 2008). Unlike permanent organizations that are designed for repetitive routine activities and focus on maintaining the current order, temporary organizations are designed for change and they offer more flexibility and a focused, accomplishment-oriented approach

(Grabher, 2004; Miles, 1964; Turner & Müller, 2003). As Goodman and Goodman (1976: 496) articulate, temporary organizations are "formed with a sense of making a difference".

In comparison with the traditional, task-oriented project management approach, the temporary organization perspective emphasizes the organizational and behavioral rather than the technical aspects of projects (Andersen, 2006; 2008; Lundin & Söderholm, 1995; Vaagaasar & Andersen, 2007). The perspective views projects as "organizations in organizations" (Andersen, Dysvik, & Vaagaasar, 2009; Shenhar & Dvir, 1996), examining the project's interaction with the wider organizational context. The temporary organization perspective acknowledges that there may be many ways to achieve the goals, and that project participants are in an active role in making sense of the task at hand in complex social interaction (Packendorff, 1995). Table 1 summarizes the main differences between the traditional task-oriented perspective and the temporary organization perspective to project management.

Table 1 Comparison of task-oriented and temporary organization perspectives on project management
(modified from Packendorff (1995) and Andersen (2008))

| | **Task or vehicle-oriented perspective** | **Temporary organization perspective** |
|---|---|---|
| **Underlying project metaphor** | Project as a vehicle or a tool | Project as a temporary organization |
| **Aim of the project** | Accomplishment of the externally given project task within budget and schedule and according to the predetermined specifications | Delivery of change for the permanent organization(s) through organized, collective action |
| **Role of project management** | Planning, monitoring and controlling the project according to the predetermined specifications | Managing the complex interactions within a project, and managing the project's relations with its environment |
| **Scope of attention** | Project-centric; ideally projects as detached from their environment | Projects as embedded in the surrounding context |
| **Aim of research on projects** | Prescriptive, normative theory, grounded in ideal models of planning and control | Descriptive theory, grounded in empirical studies on human interaction in projects |

In this study, the temporary organization perspective to projects and programs is adopted. Various factors support this choice. Firstly, the perspective has been described as particularly suitable for examining projects and programs that aim at organizational change (Andersen, 2006, 2008; Vaagaasar & Andersen, 2007). Secondly, the temporary organization perspective directs attention to the emergence of an organization (Dobers & Söderholm, 2009; Gareis, 2000). This dissertation specifically targets the

early stage of change programs, including the initiation dynamics that are often neglected within the traditional project management discipline (Morris, 1989). Thirdly, the selected perspective highlights the embeddedness of projects and programs in their context (Manning, 2008; Sydow et al., 2004) and especially the continuous interaction with the parent organization (Andersen, 2006, 2008; Vaagaasar & Andersen, 2007), which is the particular focus of this dissertation.

The origins of the temporary organization perspective in organizational and management literature can be traced back to accounts of temporary systems in the 1960s and 1970s (Goodman & Goodman, 1976; Miles, 1964). Goodman and Goodman (1976: 494) characterized how a temporary system involves "a set of diversely skilled people working together on a complex task over a limited time period". They further described how temporary systems or organizations are commonly established when the task at hand is complex, unique, and critical and when the task involves specific goals that set a time limit to the task, making both the task and the organization working on it temporary. Temporary systems are not limited to conventional projects and programs, but also include, for example, theatre groups, conferences, sport events, carnivals, demonstrations, election campaign organizations, juries and cockpit crews (Goodman & Goodman, 1976; Miles, 1964).

From the mid-1990s, an increasing number of authors have started to adopt the temporary organization perspective to examining projects and programs (e.g. Ekstedt et al., 1999; Modig, 2007; Turner & Müller, 2003). The perspective is largely based on the seminal work by Lundin and Söderholm who in 1995 outlined a theory of the temporary organization by introducing four interrelated concepts of time, task, team and transition. Firstly, the concept of *time* ultimately defines temporary organizations. Unlike more permanent organizations, temporary organizations have either a predetermined point in time or a time-related conditional state when they are expected to cease to exist (Miles, 1964; Packendorff, 1995). The existence of a time limit has implications for action and may spread a sense of urgency (Lundin & Söderholm, 1995). Secondly, similarly to the task-oriented tradition, the temporary organization perspective acknowledges that a temporary organization is built around a certain *task*. The task provides the rationale for the temporary organization to exist and legitimizes it (ibid.). The task may be truly unique or it may be more repetitive in nature (cf. Ekstedt et al., 1999 for an analysis of the differences between unique and repetitive tasks). Thirdly, a *team* is formed around the task. Lundin and Söderholm emphasize how temporary organizations depend on individuals' abilities and commitment. Temporary organizations

require collaboration and team effort of those skilled individuals to reach the goals. Fourthly, the special purpose of the temporary organization contains an element of change and thus a *transition* is required. The term emphasizes progression and underlines the purposefulness of temporary organizing. Related to the transition, Lundin and Söderholm (1995) consider *action* as the most distinctive and the most important feature of a temporary organization.

It can be argued that the organizational perspective to project management is nothing new but has existed for decades alongside the engineering based task-oriented tradition (Söderlund, 2004a). Although the temporary organization perspective has only recently started to attract attention in the major project management journals (e.g. Andersen, 2006; Modig, 2007), empirical research adopting the temporary organization view has appeared in high-ranking management and organization journals (e.g. Engwall and Svensson (2003) in *Scandinavian Journal of Management* and Bechky (2006) in *Organization Science*). Empirical studies adopting the temporary organization perspective have often examined inter-organizational projects where one clear parent organization cannot be identified, such as the organizing of the Olympic Games (Løvendahl, 1995), creative projects in the film industry (Bechky, 2006) and in television production (Sydow & Staber, 2002), and other kinds of multi-firm project networks (Larson & Wikström, 2007). Several studies of project networks emphasize the project's embeddedness in the wider organizational context (Aaltonen, Kujala, Lehtonen, & Ruuska, 2010; Sydow et al., 2004). However, when compared to the current study, the focus of these studies tends to be on delivery projects rather than on internal change projects and the studies are often located in contexts where no single parent organization can be identified.

There is another stream of recent project management research that has evolved with the temporary organization notion and is well aligned with this school of thought, namely the practice-based school (e.g. Cicmil, Williams, Thomas, & Hodgson, 2006; Packendorff, 1995; Söderlund, 2004a). In line with the wider "practice turn" in management research (cf. Miettinen, Samra-Fredericks, & Yanow, 2009) and especially the growing stream of research labeled as strategy-as-practice that examines the micro-level practice of strategy development and implementation (e.g. Ikävalko, 2005; Jarzabkowski, 2003; Johnson, Melin, & Whittington, 2003; Whittington, 1996), a movement has emerged within the project management research community, labeled as projects-as-practice (e.g. Blomquist, Gällstedt, Hällgren, Nilsson, & Söderholm, 2006; Hällgren & Wilson, 2008). This stream of research aims to strengthen the current

understanding of projects by studying what people actually do in projects through the observation of practice. The projects-as-practice school articulates criticism of the rational and instrumental task-oriented perspective and calls for more studies on the daily realities of project-based work. Due to its focus on action rather than on optimization tools and critical success factors, the temporary organization perspective is well aligned with this call for research on the actual practice of projects. Completing the criticism of the task-oriented perspective, accounts of critical project studies (e.g. Cicmil, 2006; Cicmil & Hodgson, 2006; Hodgson & Cicmil, 2008) have appeared in recent years, encouraging research on the multifaceted realities of the work in temporary organizations.

Table 2 presents a summary of the perspectives discussed above and research areas that contribute to the understanding of projects and programs as temporary organizations. The contribution of each perspective to the current study is also presented.

Table 2 Perspectives that contribute to the understanding of projects and programs as temporary organizations

| | Examples of studies | Contribution to the current study |
|---|---|---|
| **Temporary (management) systems** | Goodman & Goodman, 1976; Miles, 1964; | Provides the foundation for characterizing temporary organizations |
| **Projects as temporary organizations** | Ekstedt et al., 1999; Lundin & Söderholm, 1995; Modig; 2007; Packendorff, 1995; Turner & Müller, 2003 | Provides the theoretical basis for the study of change programs as temporary organizations |
| **Project networks** | Larson & Wikström, 2007; Manning, 2010; Sydow & Staber, 2002 | Examines the embeddedness of multi-firm projects into the wider organizational contexts |
| **Critical project research and project-as-practice school** | Critical project research: Cicmil, 2006; Cicmil & Hodgson, 2006; Hodgson & Cicmil, 2008<br>Project-as-practice school: Besner & Hobbs, 2008; Blomquist et al., 2006; Hällgren & Wilson, 2008; | Present critique of the task-oriented perspective, appreciation of the actual practice and a call for more research on micro-level processes and relations |

The current study focuses on a specific type of temporary organizations; change programs. The temporary organization perspective naturally positions the research in an organization theory framework (Söderlund, 2004b). The current study is informed by research on organizational change, organizational boundaries and organizational integration. Before discussing these fields of research in more detail, the special characteristics of programs in contrast to projects are discussed in the next section.

### 2.1.2 Definition and special nature of programs

Single projects may not be enough to deliver significant changes in organizations. Building on this notion, a number of authors have suggested *programs* and *program management* for delivering large and complex changes, realizing strategy, and achieving business objectives (e.g. Ferns, 1991; Partington, 2000; Pellegrinelli, 1997; Thiry, 2002). Multiple definitions have been presented for such programs, characterizing them as controlling instances for transformation processes (Ribbers & Schoo, 2002), frameworks for providing strategic direction to a group of change projects (Turner & Müller, 2003), large complex projects (Graham, 2000), and collections of projects and change actions that are grouped together to realize strategic and tactical benefits (Ferns, 1991; Murray-Webster & Thiry, 2000; Pellegrinelli, 1997). Most definitions emphasize that programs include multiple projects and activities that require coordination, either because they share a common goal or because additional benefits are expected from grouping them (Ferns, 1991; Pellegrinelli, 1997; Turner, 1999). The aim of program management is to ensure that the projects and activities included in the program collectively deliver the desired benefits (Lycett, Rassau, & Danson, 2004).

Programs carry special characteristics that differentiate them from single projects. Whereas projects aim at delivering well-defined outcomes as efficiently as possible, programs provide organizing and management frameworks for realizing unclear and abstract visions and in this way for delivering wider impacts and benefits for organizations (Artto et al., 2009). Programs typically involve multiple, related deliverables and the program goals and content may evolve during the program lifecycle (Pellegrinelli, 1997). The environment of the program is often expected to change during the program lifecycle, which may require changes in the program (Pellegrinelli et al., 2007; Thiry, 2004b). Compared to projects, programs are longer in duration (Office of Government Commerce, 2007; Thiry, 2004a), and sometimes their duration is unknown at the time of program initiation (Pellegrinelli, 1997). Programs are complex, as they include several interrelated projects and activities (Dietrich, 2006, 2007) and bring together multiple stakeholder groups, each with distinct interests and expectations towards the program (Thiry, 2004a). Due to their size and significance, programs are characterized as strategic (Lycett et al., 2004; Pellegrinelli, 2002). Strategy can drive the start of the programs and guide their further development (Gray, 1997; Pellegrinelli, 1997).

Table 3 summarizes the main differences between a project (as viewed from the traditional task or vehicle-oriented perspective) and a program.

Table 3 Comparison of a project and a program
(modified from Pellegrinelli (1997) and Artto et al. (2009))

| | Project | Program |
|---|---|---|
| **Objective** | Delivery of predetermined deliverables | Delivery of strategic benefits for the parent organization |
| **Starting point** | Well-defined task | High-level vision or need; may include multiple deliveries |
| **Duration** | Relatively short term; fixed duration | Long term; duration may be indefinite |
| **Scope** | Project-centric; project as ideally detached from its environment. The permanent organization is taken as given, serving as an influence factor on project success. | Close connection with the parent organization and the wider business context; program evolves with its environment. |
| **Level of analysis in related research** | Single project | Organization and its major parts |

While project management is nowadays largely recognized as an efficient methodology to organize, plan and control temporary tasks, program management as a distinct managerial framework is quite novel (Thiry, 2004b). Although the term 'program' has often appeared in general business literature, it has usually referred to more permanent "programs of work" or general platforms for change in organizations (Artto et al., 2009). The novelty of the program phenomenon within the project management discipline has also been questioned. In fact, during the emergence of the modern project management discipline over 50 years ago the terms program and project management where used interchangeably (ibid.). Also, large and complex projects have been implemented for centuries. In project management literature, such entities have been called large or large-scale projects (Jolivet & Navarre, 1996; Miller & Lessard, 2001), major projects (Bryson & Bromiley, 1993; Morris & Hough, 1987), macro-projects (Ferns, 1991), mega-projects (Bruzelius, Flyvbjerg, & Rothengatter, 2002; Miller & Hobbs, 2005), complex projects (Williams 1999), multi-team projects (Hoegl & Weinkauf, 2005), or simply just projects. There is a growing stream of literature that studies the management of such large projects (e.g. Ahola, 2009; Miller & Hobbs, 2005; Miller & Lessard, 2001; Morris & Hough, 1987; Ruuska, Artto, Aaltonen, & Lehtonen, 2009). The focus of this large project research is on delivery projects with a single main deliverable, such as a nuclear power plant, an aircraft, or a tunnel. While a large project is typically divided into sub-projects for manageability and control purposes, from the management perspective it is still essentially one project, and the managerial focus is on the internal coordination and integration across the interdependent sub-projects of the entity. Research

on large project management also examines the ways of organizing and controlling project implementation that involve a network of actors, such as subcontractors, consultants, financiers, and clients.

A program, in contrast, consists of multiple projects and tasks that together aim at the higher level goal of the program. Program management extends beyond the program's internal coordination, linking the program to the wider organizational context. According to the bibliometric analysis on program management conducted by Artto et al. (2009), program management as a managerial framework for coordinating interrelated projects started to gain importance within the management literature after the mid-1990s. Nowadays, it is increasingly agreed that programs should not be considered just as scale-ups of single projects, but they require fundamentally different managerial approaches, practices, and skills (Artto et al., 2009; Graham, 2000; Lycett et al., 2004; Pellegrinelli, 1997). Recognizing these needs, project management associations, standardization bodies and consultants have started to establish separate guidelines and standards for program management. For example, the UK Office of Government Commerce (2007 (first edition in 1999)) has published a guide called Managing Successful Programmes (MSP), and Project Management Institute (2006) has established a Standard for Program Management.

As the multiplicity of the definitions for a program may imply, different types of programs can be identified. Several program typologies have been presented, based on the number of projects and the geographical locations in a program (Evaristo & van Fenema, 1999), the degree of the attempted change and the extent to which projects already exist at the time of program launch (Vereecke, Pandelaere, Deschoolmeester, & Stevens, 2003), the mode and strength of coordination (Gray, 1997), the rationale for program creation (Pellegrinelli, 1997; 2002), and the program scope in terms of the organizational functions involved and the extent of the attempted change (Levene & Braganza, 1996). Programs also vary in type, examples including research, product development, and information systems development programs (Payne & Turner, 1999). Different management practices are needed for different kinds of programs (Evaristo & van Fenema, 1999; Vereecke et al., 2003), and even within a program for the different projects (Payne & Turner, 1999).

The focus of the current study is on a particular type of programs, *internal change programs*, defined as temporary organizations in which multiple projects are managed together to deliver a change in the parent organization. Change programs typically include cross-departmental and multidisciplinary projects that share a common business goal (Ferns, 1991). Change programs have also been called strategic programs (ibid.) and

organizational development programs (Dietrich, 2007). In a similar manner, Gray and Bamford (1999) describe platform programs that aim to improve an organization's infrastructure.

It is worthwhile to note that program management is a form of multi-project management, but the two terms are not synonymous. Particularly, project portfolio management refers to the process of systematically analyzing, prioritizing, selecting, and overseeing projects that share the limited resources of an organization (Archer & Ghasemzadeh, 1999; Cooper, Edgett, & Kleinschmidt, 1997). Although the management of scarce resources is often an essential element in programs, the temporary nature, common goal and close connections between the program's projects make program management distinct from project portfolio management (Pellegrinelli, 1997; Turner & Müller, 2003). Some programs may resemble a portfolio in the sense that they are formed by grouping loosely related projects under the same umbrella (Gray, 1997; Pellegrinelli, 1997). However, the present study focuses on *goal-oriented programs* (Pellegrinelli, 1997) that consist of related projects and actions that aim at a shared goal and require collective effort.

Goal-oriented programs consist of multiple projects that typically are at least to some extent interdependent through their goals, deliverables, methods, or resources (Dietrich, 2006, 2007; McElroy, 1996). The key roles in the typical program organization include the program manager, who is in charge of the operational management and coordination of the program, and the project managers, who are each responsible for managing a project in the program. The program manager's tasks and responsibilities include program-level planning, coordinating the projects' work and deliverables, supporting project managers in project execution, and maintaining alignment with the business objectives (Ferns, 1991). In a typical program, project managers report to the program manager, who further reports upwards to the program steering group (or a steering committee or program board), led by a program owner, program director or program sponsor, or an alternative executive body who represents the wider organization (ibid.). The program owner (or director or sponsor) has the ultimate responsibility for the realization of the anticipated benefits (Office of Government Commerce, 2007; Pellegrinelli, 1997). While delivery projects or programs have external clients, the client of an organizational change program is internal. The program owner may represent the client in the internal program. A program (support) office can also be established to support the program management, to facilitate information management at the program level, and to provide procedures, tools, training, and support

to the program manager and the project managers (Ferns, 1991; Office of Government Commerce, 2007).

The current literature on program management suggests distinct management processes and procedures for programs. While the traditional project management processes remain relevant in managing the program's projects, novel management processes are also proposed. The Managing Successful Programmes standard by the UK Office of Government Commerce (2007) and the Standard for program management by Project Management Institute (2006) both emphasize stakeholder management and benefits management. According to these standards, benefits management is about identifying, defining, and tracking the expected benefits of the program to ensure that they are achieved, including both tangible and intangible benefits and both intermediate and final outcomes of the program. Stakeholder management is about identifying stakeholders inside and outside the parent organization, analyzing how each stakeholder may affect the program or be affected by it, and developing and realizing a stakeholder management strategy to engage the stakeholders in the program. Related to benefits management and stakeholder management, program management literature also promotes value management (Thiry, 2002, 2004a), which can be used to define the program's business objectives and to identify the best ways to achieve them by balancing the stakeholder needs with the available resources. The Program Management Standard by Project Management Institute (2006: 12) also adds program governance, defined as "the process of developing, communicating, implementing, monitoring and assuring the policies, procedures, organizational structures, and practices associated with a given program".

Even though the unique nature and special managerial challenges of programs have been recognized, the number of studies that provide scientific, empirical evidence on the appropriate program management practices is still very limited (Artto et al., 2009). In this dissertation, an attempt is made to provide such evidence on the management of large-scale internal change programs. The study aims to contribute to the theoretical understanding of the characteristics and the appropriate management approaches of such programs.

The four concepts defining a temporary organization, time, task, team and transition presented by Lundin and Söderholm (1995), can be applied to characterize change programs as a distinct type of a temporary organization. Firstly, the concept of *time* concerns the program duration. Compared to other types of temporary organizations, change programs are relatively long enduring. Dietrich (2007) actually characterizes programs as semi-permanent organizing frames that in terms of duration are located

between temporary projects and permanent organizations. The concept of time is also relevant to the current study due to the focus on the program emergence and the early program activities. The *task* dimension refers to the goal of the program, the desired change in the parent organization. The task of a change program is truly unique and especially during the early program stages involves considerable uncertainty and ambiguity (Thiry, 2002). Thus, although an initial assignment may be provided by the parent organization, the task typically requires significant elaboration. The *team* refers to the program organization. The core program team that includes the main program management roles may be supported by a larger group of peripheral participants and consultants. In the context of change programs, the team dimension is especially interesting, as the program personnel often simultaneously are members of the parent organization, working part-time in the program (Eskerod & Jepsen, 2005). Finally, the *transition* is associated with the program activities that make change happen. The current study focuses especially on the early activities of the program core team members and examines their role in promoting change.

### 2.1.3 Program initiation

The present study is focused on the early program stage which is critical for the success of the entire program. Both programs and projects are often described through process or stage models, depicting different phases in their lifecycle. The most basic division is made between planning and execution. For example, Dobson (2001) divides a change program into development and implementation, whereas Pinto and Mantel (1990) make a similar division but label the stages as the strategic stage and the tactical stage. There is a general agreement that the early stage, during which the project or a program is being established and planned, is different in nature and requires different kinds of management actions than the later stages which are about executing the plans and delivering the results.

The early stage of a project or a program has repeatedly been promoted as the most important stage in its lifecycle (Abdul-Kadir & Price, 1995; Dvir et al., 2003; Gareis, 2000; Uher & Toakley, 1999). At the early stage the goals are defined and a plan is made of how they will be achieved. The early stage has a significant impact on the forthcoming stages (Abdul-Kadir & Price, 1995; Anell, 1998), and failure to carry out the early activities thoroughly enough may lead to significant difficulties during execution (Atkinson et al., 2006; Gareis, 2000; Woodward, 1982). Although the importance of the early project or program stage has been widely recognized, is has not received sufficient attention in project management research (Kolltveit & Grønhaug, 2004; Morris, 1989, 1994). The guidelines offered by the project management standards also tend to focus on the management of the

detailed planning and execution stages, leaving the early initiation and conception stage (as well as the time after project implementation) with less attention (Atkinson et al., 2006).

Traditionally, literature on the early project stages has been dominated by the discussion on rational planning tools, such as the product breakdown structure, work breakdown structure and design structure matrix (e.g. Austin, Baldwin, Li, & Waskett, 2000; Bachy & Hameri, 1997), risk analysis approaches (e.g. Dawson & Dawson, 1998; Uher & Toakley, 1999), and optimization models for project scheduling (e.g. Long & Ohsato, 2008; Shi & Deng, 2000). While project planning has evolved into a sophisticated discipline that leans on complex mathematical models, it has been increasingly questioned whether the results of this research are actually put into practice, as practitioners seem to dominantly rely on the most basic models (Packendorff, 1995). As Söderlund (2002) notes, project planning research is mainly based on the assumptions of clear goals, given tasks and high analyzability of the project. These assumptions have been questioned especially by the proponents of the temporary organization perspective (Andersen, 2006; 2008; Packendorff, 1995) who recognize that the project or program task continuously evolves as the participants interact with each other and with the environment (Vaagaasar & Andersen, 2007). A study by Ericksen and Dyer (2004) demonstrated how the project team actively shapes the initial task, which may consist of just brief descriptions of the desired outputs and deadlines. The task is processed in discussions and negotiations during project mobilization, gradually moving towards more operational tasks. Still, the initial task given to the team is important, as the nature and the framing of the task influence the actors' perceptions, e.g. of the salience and urgency of the project. (ibid.)

Most of the discussion on the management of early project stages has focused on construction projects and other delivery project contexts, where the early stage includes activities such as project marketing, tendering, supplier selection, and contract management. The present study focuses on internal change programs whose initiation and planning activities have received less attention. Several studies have pointed out how the traditional project planning methods and tools are better adapted to delivery projects than to internal projects, and how the initiation of change projects and programs requires different kinds of methods due to their low analyzability, high uncertainty and dynamism (Besner & Hobbs, 2008; Lehner, 2009; Mikkelsen, Olsen, & Riis, 1991; Turner & Cochrane, 1993).

Even though the early activities of internal change projects and programs have received little research attention, the related challenges have often been described. The early stage of an internal project may be slow, and it

may take several years of discussions and preparations for the project to be born (Mikkelsen et al., 1991). The product of internal change projects and programs is often intangible, and the logical relationships between the activities of achieving the desired results may be fuzzy (McElroy, 1996). Intangible goals are difficult to define, as subjective interpretation is involved and judgment is required (Crawford & Pollack, 2004). Compared to delivery projects, internal projects and programs do not involve a formal contract and thus their foundation may be weak (Mikkelsen et al., 1991). Internal change projects and programs tend to be truly unique (Ekstedt et al., 1999) and there may be little prior experience in the organization (Mikkelsen et al, 1991). Internal projects may need to break up deeply rooted organizational traditions, thus requiring substantial discussion and analysis of the implications (ibid.). Eskerod and Jepsen (2005) also recognize the difficulties related to staffing internal change efforts: it may be hard to find motivated and committed participants, as there tends to be considerable ambiguity and uncertainty related to the change objectives, and people may already be heavily burdened by their everyday work.

The recent literature on program management has addressed the special nature of large-scale change efforts throughout their lifecycle. Lifecycle or stage models for programs (Lycett et al., 2004; Murray-Webster & Thiry, 2000; Office of Government Commerce, 2007; Pellegrinelli, 1997; Project Management Institute, 2006; Thiry, 2004a) typically begin with an initiation or identification stage, followed by the planning stage. After that, the program proceeds to the execution stage, and eventually to some sort of evaluation and closure. It is often recognized that programs do not follow linear cycles, but the stages may overlap and the program process is described as iterative and cyclic (e.g. Pellegrinelli, 1997; Thiry, 2004a).

This dissertation focuses on the early program stage and examines the activities before program execution. Program lifecycle models often divide the early stage into the initial conception or definition and more detailed planning. Typically, lifecycle models state that high-level goals and desired benefits are drafted at the initial conception stage, whereas more detailed plans are created and appropriate projects are selected or initiated during the planning stage (e.g. Pellegrinelli, 1997). In practice, the distinction between these stages may be unclear due to the “fuzziness” related to the early program activities. In this dissertation, the terms *program initiation* and *early program stage* are used interchangeably to refer to both the program definition (conception) and planning. The focus is on the activities that take place before the detailed design and implementation of the projects and tasks of the program.

As the early program stage involves significant levels of uncertainty and ambiguity (Thiry, 2004a, 2004b), initiation and planning activities of a program differ from smaller and more clearly defined projects. Converting from traditional project management, program management models describe how specific objectives may not be known when programs are established, but they may start with abstract visions and goals, and the more specific objectives are elaborated and adjusted along the journey as the program evolves in line with the business needs and environmental conditions (Pellegrinelli, 1997; Thiry, 2004b). Initial definitions provide a general path for the program, but iteration and changes are to be expected during the later stages (Lehner, 2009).

Program management literature describes the program plan as the main output of the early program stage. In general, program and project plans are attempts to define the intended future (Atkinson et al., 2006), and they influence tradeoffs and priorities (Graham, 2000). Plans also have other purposes: they reduce uncertainty by their very existence and they legitimize action (Lundin & Söderholm, 1995). Especially in change programs it is often not the plan itself that is important, but rather the planning activity and the related learning (Yeo, 1995). Correspondingly, Thiry (2002, 2004a) stresses the importance of feedback and learning and argues that program initiation is more a question of sensemaking, intuition, and creativity than planning and control. Lehner (2009) similarly describes how planning in dynamic and uncertain situations involves large amounts of information gathering, cooperation and integration of people with different backgrounds, and is mainly a process of interpretation. Crawford and Pollack (2004) suggest that since change initiatives (projects and programs) tend to involve ill-defined goals and methods, they require soft systems thinking. Such soft methods acknowledge goal ambiguity by focusing on problem definition, exploration and learning and place emphasis on negotiation, debate and accommodation.

Although the special nature and challenges related to early program stages are largely reported, there is very limited research evidence of the actual practices in establishing and planning change programs. Conceptual literature concerning the early program and project stages has listed early activities such as business case development, selection of management activities, design of the program organization, program plan creation, and identification and allocation of resources (e.g. Murray-Webster & Thiry, 2000). Many of these activities involve cooperation with people external to the program team. The influence of the various stakeholder groups is emphasized during the early stage, as they may have different and even conflicting interests and ambitions towards the program (Kolltveit &

Grønhaug, 2004; Thiry, 2004a, 2004b; Woodward, 1982). The early stage also involves the creation of relationships with those outside the core team to ensure the required support for the program (Woodward, 1982). The emerging program needs to be integrated into the parent organization and communication channels must be established (Gareis, 2000).

Related to the early project and program stages, there is a growing stream of literature on the front-end of innovation, i.e. the early phase of innovation before the formal decisions on the development (e.g. Murphy & Kumar, 1996; Nobelius & Trygg, 2002; Poskela, 2009). The innovation front-end is often described as "fuzzy" (Reid & de Brentani, 2004), highlighting the related uncertainty and ambiguity. Literature on the innovation front-end is concerned with idea generation and concept development, focusing mainly on product and service innovations. Change programs rather involve process, organizational, or management innovations (Trott, 2002), which have received less research attention.

The present study aims to provide empirically rooted research evidence on the early program activities, examining an emerging change program's interplay with its parent organization. More research has been requested to better understand the early stage of a temporary organization and its linkages with the subsequent lifecycle stages (Atkinson et al., 2006). The current study links the early program stage to program execution by studying how the early activities create readiness for program implementation.

Compared to the project management tradition, the program management approach is more informed by the literature on strategic change and organization development (Pellegrinelli, 2002). To better understand the nature of change programs and their role in the larger organizational context, the literature on organizational change is reviewed in the next section.

## 2.2 Initiating large-scale organizational change

This section summarizes the relevant literature on organizational change from the perspective of this dissertation. After providing a brief overview to the literature on planned organizational development and change, the focus is set on the management of large-scale organizational change by examining issues that are related to successful change program initiation. Finally, the concept of readiness for change program implementation is introduced.

### 2.2.1 Introduction to large-scale organizational change

Change is pervasive in today's turbulent business environment. *Organizational change* may be defined simply as a transformation of an

organization between two points of time (Barnett & Carroll, 1995), and it is both a process and an outcome (Ginsberg & Abrahamson, 1991). In today's world, the ability to manage change is considered an increasingly important managerial skill, which is reflected in the vast practitioner-oriented literature on organizational change (e.g. Beer, Eisenstat, & Spector, 1990; Beer & Nohria, 2000; Duck, 1993; Kanter, Stein, & Jick, 1992; Kotter, 1995; Kotter & Schlesinger, 1979; Roberto & Levesque, 2005; Sirkin, Keenan, & Jackson, 2005). Organizational change has also attracted considerable attention by academic scholars. The extensive literature on change and its management has focused on topics such as the nature of organizational change, reasons behind it, and the way that the change occurs (cf. Barnett & Carroll, 1995; Dibella, 2007).

Although researchers commonly agree that change has become a central feature of organizational life, academic literature on organizational change and development is highly fragmented and no universal theory can be found (Bamford, 2006; Dunphy, 1996; Woodman, 1989). Scholars on organizational change have been drawing on varying disciplines, such as population ecology (Hannan & Freeman, 1984), psychology (Kahn, 1995; Smollan, 2006), institutional theory (Greenwood & Hinings, 1996), complexity theory (Beeson & Davis, 2000), learning theory (Hendry, 1996), and strategy (Boeker 1989; Golden & Zajac, 2001). Despite several attempts to categorize the theoretical perspectives (e.g. Fernandez & Rainey, 2006; Siegal et al., 1996; Van de Ven & Poole, 1995), there is still a lack of consensus within the field. The multiplicity of the perspectives to organizational change may be interpreted as a reflection of the complexity and diversity of the phenomenon itself (Buhanist, 2000).

One of the most common ways to categorize the discussion on organizational change is the division into *planned change* and *emergent (unplanned) change* (e.g. Bamford, 2006; Coram & Burnes, 2001; Glueck, 1969). The focus of the current study directs attention to planned change, which involves a deliberate decision to engage in a guided change initiative (Levy, 1986). More specifically, the study focuses on the management of planned, large-scale organizational change. *Large-scale organizational change* can be defined as a transition between organizational states that differ significantly in key organizational parameters (Wischnevsky & Damanpour, 2006). Such large-scale change is deep and pervasive (Ledford & Mohrman, 1993), as it involves simultaneous changes in multiple organizational dimensions, and often radical shifts in each or some of the dimensions (Barnett & Carroll, 1995). Covin and Kilmann (1990) note how large-scale organizational change initiatives involve multiple goals, utilize multiple methods to achieve them, and typically require an implementation

time frame of at least a year. Instead of dealing with just one department or unit, large-scale change often extends throughout the organization and its subunits (Ledford & Mohrman, 1993). Large-scale change is contrasted with smaller changes, described as incremental (Amis, Slack, & Hinings, 2004; Kindler, 1979) or evolutionary change (Gersick, 1991; Greenwood & Hinings, 1996). Large-scale change is also characterized as discontinuous, in contrast to continuous change (Brown & Eisenhardt, 1997).

During the past decades, multiple schools of thought have examined planned organizational change, each with their own perspective, focus and assumptions. Much of the knowledge on planned organizational change originates in the organization development (OD) movement that emerged in the 1930s and expanded throughout the twentieth century. The OD literature depicted how effective change took place gradually by small steps and incremental adjustments (Dunphy & Stace, 1988). Still, in practice change was seen to increasingly often take place through dramatic large-scale transformations that could not be interpreted with the traditional OD lens (Bartunek & Ringuest, 1989; Dunphy & Stace, 1988; Porras & Silvers, 1991). In the late twentieth century, new streams of literature emerged, discussing large-scale organizational change or organizational transformation, sometimes referred to as OT in comparison to OD. Many terms for such large-scale change have been presented, including radical change (Amis et al., 2004; Huy, 2002; Stoddard & Jarvenpaa, 1995), revolutionary change (Gersick, 1991), transformational change (Kindler, 1979; Nutt & Backoff, 1997), quantum change (Miller & Friesen, 1982), second order change (Levy, 1986), significant change (Chrusciel, 2008) and organizational transition (Marks, 2007). Organizational turnaround has been used as a label for massive changes in organizations who are in crisis and whose survival is on the line (e.g. Barker & Duhaime, 1997). Despite the differences in terminology and focus, all these perspectives portray large-scale change efforts resulting in major changes in the core organizational dimensions.

A related perspective is offered by researchers of strategic change, who examine strategy formulation and implementation in organizations (Nutt & Backoff, 1993). Similarly to studies on organizational change, research on strategic change examines antecedents and consequents of change, as well as the change process (Rajagopalan & Spreitzer, 1997). Strategy research has also touched upon change-related topics with different terminology, for example, by discussing strategic initiatives (Noda & Bower, 1996; Simons, 1991) and strategic issues (Diffenbach, 1982; Dutton, Ashford, O'Neill, & Lawrence, 2001; Dutton & Duncan, 1987).

Although many authors appear to assume that change is implemented in the form of a project or a program (e.g. Bamford & Daniel, 2005; Beer et al., 1990; Dunphy & Stace, 1993; Lüscher & Lewis, 2008; McNulty & Ferlie, 2004; Woodward & Hendry, 2004), the project or program organization assigned for planning and managing a change effort has received little attention in the mainstream change management literature. Within project management research, a stream of studies has emerged that focuses on change projects, also called internal development projects (Elonen & Artto, 2003), internal projects (Mikkelsen et al., 1991), renewal projects (Andersen, 2006; Blomquist & Packendorff, 1998) and soft projects in contrast to hard projects (Crawford & Pollack, 2004; McElroy, 1996). These studies propose that the management of change projects and programs requires approaches and practices that differ from the traditional project management methodologies, including sensemaking, improvisation, and experimenting (Leyborne, 2006; Sankaran, Tay, & Orr, 2009).

Recent streams of organizational change research also include micro-level, interpretative studies that examine change from the individuals' perspective, focusing on cognitive processes and behavior that shape the change (e.g. Balogun & Johnson, 2004; Gioia & Chittipeddi, 1991). Furthermore, the recent years have witnessed a growing number of researchers adopting a critical view of organizational change. These researchers accuse the traditional change management research of managerialism, universalism and pro-change bias and they aim to give voice to the silenced issues, alternative perspectives and marginal groups involved in organizational change (Sturdy & Grey, 2003).

Table 4 presents a summary of the above described perspectives on planned organizational change. The table lists authors representing each stream of literature and describes the contribution of each perspective from the viewpoint of this dissertation research.

Table 4 Perspectives on planned organizational change

| Tradition | Main focus | Examples of authors | Contribution to this study |
|---|---|---|---|
| Organization development (OD): early approaches (around 1930–1985) | Examines planning, implementation and impact of consultant-led interventions that are undertaken to improve organizational effectiveness and well-being | Bennis, 1963; Spencer & Sofer, 1964; Culbert & Reisel, 1971; Alderfer, 1977; Faucheux, Amado, & Laurent, 1982 | Construction of the basic concepts for planned interventions of organizational change |
| Organization development (OD): later approaches (from mid-1980s onwards) | Complements the early OD perspective by acknowledging the need to react to environmental changes and highlighting the role of managers in guiding change, as well as the role of organizational culture | Beer & Walton, 1987; Sashkin & Burke, 1987; Woodman, 1989; Boss, Dunford, Boss, & McConkie, 2010 | Importance of extra- and intra-organizational environments in managing planned change |
| Management of radical, transformative and large-scale organizational change (from mid-1980s onwards) | Examines the nature, triggers, processes and performance of large-scale organizational change and makes recommendations for its management | Levy, 1986; Barczak et al., 1987; Ledford & Mohrman, 1993; Waclawski, 2002; Wischnevsky & Damanpour, 2006 | Description of the antecedents and processes of planned, large-scale organizational change |
| Strategic change (from late 1980s onwards) | Examines the triggers, processes and performance of strategic change at the firm and industry level | Boeker, 1989; 1997; Ginsberg & Abrahamson, 1991; Barker & Duhaime, 1997; Rajagopalan & Spreitzer, 1997; Golden & Zajac, 2001; Meyer & Stensaker, 2006 | Acknowledgement of the strategic nature of organizational change and description of the related processes |
| Project management of organizational change (from early 1990s onwards) | Centers on the implementation of planned change as a project and identifies appropriate management practices of change projects and programs | Mikkelsen et al., 1991; McElroy, 1996; Partington, 1996; Alsène, 1998; Boddy & Macbeth, 2000; Crawford, Costello, Pollack, & Bentley, 2003; Leyborne, 2006; Boonstra, 2006; Carton, Adam, & Sammon, 2008 | Integration of project management and organizational change |
| Micro-level, interpretive research on organizational change (from early 1990s onwards) | Examines organizational change from the individual's perspective, focusing on micro-level activities and cognitive processes and their role in shaping, enabling and constraining change | Gioia & Chittipeddi, 1991; Gioia, Thomas, Clark, & Chittipeddi, 1994; Reger, Gustafson, Demarie, & Mullane, 1994; Balogun & Johnson, 2004; 2005; Rouleau, 2005; Lüscher & Lewis, 2008 | Linking micro-level activities of organizational change to macro-level outcomes |
| Critical views of organizational change (from mid-1990s onwards) | Offers alternative, critical views to organizational change by studying change and its consequences from multiple perspectives and by bringing sensitive, controversial issues into discussion | Aaltio-Marjosola, 1994; Sturdy & Grey, 2003; Linstead, Brewis, & Linstead, 2005; Diefenbach, 2007 | Acknowledgement of the complexity and dynamics of change and the multitude of possible perspectives |

The multiplicity of theoretical perspectives to organizational change reflects the confusion and disagreement amongst both researchers and practitioners regarding the appropriate approaches for managing change (Bamford, 2006). The literature on organizational change has been criticized for its normative tone and lack of a high-quality empirical base (Bamford & Daniel, 2005; McNulty & Ferlie, 2004; Wilkinson, 1997), and rigorous research on the actual change processes has been encouraged (e.g. Pettigrew, 1990). The present study aims to provide empirically rooted research evidence on the activities related to initiating change programs. From the perspectives listed in Table 4, the study draws mostly on the literature on large-scale organizational change and the project management of organizational change. In the present study, the initiation of significant change is examined from the perspective of the temporary organization that is put in charge of the change endeavor. The study examines large-scale change programs that may be described as strategic, consist of multiple projects, and pursue wide impacts in their parent organization.

Large-scale organizational change can be initiated for different reasons, and is often necessary for the short-term competitiveness and long-term survival of organizations (Lüscher & Lewis, 2008). The initiation of a change program may result from a variety of external and internal influences. External triggers for change include developments in technology and materials, changes in legislation, government policies and customer preferences, and the competitors' actions and innovations (Barnett & Carroll, 1995; Buchanan & Huczynski, 1997; Greiner, 1967). Internal triggers include low performance, stockholder discontent, internal conflicts, product and process innovations, the appointment of new senior managers, and changes in the ownership structure (Boeker, 1997; Buchanan & Huczynski, 1997). Although large-scale change is often triggered by a failure or a problem, it may also result from the recognition of an opportunity, and the rationale behind the change may be the anticipation of and preparation for probable futures (Nadler & Tushman, 1990; Woodman, 1989). The managers' personal characteristics such as tolerance for ambiguity may determine whether radical change is pursued proactively (Mullins & Cummings, 1999). Empirical studies have shown how large-scale organizational change may involve multiple triggers (e.g. Denis, Langley, & Cazale, 1996). The internal and external triggers of change also tend to be closely related. For example, radical changes in competition, regulation or technology create performance gaps and generate opportunities for innovation (Wischnevsky & Damanpour, 2006).

Lifecycle theories suggest that the organization's stage of development dictates the pace of change: when organizations grow, certain transformations tend to occur (Barnett & Carroll, 1995). A common view is that impetus for a large-scale change builds up over a period of time and is then triggered, e.g. by a decline in performance or some other shock (Mitki, Shani, & Meiri, 1997). A number of authors have studied organizational inertia, described as a tendency towards stability and persistence that opposes the impulse to change (Hannan & Freeman, 1984; Miller & Chen, 1994). The model of punctuated equilibrium (Gersick, 1991; Romanelli & Tushman, 1994) describes how radical, discontinuous change (i.e. "punctuation") breaks the inertia. Other theoretical perspectives provide alternative reasons for change. For example, institutional theory describes mimetic pressures that drive isomorphism (DiMaggio & Powell, 1983) and shows how organizational decision makers imitate patterns which they believe are appropriate (Erakovic & Powell, 2006). Research on the diffusion of innovations similarly examines how new management practices and other innovations are spread within and across organizations (O'Mahoney, 2007; Rogers, 1995).

Large-scale organizational change does not only concern private organizations, but also the public sector. Following the international trend of "new public management" that gained strength in the 1980s and 1990s, public organizations experience increasing pressures to rationalize their operations, improve performance and become more private-like (Arnaboldi, Azzone & Savoldelli, 2004; Cheung, 1996, McNulty & Ferlie, 2004). Public sector organizations are being held increasingly accountable for their funds, causing growing demands to improve the efficiency, effectiveness and quality of public services. In line with these demands, public organizations are encouraged to adopt market-based philosophies and practices such as strategic planning, risk management, quality assurance, and performance measurement (Dixon, Kouzmin, & Korac-Kakabadse, 1998; Gomes, Yasin, & Lisboa, 2008). In addition to the requirements of becoming more private-like, the contemporary public sector is characterized by other trends and developments that require changes in public policies, structures, and processes. In many Western countries, significant challenges to public operations are being posed by the ageing population, changing migration and employment patterns, novel types of social issues, and environmental concerns (Wilkinson, 1997).

Concerning both private and public organizations, the past few decades have witnessed a recognizable trend to make the traditional, bureaucratic organizations leaner and more flexible. Various business improvement philosophies and methodologies have emerged and given birth to popular

types of change programs, such as Total Quality Management (TQM) and Business Process Re-engineering (BPR). More recently, fashionable change initiatives have included Six Sigma quality programs and the adoption of Enterprise Resource Planning (ERP) systems. Mergers and acquisition also represent distinct types of large-scale change efforts, as well as the privatization initiatives of public organizations. In the Finnish public sector, the restructuring of local government and the related services has been a major topic during the past few years, and recent largely debated examples include municipal mergers and health care sector reorganization initiatives. Table 5 lists common types of change programs and provides examples of studies that examine their management.

Table 5 Common types of large-scale organizational change programs

| Change program type | Examples of studies |
|---|---|
| Organizational restructuring and re-engineering (e.g. Business Process Re-engineering (BPR) programs) | Stoddard & Jarvenpaa, 1995; Willcocks, Currie, & Jackson, 1997; McNulty & Ferlie, 2004 |
| Quality improvement programs (e.g. Total Quality Management (TQM) and Six Sigma implementations) | TQM: Mallinger, 1993; Spector & Beer, 1994; Cox, 1995; Douglas & Judge, 2001<br>Six sigma: McAdam & Lafferty, 2004; Huq, 2006 |
| IT-based restructurings (e.g. Enterprise Resource Planning (ERP) system adoptions) | ERP: Akkermans & van Helden, 2002; Motwani, Mirchandani, Madan, & Gunasekaran, 2002; Boonstra, 2006: Martin & Huq, 2007<br>Other: Cats-Baril & Thompson, 1995; Stewart & O'Donnell, 2007 |
| Organizational turnarounds | Barker & Duhaime, 1997; Clapham, Schwenk, & Caldwell, 2005 |
| Mergers and acquisitions | Pfeffer, 1972; Trautwein, 1990 |
| Privatization initiatives | Coram & Burnes, 2001; Erakovic & Powell, 2006 |

The change initiatives listed in Table 5 have different focuses, like the improvement of quality or the restructuring of IT systems, but they all encompass pervasive organizational change. In practice, radical organizational change often involves simultaneous or subsequent implementation of several change initiatives that are hoped to support each other (Huq, Huq, & Cutright, 2006; Motwani et al., 2002). The present study does not focus on any distinct type of change initiative, but examines multi-project programs as a means of large-scale change.

Regardless of the change program type, large-scale change involves simultaneous changes in several aspects of the organization, such as strategy, structure, infrastructure, processes, practices, routines, and values. It is this interplay between technical, economic, social and

organizational factors that makes large-scale change so complex (Hafsi, 2001). Large-scale organizational change typically involves redistribution of personnel, finance and power (Spencer & Sofer, 1964), and is also described to require significant cognitive processes (Balogun & Johnson, 2004, 2005; Gioia & Chittipeddi, 1991). Marks (2007) characterizes organizational transition as a path to an unknown state. During the journey, existing practices and routines must be abandoned and new ones developed and adopted. Research on micro-level institutional change describes how radical organizational change requires a change from one institutional template, or archetype or schema, to another (Greenwood & Hinings, 1993, 1996; Lau & Woodman, 1995; Reger et al., 1994). Large-scale change has also been noted to involve a change in the organizational identity (Reger et al., 1994; Siegal et al., 1996).

Even though large-scale organizational change has become increasingly common in both the public and private sectors, the management of change is challenging and change efforts are often considered unsuccessful (Beer et al., 1990; Beer & Nohria, 2000; Dobson, 2001; Duck, 1993; Hope Hailey & Balogun, 2002; Kotter, 1995; Roberto & Levesque, 2005; Zand & Sorensen, 1975). Surveys have reported failure rates of at least 70% for change programs (Siegal et al., 1996; Spector & Beer, 1994; Strebel, 1996). Change initiatives frequently take longer than expected, meet resistance, face unforeseen problems, and ultimately fail to yield benefits that would account for their costs (Beer & Eisenstat, 1996; Darragh & Campbell, 2001). Change efforts that have been intended as revolutionary sometimes only produce modest results, better characterized as evolutionary change (McNulty & Ferlie, 2004; Stoddard & Jarvenpaa, 1995). Although some of the failures may be attributed to the content of the change initiatives, most often change efforts are described to fail due to the problems related to managing the change process (Siegal et al., 1996). Next, process models for managing change are reviewed, after which the discussion is turned to the success of change.

### 2.2.2 Stages in the change process

Similarly to projects and programs, planned organizational change is often described to progress through successive phases. The planned change approach is thought to be initiated by Kurt Lewin, who more than 60 years ago suggested that previous behavior must first be discarded before new behavior can be successfully adopted. Lewin (1947) depicted a three-step unfreeze-move-freeze model for changing a social system. In Lewin's model, the present condition of an organization or a group is conceptualized as a dynamic social equilibrium, where a balance is being maintained by active driving and resisting forces. A change represents a

disruption of the equilibrium. First, the *unfreezing* stage involves behavior that increases the system's receptivity to change by destabilizing the status quo. Then, at the *moving* stage, the actual transformation is made, resulting in a shift of the equilibrium to a new level. Finally, at the *freezing* stage the new equilibrium is stabilized and maintained.

Building on Lewin's three-step model, many authors have described planned change as a sequence of stages or steps (e.g. Beer et al., 1990; Kotter, 1995; Levy, 1986; Phillips, 1983). The idea behind the models is usually that the stages cannot be bypassed without harming the progress of change (Armenakis & Bedeian, 1999). While different models label the stages differently and contain a different number of steps, the contents of the models are to a large degree similar, typically starting with an analysis of the situation and development of a vision, and proceeding to making the actual change actions, after which the changes are institutionalized (see Buhanist (2000) and Lanning (2001) for a comparison of different stage models). Most of the stage models are practitioner-oriented and aim to codify the best practices of change management by providing recommendations and checklists for managers.

The detailed stage models of change have received substantial criticism. They have been accused of oversimplifying the reality (Lanning, 2001), and their universalist "one size fits all" approach has been questioned (Burnes, 1996). It has also been pointed out that there is very little scientific evidence proving the effectiveness of the models (Farias, Johnson, Worren, Ruddle, & Moore, 2000). Organizational change tends to be nonlinear and iterative (Coram & Burnes, 2001; Higgs & Rowland, 2005) and also unpredictable, as planned change efforts may involve unplanned elements (Bamford & Daniel, 2005; Erakovic & Powell, 2006; Greiner, 1967). This conception brings planned change closer to the emergent view, making change less dependent upon detailed plans and embracing the related complexity and uncertainty (Coram & Burnes, 2001; Bamford & Daniel, 2005; Bamford, 2006).

Despite the criticism, the literature on planned organizational change has increasingly produced lifecycle models and recipes for change management along the change initiative's lifecycle. Even studies that do not lean on detailed stage models tend to make a distinction between the development phase and the implementation phase of a change endeavor (e.g. Dobson, 2001; Stoddard & Jarvenpaa, 1995). Following this division, the current study focuses on the early stage of change, involving activities such as initiation, planning, solution development and preparation for implementation. In terms of Lewin's (1947) three step model, the focus is

mainly on the unfreezing stage, which will be followed by "moving" and "freezing".

The early stage of change has been characterized as particularly complex (Zand & Sorensen, 1975), and also as especially critical, since it guides the entire venture (Gioia & Chittipeddi, 1991). During the early stage, important decisions are taken on what needs to be changed and how (Bruch et al., 2005), and the organization is prepared for change (Howes & Quinn, 1978). Studies have shown how the early stage of radical change involves different techniques (Stoddard & Jarvenpaa, 1995) and even a different organizing structure (Dobson, 2001) than the implementation stage. Activities related to the early stage have been listed, such as analyzing the current state, providing rationale for the change, collecting baseline data, creating plans, designing the organizing structure, assembling resources, and training personnel (Klein, 1996). Still, empirical research has mostly focused on the implementation stage, whereas the early stage of large-scale change has received surprisingly little attention (Bruch et al., 2005). This study aims to increase the understanding of this crucial stage of a change effort. Next, the discussion is turned to the successful management of the early stage of change. Before that, the definition of success in organizational change is discussed.

### 2.2.3 Successful management of the early stage of organizational change

Change programs aim at improved organizational performance, growth, and survival. Financial performance is the most common criterion for assessing the success of change, typically measured by return on investment, return on assets, profitability, and sales growth (Barnett & Carroll, 1995; Waclawski, 2002). Finding the suitable criteria for evaluating organizational change is often difficult, and even if the agreement on the success criteria is reached, it may be difficult to prove that the observed changes have really resulted from a particular intervention (Wilkinson, 1997). Criteria that may relate more closely to a specific change program (but also are more subjective and difficult to measure) include the institutionalization of the changes, the frequency of use of the results, and the perceptions of the involved employees about the achievement of the change goals (Nutt, 1986).

Large-scale organizational change involves risks, and often the consequences of changing are not fully know (Balogun & Johnson, 2005; Bruch et al., 2005). Change programs may have negative outcomes, like stress, cynicism, and reduced commitment (Armenakis & Bedeian, 1999), and the success of a change program may depend on the perspective taken. Typical change-related employee concerns include the threat of job loss and

the impact on the nature of work (McHugh, 1996). Human values and organizational effectiveness often come into conflict during large-scale change (Alderfer, 1977), as it may be impossible to integrate the employee and organizational needs (Beer & Walton, 1987). For instance, a change that improves the organization's short-term financial performance may simultaneously decrease employee well-being. The level of success in organizational change may vary in time (Pettigrew, 1990), and in the long run the crucial issue often is whether the change is sustained, i.e. whether the new work methods and performance levels do not decay but persist for an appropriate period (Buchanan et al., 2005).

Instead of examining the ultimate success of change programs, the current study addresses change program performance by evaluating how the early program activities contribute to the progress of the entire program. The study is based on the assumption that the early activities affect the program's eventual success. For example, early planning activities may help ensure that the planned changes fit with the organization's specific features and situation. Next, the discussion is turned to the key issues in successful initiation of change.

Change management literature includes many lists of "best practices" of change. The different stages of the suggested stage models often incorporate success factors, and success factors are sometimes depicted as steps that should be followed in a particular order (Lanning, 2001). Several authors have provided extensive, empirically based lists of success factors or enablers of change (e.g. Covin & Killmann, 1990; Fernandez & Rainey, 2006; Greiner, 1967; Kotter, 1995). The proposed success factors have been similar across different types of change initiatives, and the same enablers are reported to apply to both public and private sectors.

Table 6 lists commonly described success factors that are relevant at the early stage of change. The factors included in the table are grouped into three categories: factors related to establishing the intent for change, factors that aim at ensuring resources for the change effort, and factors related to mobilizing change. Table 6 provides examples of studies that mention each factor. Both research-oriented and practitioner-oriented studies are included, but all the studies are based on either empirical observations or systematic reviews of existing research.

Many success factors listed in Table 6 particularly concern change initiation, such as the creation of a shared vision, a sense of urgency, and a purposeful plan. Others, such as the existence of a skillful leader, a dedicated program team, and effective communication, affect the whole change process, but are relevant also during the early stage of change. Actually, when comparing the list of factors in Table 6 with the full (stage-

independent) listings of success factors of change presented in the literature, a conclusion can be made that most of the success factors of organizational change somehow deal with change initiation, planning and preparation. There are still some stated success factors that mainly concern later stages of change, for example, monitoring and evaluating the progress of change, providing training regarding the change results, and rewarding for success (e.g. Fernandez & Rainey, 2006; Lanning, 2001). Although the basis for these activities may already be laid during the early stage of change (e.g. by creating reward systems and control procedures), in this dissertation these activities are viewed primarily as success factors of change implementation and thus mainly excluded from the discussion.

Table 6 Success factors related to the early stage of change programs

| Reported success factors | Examples of studies |
|---|---|
| **Establishing intent** | |
| Visible need and pressure for change | Greiner, 1967; Covin & Kilmann, 1990; Kotter, 1995; Lanning, 2001; Fernandez & Rainey, 2006; Leppitt, 2006; Cunningham & Kempling, 2009 |
| Clear and shared vision and sense of direction | Covin & Kilmann, 1990; Bamford & Daniel, 2005; Kotter, 1995; Leppitt, 2006; Marks, 2007; Cunningham & Kempling, 2009 |
| Purposeful plan for change content and change process | Lanning, 2001; Fernandez & Rainey, 2006; Leppitt, 2006; Cunningham & Kempling, 2009 |
| **Ensuring resources** | |
| Skillful and charismatic leader | Covin & Kilmann, 1990; Salminen, 2000; Lanning, 2001 |
| Dedicated and powerful program team | Kotter, 1995; Lanning, 2001 |
| Visible senior management support and involvement | Greiner, 1967; Covin & Kilmann, 1990; Lanning; 2000; Lok, Hung, Walsh, Wang, & Crawford, 2005; Fernandez & Rainey, 2006 |
| Supportive and receptive organizational atmosphere | Howes & Quinn, 1978; Lanning, 2001; Bamford & Daniel, 2005; |
| **Mobilizing change** | |
| Participative or empowering approach in planning | Covin & Kilmann, 1990; Kotter, 1995; Salminen, 2000; Lanning, 2001; Bamford & Daniel, 2005; Lok et al., 2005; Marks, 2007 |
| High degree of communication | Covin & Kilmann, 1990; Lanning, 2001; Marks, 2007; Cunningham & Kempling, 2009 |
| Sustaining the momentum | Kotter, 1995; Marks, 2007 |

Before examining the success factors more closely, it is worthwhile to note that some studies have taken an alternative perspective, listing factors that contribute to the failure of organizational change (Covin & Killman, 1990; Darragh & Campbell, 2001; Kotter, 1995). These studies attribute failure to a wide variety of issues, including but not limited to top managers forcing

change, unrealistic expectations, low priority of the change initiative, key managers' inconsistent actions, and misplacement (or no placement) of responsibility. Many of the reported "failure factors" are mirror images of the success factors, such as the lack of management support, poor communication, unclear purpose of change, and lack of meaningful participation. Next, each success factor listed in Table 6 is introduced in more detail.

**Establishing intent**

The first three success factors directly relate to the defreezing activities (cf. Lewin, 1947) and thus are in the core of change initiation. These three factors are about establishing the intent for change. Firstly, one of the most commonly reported success factors of organizational change is *a visible need and pressure for change*. When organizational members understand the rationale of the change and view it as justified, they are more likely to commit to the change effort. Often, change leaders need to actively convince others about the legitimacy of the change (Stjernberg & Philips, 1993). Issue selling (Dutton & Duncan, 1987; Dutton et al., 2001) is one way to characterize such activity. Nutt and Backoff (1993) describe how the leaders of a large-scale change effort may reframe the change individually for each interest group by stressing the aspects of change that serve that particular interest group.

The existence of a visible need has been reported to reduce resistance to change, defined as the inability or unwillingness to accept organizational changes (Buchanan & Huczynski, 1997). Resistance to change has been identified as one of the main reasons behind failed change efforts and it has received considerable research attention (e.g. Ford, Ford, & McNamara, 2002; Mealia, 1978; Trader-Leigh, 2002). Employees are especially likely to resist changes that involve staff reduction (Dibella, 2007). Still, all change is disruptive and upsets the organizational balance (Karp & Helgø, 2008). The benefits and threats related to a change may be perceived differently by different employee groups, and the responses can vary according to the actors' subjective perspectives and interests (Karp & Helgø, 2008; Spencer & Sofer, 1964). Contrasting the traditional view, resistance to change has also been promoted as a positive force that can be used as a resource for change (Ford, Ford, & D'Amelio, 2008). For example, change leaders may interpret the change recipients' questions and complaints as a counteroffer that can refine the change plans to be more successful (ibid.).

Many authors suggest that in addition to a visible need for change, there should be pressure and a sense of urgency (Kotter, 1995; Leppitt, 2006; Meyer & Stensaker, 2006). The pressure for change is related to the concept

of momentum (Dutton & Duncan, 1987; Jansen, 2000, 2004; Kelly & Amburgey, 1991; Phillips, 1983), which is difficult to conceptualize but typically refers to a dynamic force whose presence or absence affects the success of the change effort. Jansen (2004) describes change-based momentum as the energy associated with the movement along a new trajectory. Jansen studied momentum during the early stage of strategic change and found that change-based momentum is positively related to future goal attainment, while goal attainment is also positively related to future momentum. In Jansen's findings, communicating about the change in ways that convey urgency, feasibility, and progress was positively related to momentum, while critical events that shift attention away from the change had a negative influence on it. (ibid)

Another well-recognized success factor of organizational change is *a clear and shared vision and a sense of direction*. The change vision should provide purpose, focus and commitment (Eisenbach, Watson, & Pillai, 1999). Effective visions are described as meaningful, inspiring, ethical, and memorable, and they build faith in those leading the change (Gill, 2003; Kotter, 1995; Marks, 2007). Beer and Walton (1987) describe how it is the change leaders' task to articulate and propagate the vision and to assign meaning and significance to it. Nutt and Backoff (1993) describe how the vision can be acquired in different ways: it can be based on a leader's idea, it may emerge from the various demands for change, or it can be created in co-operation by uncovering and interpreting signals. Nutt and Backoff suggest that the change is more likely to succeed when the vision is developed in cooperation with all key stakeholders, whereas Marks (2007) notes that a shared commitment to the vision can also be built after its creation by wide-scale participation.

A key outcome of the early stage of change is *a purposeful plan for the change content and the change process*. A plan or a change strategy describes how the vision will be reached (Fernandez & Rainey, 2006; Gill, 2003), stating the involved processes, structures, methods, and resources. Well-planned change is said to have a greater chance to succeed (Anell, 1998). Detailed planning of change has been also questioned, as many argue that complex change cannot be preprogrammed. In large-scale change efforts, continuous readjusting of goals, direction and methods is often required (Beer & Walton, 1987), and "planning for the unexpected" is a common challenge (Stewart & O'Donnell, 2007). Still, plans may have important purposes even in turbulent environments. For example, a study by Hill (2000) showed how the evolving plan may serve as a backbone of the change effort, providing a sense of continuity. Correspondingly, Anell (1998) suggests that change efforts should be planned carefully, but the

plans should be open-ended to a certain degree to leave room for spontaneity, creativity, and learning.

**Ensuring resources**

The second set of success factors relates to the different kinds of (human) resources that must be acquired or ensured during the early stage of change. Firstly, the importance of *a skillful and charismatic leader* is largely recognized (Fernandez & Rainey, 2006; Gill, 2003), especially concerning radical change (Lok et al., 2005). The characteristics, abilities, and activities of change leaders have attracted considerable research attention (e.g. Kahn, 1995; Woodward & Hendry, 2004). Organizational change is said to require charismatic leadership (Nadler & Tushman, 1990; Wang, Chou, & Jiang, 2005) or transformational leadership (Eisenbach et al., 1999). According to Nadler and Tushman (1990), charismatic leadership is about envisioning, energizing and enabling and it includes activities such as communicating the vision and motivating the participants. The leader of a change effort also needs a sufficient understanding of the content of change to ensure required credibility and ability to manage the change effort (Mikkelsen et al., 1991). Nadler and Tushman (1990) describe this side as instrumental leadership which focuses on managing structures and processes and includes activities such as setting goals, defining roles and responsibilities, creating control procedures, and rewarding participants.

Diverging views concerning the leadership of change have also been presented. Nutt and Backoff (1993) suggest blurring the leader-follower distinction and giving up hierarchical control to achieve the required commitment. Similarly, Karp and Helgø (2008) encourage the leaders to embrace the uncertainty and chaos related to change by loosening control, and by valuing communication, sensemaking, and self-governing. The leaders' role, then, is to serve as a role model and facilitate conversations and interactions (ibid.). Adding to this view, Nutt and Backoff (1993) discuss path clearing, which refers to the leader's actions in helping the followers by removing barriers that limit the adoption of changes.

A successful change program also requires *a dedicated and powerful program team*. Although a change effort may begin with just one or two people, some minimum mass of committed people must be recruited early in the effort (Kotter, 1995). The project-oriented literature describes the project or program team members as those planning and implementing the change (e.g. Lanning, 2001). While change management authors often do not explicitly refer to a project or program team, they frequently describe the need for dedicated resources for managing a change effort (e.g.

Fernandez & Rainey, 2006). Kotter (1995) further emphasizes how the guiding team must be powerful in terms of titles, information, expertise, reputation, and relationships. Change management literature regularly discusses change champions or change agents (e.g. Balogun, Gleadle, Hope Hailey, & Willmott, 2005; Chrusciel, 2008; Ginsberg & Abrahamson, 1991), described as change advocates that shape the conditions for change, take part in leading the change effort and actively promote change by their example. In these accounts it often remains unclear whether the described change agents have a formal role in the change project or program organization, e.g., as a program manager or owner. To date, the relationship between the change roles described in the change management literature and project or program management roles remains largely unclear (Stummer & Zuchi, 2010).

The larger the change effort, the more dedicated personnel is needed (Stoddard & Jarvenpaa, 1995). Although the core team may be small, it may be supported by a group of secondary participants. Since the required skills and resources cannot often be found within the organization (Dobson, 2001), external consultants may be called in to support the core team and to provide data, skills, suggestions, and ideas. Consultants may help in clarifying visions, motivating, training, and facilitating the change processes (Beer & Walton, 1987; Dobson, 2001; Saxton, 1995). Besides their expert role, external consultants may play a critical role as provocateurs that challenge the managers' thinking and as third party legitimizers of plans and decisions (Ginsberg & Abrahamson, 1991; Saxton, 1995). Beer and Nohria (2000) suggest that consultants may be especially helpful during the early stage of change. Still, the use of consultants involves challenges. Consultants often do not possess much knowledge about the business and history of the organization, and it may take time for them to learn the required details (Dobson, 2001). Also, if consultants are responsible for designing a change solution, much of the knowledge may be lost when the consultants leave the organization, reducing the organization's ability to maintain and develop the solution (ibid.).

*Visible senior management involvement and support* is also identified as a necessary condition for change (McNulty & Ferlie, 2004). The importance of top management support is highlighted in radical change (Lok et al., 2005), and particularly in the early stage of change, in developing the basic ideas (Mikkelsen et al., 1991). Top management may have an integral role in leading the change effort, communicating about the change, and resolving potential conflicts (Martin & Huq, 2007). Especially when a change effort is not led by a top management "champion", senior management should demonstrate its support for the change (Fernandez &

Rainey, 2006). Top management acceptance and support is not self-evident, but it may need to be actively achieved by the core change team members (Stjernberg & Philips, 1993). To ensure senior management support, project management literature has emphasized the role of a project or a program owner (or sponsor or director), who "owns" the project and is ultimately responsible for its success (e.g. Kloppenborg et al., 2006). The role of the owner is especially crucial in project or program initiation, ensuring a proper foundation for the effort and aligning the project or program goals with the wider business interests (ibid.).

The importance of a *supportive and receptive organizational atmosphere* for the success of change has been recognized (Beer & Walton, 1987; Feldman, 1986). Some types of organizational culture have been characterized as more receptive towards change. For example, the traditional public sector culture and values have been described to inhibit radical change efforts (Dixon et al., 1998; Harrow & Willcocks, 1990). Feldman (1986), on the other hand, argues that organizational culture is a source rather than an obstacle to change. Although some argue that change processes are only likely to succeed if they fit with the organization's current culture (Bruch et al., 2005; Cunningham & Kempling, 2009), others have viewed culture as the target of change, discussing culture change programs (e.g. Gill, 2003). The manageability and changeability of organizational culture has also been widely questioned (Parker & Bradley, 2000). Since organizational culture is described as enduring, organizational climate or atmosphere may be a more useful concept in terms of introducing change in organizations, defined as a more temporary employee feeling about the organization (Smeltzer & Zener, 1993). The change advocates are encouraged to actively create a favorable atmosphere for change by their actions (Bamford & Daniel, 2005; Marks, 2007).

**Mobilizing change**

The third category of success factors involves a set of recommended actions for successful management of change. These actions are not restricted to the early stage of change, although they have been identified as important tactics already during change initiation. Firstly, *participative or empowering approaches* are often recommended for planning change efforts. Radical change in particular is said to require significant cooperation among the key stakeholders (Nutt & Backoff, 1993). A common view is that transformation cannot be mandated, but it requires involvement from all concerned (Kimberly & Bouchikhi, 1995). Correspondingly, Bamford (2006) describes how managers should be facilitators rather than implementers of change. Earlier research on

organizational change has been accused of depicting organizational members merely as resisting change (Woodward & Hendry, 2004), and treating human resources as passive recipients of the top management's "empowerment" efforts (Willcocks et al., 1997). More recent studies acknowledge how successful large-scale change requires fundamental shifts in the ways how organizational members think and act (Woodward & Hendry, 2004).

Employee participation is increasingly described as a key mechanism in encouraging a welcoming approach to change (Buchanan & Huczynski, 1997; Lines, 2004; Russ, 2008). As Gill (2003: 314) describes, "change is exciting for those who do it and threatening for those to whom it is done". Different methods for participation entail different levels of involvement. Related to the early stage of change, attendance in change-related workshops is a common method (Greenly & Carnall, 2001). Organizational members are reported to more likely assume ownership of a change program when they can have input in the planning process (Mallinger, 1993). Other forms of participation include discussion forums, task forces, focus groups, brainstorming sessions, opinion surveys, and feedback systems (Russ, 2008). Regardless of the method, participation in change is seldom a one-time activity. For example, Gioia and Chittipeddi (1991) describe how change initiation may involve iterative negotiation processes that consist of several rounds of sensemaking and sensegiving.

Although contemporary change management models typically promote wide-scale participation, Dunphy and Stace (1993) note that participative approaches may not always be as participative as they seem. Also, Smeltzer and Zener (1993) argue that some change agendas are by nature top-down and directive, including massive lay-off programs, urgent turnarounds and major restructurings. Dunphy and Stace (1993) similarly propose that the participative approach to change is not suitable in all situations, but sometimes more dictatorial transformation techniques may be in place.

Many studies of organizational change suggest *a high degree of communication*. Communication during a change effort has many purposes. It is used to share information, clarify the objectives, obtain commitment, and reduce uncertainty, anxiety and resistance (Allen, Jimmieson, Bordia, & Irmer, 2007; Goodman & Truss, 2004; Russ, 2008). Besides the content, also the process of communication is important, concerning the timing of the messages, the use of appropriate media, and tailoring communication to the recipient profiles (Goodman & Truss, 2004). In addition to the participative communication activities described above, typical communication methods of change include newsletters,

pamphlets, bulletin boards, posters, web-sites, briefing sessions, and informal communication (Russ, 2008).

An important part of the early communication is the announcement of the forthcoming change. In the case of complex changes, the actual effects of change may be largely unknown, which makes it difficult to communicate the change to others (Smeltzer & Zener, 1993). Also, it may be challenging to engage in a discussion of difficult or even painful issues related to change (Beer & Eisenstat, 1996). Still, if a major change effort is not announced early, the employees are often able to sense the signals that a change is approaching (Smeltzer & Zener, 1993). If the announcement is postponed and communication is restricted, rumors can be expected, possibly promoting a negative climate (Klein, 1996; Smeltzer & Zener, 1993). Besides announcing change, early change-related communication aims at explaining the rationale and goals of the change effort, and developing and describing the involved plans and procedures (Klein, 1996). Marks (2007) argues that the participants of change should be fully educated about the necessity for change, the benefits related to it, the progress, and the related problems. The importance of dialogue has also been highlighted (Russ, 2008). Although extensive communication is typically recommended, Smeltzer and Zener (1993) note that one should not provide too much information during the early stage of change, as it may result in unnecessary controversy and confusion.

The last success factor is *sustaining the momentum for change*. Many authors warn about losing the momentum after the initial enthusiasm (e.g. Armenakis & Harris, 2002; Bruch et al., 2005; Cox, 1995). In large change programs, the initiation and planning stage may take years, and thus the managers of change need to put effort into actively sustaining the momentum. Stjernberg and Philips (1993) note how the legitimacy of change has to be continuously regenerated and sustained. The managers also need to ensure employees that the change is given priority and kept permanently present (Bruch et al., 2005).

One of the most commonly suggested tactics of sustaining the momentum is the introduction of so-called quick wins (Gill, 2003; Kotter, 1995; Marks, 2007), referring to visible benefits that are demonstrated early in the change process. Such short-term wins need to be systematically planned in advance and when achieved, made visible to the larger audience. In large change programs, a common tactic is to establish pilot projects that introduce the change first to just one unit or group before spreading it to the entire organization (Spencer & Sofer, 1964; Turner, 2005). If a pilot project is successful, it may help sustain the momentum and ensure others of the feasibility of change. The overall pace of change is also important.

Milestones and deadlines (Gersick, 1991; Stoddard & Jarvenpaa, 1995) give rhythm to a change effort and may help sustain the sense of urgency.

When reviewing the list of success factors presented in Table 6 and described above, one may easily observe that the factors are interrelated. For example, communication can be used to share the vision and prepare plans. Similarly, top management support may be demonstrated to create a favorable atmosphere. The concept of momentum seems related to many of the other factors. For instance, a shared vision, a sense of urgency and a participative approach may add to the momentum. The next section summarizes the discussion on the success factors by introducing the concept of readiness for change program implementation.

### 2.2.4 Readiness for change program implementation

The previous section discussed factors that contribute to the successful initiation of a change program. The success factors can be summarized with the help of the concept of readiness for change program implementation. The concept was developed by Armenakis et al. (1993), who argued that *readiness for change* is central to the success of change efforts and thus should be actively promoted. During the past decade the concept has received increasing attention (e.g. Armenakis & Harris, 2002; By, 2007; Holt, Armenakis, Feild, & Harris, 2007; Jones et al., 2005; Neves, 2009; Walinga, 2008; Weiner et al., 2008). As a related concept, *change receptivity* (e.g. Frahm & Brown, 2007) has been proposed as a measure for how receptive a person, group, or organization is to change. Readiness for change is typically defined as the extent to which employees have positive attitudes towards the need for change, accept the change, and believe that the change would have positive implications for themselves and the entire organization (Armenakis et al., 1993; Jones et al. 2005; Weiner et al., 2008). The term *openness to change* has been used in a similar manner (Allen et al., 2007). While these notions of readiness and openness center on the employees' perceptions and attitudes towards change, the employee perceptions may be viewed to reflect the organization's overall ability to make the desired changes in a successful manner (Jansen, 2000). In the current study, the focus is not on the individuals' attitudes and perceptions, but rather on the organization's ability to conduct the desired change efforts.

Many authors have used concepts similar to change readiness in describing how an organization must be prepared for change. Beer and Walton (1987) note how change should not be imposed on a resistant, *unready* system. Beer and Eisenstat (1996) propose that failure in organizational change often results from the inability to create an organization *capable* of implementing it. Correspondingly, *organizational*

*change capacity* has been defined as the organization's ability to develop and implement appropriate organizational changes (Judge & Douglas, 2009; Klarner, Probst, & Soparnot, 2008). Whereas change capacity describes an organization's general ability to change, recent research suggests that the concept of organizational readiness for change should be tied to the context of a specific change effort, instead of viewing it as a general state of affairs (Weiner et al., 2008).

Earlier studies provide some ideas on how to prepare an organization for a specific change. Nutt and Backoff (1993: 323–324) state how "a careful consideration of what is needed to make implementation possible and steps that must be taken to secure the needed support are essential components of a transformation". Woodward (1982) sets four criteria for the performance of project planning: a realistic plan; completion of the plan within the timescale; smooth task-oriented performance; and organizational acceptance of the plan. Furthermore, a survey of the success factors of large-scale change programs by Covin and Killmann (1990) highlighted the need to prepare the organization for a successful change.

In this study an organization-level perspective to readiness for change is adopted to include the multiple dimensions of change initiation. In the context of large-scale organizational change programs, readiness for change program implementation is viewed to reflect the various organizational abilities and resources that are created or ensured during the early stage of change and that are required to successfully implement the change program. This approach is encouraged by the notion that Armenakis et al. (2002) relabel the three steps of Lewin's (1947) unfreeze-move-freeze model as readiness, adoption and institutionalization.

The present study uses the concept of readiness for change program implementation to integrate the success factors of change program initiation listed in Table 6. Building on the literature review, *readiness for change program implementation* is defined as having a shared intent for the change, and possessing the resources that are required for the implementation of a certain change program. The concept includes both the willingness and the ability to implement the change (Weiner et al., 2008). Instead of indicating the organizations' general ability to change, or the change recipients' personal attitudes towards change, the concept describes the organization-level readiness to implement a specific change program. Thus, the definition provides a contextual view of readiness for change, linking it to a certain change context.

To summarize the discussion, readiness for change program implementation is defined as consisting of commonly reported success factors of organizational change. These factors must be ensured or acquired

during the early stage of a change program, as they are required for moving the program successfully from the early idea through the initiation and planning stage to implementation. The conception of readiness for change program implementation includes the first two sets of success factors of change listed in Table 6, the intent and resources for change. Rather than representing a dimension of readiness for change, the third category of success factors in Table 6, the tactics for mobilizing change, is viewed to consist of potential means for creating and maintaining readiness. For example, Armenakis et al. (1993) describe how readiness for change can be promoted by active participation and persuasive communication. Jansen (2000) acknowledges how the managers' active efforts, interactions and manipulation may build momentum and increase readiness for organizational change.

Most of the identified activities related to mobilizing change concern the core program team's interaction with the larger audience of organizational members, indicating cooperation across the change program's boundaries. The next section of the literature review examines the contextuality of change programs in more detail.

## 2.3 Contextual interplay of change programs

This section examines how change programs are embedded in their context and how the linkages with the context may be managed. After summarizing literature on the contextuality of organizational change and temporary organizations, the discussion centers on the interplay between a change program and its parent organization, summarizing the previous research that informs the current study.

### 2.3.1 Contextuality of organizational change

Research on organizational change has increasingly emphasized the contextuality of change, acknowledging that every change effort is different and embedded in a specific context. Correspondingly, the management of change should be tailored according to the situation-specific requirements (Bamford & Daniel, 2005; Beer & Walton, 1997; Coram & Burnes, 2001; Erakovic & Powell, 2006; Rafferty & Restubog, 2010). The organization's position within its environment, its structure and governance as well as the "invisible factors", such as taken-for-granted rules, norms and values may have a significant influence on change efforts. Change initiatives are also affected by other activities, projects and events taking place in the organization and in its environment (Huy, 2002). Similarly, the organization's past history affects its future and should be considered when planning a large-scale change effort (Kimberly & Bouchikhi, 1995; Nutt & Backoff, 1993). Dobers and Söderholm (2009) suggest that organizational

change processes are especially open for external influences in their beginning and towards their end.

Authors advocating a contextual approach to change have criticized the stage models and other recipes for managing change of their "one size fits all" approach (Burnes, 1996). Respectively, contingency models for change have been introduced (e.g. Dunphy & Stace, 1988; Kotter & Schlesinger, 1979), highlighting focal contextual factors like the type and scale of change, the timeframe in which the change should be achieved, and the extent of support for the change (Hope Hailey & Balogun, 2002). These contingency models suggest that contextual factors determine the appropriate approach to change, including the management style, intervention methods, and required roles and responsibilities. Burnes (1996) goes beyond the classical contingency theory, arguing that the managers of change programs do not just passively adapt to the contingency factors, but they also make choices in what changes they implement and how. Burnes maintains that managers may affect the contingency factors by influencing the circumstances of change, which requires understanding of the organization's current situation and the related constraints.

The context, content and process of change are intertwined and thus all three should be taken into account in the study of organizational change (Armenakis & Bedeian, 1999; Barnett & Carroll, 1995). Especially Pettigrew and his colleagues (Pettigrew, 1987; 1990; Pettigrew, Woodman, & Cameron, 2001) have argued for a more contextual approach to studying organizational change. Pettrigrew (1990) divides the context of organizational change into the outer and inner context of the organization. The outer context involves wider environmental forces, such as political, social, economic and sectoral influences, whereas the inner context involves the structural, cultural and political environment of the organization. Empirical research adopting the contextual view of organizational change has typically focused on examining specific areas of the context, such as the effects of the industry sector (Child & Smith, 1987) or organizational culture (Feldman, 1986).

The current study takes a contextual view to organizational change in two ways. Firstly, instead of focusing on the change program's internal life, the study acknowledges the importance of the program's context and focuses on examining the key program actors' interaction with other members of the parent organization. Secondly, the study examines the impact of contextual factors on the early program activities and on creating readiness for change program implementation. The study aims to identify key contextual factors, primarily related to the inner context of the

organization, that have an effect on the management and success of change program initiation. These contextual factors will be examined on three levels: the program's characteristics, the parent organization's characteristics, and the individual characteristics of the involved key actors.

The next section reviews existing literature on the contextuality of projects, programs and other temporary organizations.

### 2.3.2 Contextuality of temporary organizations

Traditionally, project management research has taken an inward-looking perspective, viewing projects as isolated entities or as independent "islands" (Engwall, 2003). Nowadays an increasing number of researchers acknowledge that projects and programs are in many ways embedded in the wider context (Blomquist & Packendorff, 1998; Hällgren & Maaninen-Olsson, 2005; Jensen et al., 2006; Manning, 2008; Modig, 2007; Sydow et al., 2004). Projects and programs have relations with previous, simultaneous and future activities and projects, and with the traditions and norms of their organizational context (Engwall, 2003). Similarly to all organizational activities, projects and programs are affected by their economic, political, social, technical, legal, and environmental contexts (Harpham, 2000).

In line with the contextual view, an increasing number of authors have adopted an open systems perspective to projects and programs (e.g. Artto, Martinsuo, Dietrich, & Kujala, 2008; Crawford & Pollack, 2004; Hellström & Wikström, 2005; Morris, 1988). There is also a growing stream of research that takes a contingency view of projects, arguing that different kinds of projects and programs require different management approaches (e.g. Blomquist & Müller, 2006; Dietrich, 2007; Larson & Gobeli, 1989; Sauser et al., 2009; Shenhar & Dvir, 1996; Shenhar, Tishler, Dvir, Lipovetsky, & Lechler, 2002). In addition to the "classical" project-related contingency factors like the project size and type, recent studies argue that also the external environment of the projects and programs affects their management, as the context simultaneously enables and inhibits the projects' actions (Modig, 2007; Pellegrinelli et al., 2007). Engwall's (2003) findings suggest that the probability of smooth and efficient project execution is greater if the project's purpose and the employed practices are aligned with the ideas, structures and behavioral patterns of the surrounding organization(s).

Traditionally, project and program management literature has addressed the projects' and programs' interplay with their context indirectly, through stakeholder management, communications management, and purchasing management (e.g. Office of Government Commerce, 2007; Project Management Institute, 2004, 2006). For example, Bourne and Walker

(2005) describe how project managers are challenged to identify the key stakeholders and decide how and when to involve them in the project. Recent research has also shown how unexpected events, deviations, or exceptions that stem from the project's stakeholder environment may have an impact on the project (Aaltonen et al., 2010; Hällgren & Maaninen-Olsson, 2005; Söderholm, 2008). Whereas the traditional project management perspective has viewed the project's embeddedness mainly as a dysfunction and regarded environmental influences as distractions to project execution, a more recent perspective suggests that embeddedness should be taken for granted, and one should concentrate on handling environmental influences in a way that benefits both the focal project and the surrounding organization(s) (Blomquist & Packendorff, 1998).

Authors adopting the temporary organization view acknowledge the importance of a project's or program's relations with its environment, and have encouraged more research on this topic (Grabher, 2002; Lundin & Söderholm, 1995; Lundin & Steinthórsson, 2003; Turner & Müller, 2003). Although temporary organizations may be embedded in multiple organizations, complex stakeholder networks and wider institutional fields (Manning, 2008), the present study focuses on the relationship between a change program and its parent organization. A change program is affected by the wider context and it may interact with several external organizations and groups, but the parent organization provides the immediate operating environment for the program. As Andersen (2008) notes, the entire purpose of the program is value creation for its parent organization. Figure 1 depicts the focus of the present study by portraying an internal change program within its parent organization.

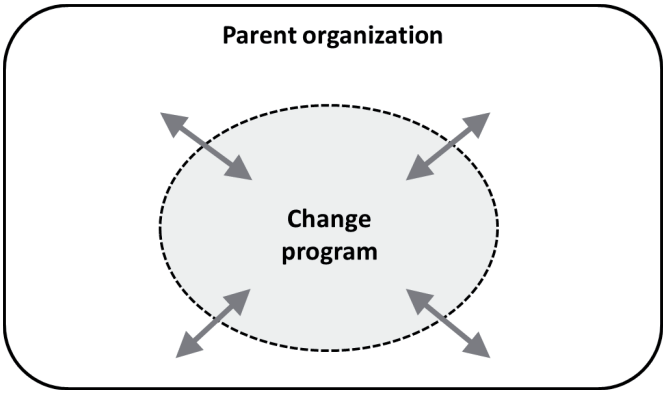


Figure 1 Illustration of a change program embedded in its parent organization

The next section reviews existing literature concerning the interplay of programs and projects with their parent organizations.

### 2.3.3 Program-parent organization interplay

Within mainstream project management literature, the interplay of projects with their parent organizations has been primarily covered as structural and governance choices (Project Management Institute, 2004), such as matrix organizing (Arvidsson, 2009; Kuprenas, 2003; Wilemon, 1973). The discussion has centered on comparing the advantages and challenges related to different organizational structures (Alsène, 1998; Andersen, 2000; Larson & Gobeli, 1989), and especially on describing tensions between the project personnel and the functional organization. Previous literature has reported difficulties related to dual reporting, role conflicts and authority issues (e.g. Andersen, 2000; Wilemon, 1973).

Some studies have taken a broader perspective to the relationship between a project and its parent organization, examining this interplay as loose vs. tight coupling (Heller, 1999), attachment vs. detachment (Johansson, Löfström, & Ohlsson, 2007), or integration vs. isolation (Lehtonen & Martinsuo, 2009). The studies have reported how project goals are derived from the goals and strategies of the parent organization (Heller, 1999), and how the parent organization may provide tools, techniques, infrastructure, funding, resources, and support for the project (Besner & Hobbs, 2008; Gelbard & Carmeli 2009; Ives, 2005). The parent organization may establish various governance mechanisms to guide and control the project's progress (Ives, 2005). Especially, the appointment of a project owner or a sponsor provides a central link between the project and the parent organization (ibid.). Project teams may also be linked with other members of the parent organization by common location choices (Lakemond & Berggren, 2006) and by shared resources (Eskerod, 1996). Related to the interplay of projects with their parent organizations, a growing stream of studies examines how knowledge and learning is transferred across the projects' boundaries (e.g. Bresnen, Goussevskaia & Swan, 2004; Cacciatori, 2008; Dougherty & Takacs, 2004; Grabher, 2004), so that this knowledge can be utilized in other projects and activities.

Literature on program management gives more emphasis to the program's connections with its parent organization than the traditional project management literature. Artto et al. (2009) compared literature sources on project and program management and concluded that whereas project management articles tend to focus on issues at the level of single projects, the level of analysis in program management studies is often the organization as a whole. There are several reasons for the higher level (and more external) focus of the program management studies. Firstly, the need to link the program to the business and strategy of the parent organization is widely reported (Ferns, 1991; Pellegrinelli, 1997; Ribbers & Schoo, 2002).

Similarly, program management standards (Office of Government Commerce, 2007; Project Management Institute, 2006) recognize that programs deliver benefits and capabilities that support the parent organization in achieving its goals. The value of the program to the parent organization may be articulated, e.g., in the form of a business case (e.g., Office of Government Commerce, 2007; Pellegrinelli et al., 2007) that is described to provide a basis for the value management process (Thiry, 2002; 2004a) during the program's lifecycle.

Literature on program management also describes how program managers need to maintain an external focus (Blomquist & Müller, 2006), as they must ensure connection with the evolving organizational goals to secure the viability of the program. Programs are long-term endeavors and the environment of the program may develop and change significantly during the program's lifecycle. Thus, compared to project managers, program managers need to be more conscious of and responsive to changes in the program's external environment (Pellegrinelli et al., 2007). Program management standards also regularly highlight stakeholder management (Office of Government Commerce, 2007; Project Management Institute, 2006), and describe how program directors, sponsors and steering groups are in a central role in ensuring that the desired benefits are achieved.

Even though program management literature has acknowledged the need for an external focus, Pellegrinelli et al. (2007) argue that the current standards and guidelines for program management do not sufficiently cover the need and the means to manage the program's connection with its operating environment. For example, although the current program management standards suggest that program governance should fit within the wider governance framework of the parent organization (Office of Government Commerce, 2007; Project Management Institute, 2006), the standards do not sufficiently take into account the need to adapt the program management practices to the needs of different organizations and programs (Pellegrinelli et al., 2007). There is also very limited research evidence on the actual means of managing the change program's interaction with its parent organization.

Many aspects suggest that the early program phase is particularly interesting in terms of the program's interplay with its organizational context. During the early stage, the program plan should be aligned with the wider requirements and organizational strategy (Turner, 1999). The involvement of various stakeholder groups, each with their specific interests and expectations, is emphasized during program initiation (Thiry, 2004a). Also, Gray and Bamford (1999) note how the proposer of a new change

program should confirm that potential "buyers" exist for the program outputs within the organizational environment.

Previous research has acknowledged that internal change projects and programs are especially interesting in terms of their interaction with the organizational context (Johansson et al., 2007). Blomquist and Packendorff (1998) describe change projects and programs as the most embedded kind of temporary organizations. An internal change program aims at changing the parent organization and gains its resources and the entire reason for existence from it. As Pellegrinelli (1997) states, a program operates on the existing structures, systems and procedures to transform or replace them.

The managerial structures and procedures of some organizations may also constrain programs (Ferns, 1991). Furthermore, Huy (2002) notes how it may be a considerable challenge to balance between achieving change and maintaining operational continuity during radical organizational transformation. The attempted change typically requires considerable efforts from the recipients, as change deals with people's behaviors, not only with tangible deliverables (Pellegrinelli, 2002). Adding to the complexity, the participation in a change program can be part-time (Eskerod & Jepsen, 2005), and the program staff may themselves represent the clients or "users" of the attempted change, besides their roles as planners, "sellers", and implementers of change (Andersen, 2000). The present study examines this complex interplay between a change program and its parent organization in detail.

### 2.3.4 Integration or isolation?

Within organization theory and management studies, the relationships and connections between organizational entities have typically been examined as *integration*. Integration has been viewed as the process of achieving unity of effort among the various subsystems (Lawrence & Lorsch, 1967), as collaboration (Ledwith & Coughlan, 2005), coordination (Martinez & Jarillo, 1989) and communication (Griffin & Hauser, 1996). Integration may deal with any of the organization's components, such as departments, functions, processes, systems, people, and technology. Integration can be achieved through diverse solutions and integration mechanisms (Griffin & Hauser, 1996; Martinez & Jarillo, 1989). Research on organizational integration has examined integration within and between organizations. Studies on intra-organizational integration have primarily centered on integration between organizational units or functions (Griffin & Hauser, 1996; Nihtilä, 1999; Souder & Moenaert, 1992; Turkulainen, 2008), or integrating knowledge or technologies into an organization (Becker & Zirpoli, 2003; Carlile & Rebentish, 2003). External integration has been studied as supplier integration (e.g. Koufteros, Cheng, & Lai, 2007;

Petersen, Handfield, & Ragatz, 2005), and in the context of mergers and acquisitions (e.g. Puranam, Singh, & Zollo, 2003; Schweizer, 2005).

Integration has also been recognized as very central to project management (Morris, 1994; Stuckenbrück, 1988). For example, Project Management Institute's (2004) Project Management Body of Knowledge (PMBOK) includes project integration management as one of the nine knowledge areas of project management. In discussing integration, the project management discipline has mainly focused on integration within a project, i.e. a project's internal integration. For example, PMBOK (ibid.) views integration as the processes that are required to ensure that the various elements of the project are properly coordinated. Previous research has demonstrated how internal integration in projects and programs can be achieved through a variety of integration mechanisms, including formal management processes and standards, project meetings, status reports, information systems, reward systems, liaison positions, configuration management, and informal communication (e.g. Dietrich, 2006; 2007; Griffin & Hauser, 1996; Morris, 1988; Sicotte & Langley, 2000). Project management literature has seldom addressed the projects' and programs' external integration that expresses their contextuality.

The literature on organizational integration generally holds the assumption that integration is desirable, although there are costs related to achieving it (Barki & Pinsonneault, 2005). However, research on temporary organizations suggests that even though projects and programs are always embedded in their context, they simultaneously require a certain level of independence and autonomy in order to ensure efficient project execution (e.g. Johansson et al., 2007; Lundin & Söderholm, 1995; Sydow et al., 2004). Miles (1964) describes how the members of temporary systems are typically both physically and socially isolated from their ordinary environment. Lundin and Söderholm (1995) characterize the execution of a temporary organization as planned isolation, minimizing disturbances that could threaten the actions of the temporary organization.

Change programs need to be distinguished from the daily work of the organizations to ensure favorable conditions for effective program execution. Implementing change in the form of a program makes it possible to detach the change to some extent from the constraining norms and processes of the parent organization (Partington, 2000). The change program may also need to be protected from external disturbances. There may be a constant competition for resources between the program and the day-to-day operations (Mikkelsen et al., 1991), and program managers may need to protect their team members from external requests and pressures (Goodman & Goodman, 1976). Lundin and Söderholm suggest that planned

isolation is achieved by planning and guarding. Plans enable independent action without the need to continuously ask for approval outside the temporary organization, and guarding mechanisms further restrict the contacts between the temporary organization and its surroundings (ibid.). On the other hand, the suitability of isolation and detachment in the case of internal change projects and programs has been questioned (Andersen, 2008; Johansson et al., 2007). A study by Huy (2002) showed how a project team's tendency to accentuate the division between "in-group" and "out-group" led to insufficient commitment of external stakeholders and unwillingness to assign resources to the project. Similarly, Lakemond and Berggren (2006) found that a continuous isolation of a project may lead to negative consequences, including insufficient coordination and "us vs. them" feelings.

Artto and his colleagues (Artto, Kujala, Dietrich, & Martinsuo, 2008; Artto, Martinsuo et al., 2008) describe how projects differ in their level of autonomy with regards to the environment. Highly autonomous projects may pursue renewal and innovation even in ways that contradict with their parent organization's strategy. Recent empirical studies confirm that some projects are more tightly linked with their environment and some are more isolated (Johansson et al., 2007; Martinsuo & Lehtonen, 2009). The findings by Johansson et al. (2007) suggest that projects that are deeply integrated in the permanent organization may be easy to execute, but their potential for radical organizational change may remain modest. Projects that are implemented according to the isolation principle can be innovative and creative, but the implementation of their results may be difficult and they may not provide benefits for the permanent organization in a desired way. Alsène (1998) also explains how there may be opposition towards the establishment of a strong and autonomous temporary organization for a change effort due to the fear of losing influence over the project and the potential difficulties related to the reintegration at the end of the project.

In summary, the tension between the autonomy requirements of the program or project team and the program's embeddedness in the organizational context is a significant dilemma (Sydow et al., 2004). On the one hand, a program requires autonomy in order to achieve its goals and function effectively. On the other hand, the program activities must be coordinated within the wider organizational context in order to ensure the realization of the benefits expected from the project. There is a tension between the requirements of stability and control, and the need to be flexible in order to react to increased knowledge and changing circumstances (Olsson & Magnussen, 2007). Dobson's (2001) empirical findings demonstrate the tradeoff between autonomy and integration

already during the early program stage. When change programs are planned within an autonomous program team, design decisions can be made efficiently, without constant input and ratification of line managers. On the other hand, these programs may require a significant amount of rework, since the original solutions may not fully meet the business needs.

Acknowledging that somewhat contradictory characterizations have been reported in previous research regarding the interaction of temporary organizations with their context, the current study makes an attempt to shed light on this interaction during the early days of a change program. The study aims to dig deeper into the activities that managers of emerging change programs use in achieving both integration with and isolation from the program's parent organization. In conceptual terms, the study examines how the temporary organization's boundaries are created, maintained, guarded and crossed. In the next section, attention is turned to the literature on organizational boundaries and boundary activities.

## 2.4 Organizational boundaries and boundary activities

To address the relationship between an emerging change program and its parent organization, the concepts of organizational boundaries and boundary activities are adopted. The study analyzes the emerging boundary between a change program and its parent organization, and the activities that address the boundary, e.g., by shaping or spanning it. A simple illustration of the program-parent organization boundary is provided in Figure 2.

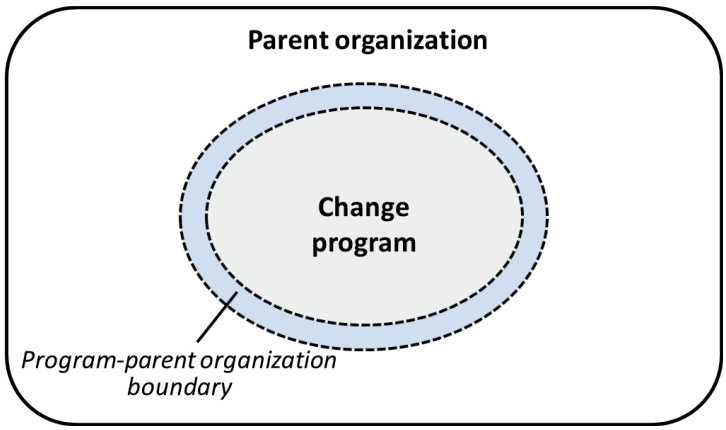


Figure 2 The focus of the study is on the program-parent organization boundary

Next, literature on organizational boundaries and boundary activities is introduced and discussed from the perspective of the current study.

### 2.4.1 Introduction to organizational boundaries

An organization's *boundary* is one of its basic properties. Boundaries define and limit organizations (Ashforth, Kreiner, & Fugate, 2000), separate them from one another (ibid.), and protect organizations from environmental stresses (Leifer & Delbecq, 1978; Thompson, 1967). Organizational boundaries have been conceptualized in multiple ways. While some authors emphasize how boundaries limit separate organizations from each other and protect organizations from external disturbances, others view boundaries as domains or frontiers where the organization interacts with its environment and acquires required resources (Yan & Louis, 1999). The choice of definition depends on the degree of autonomy of action the organization is seen to have concerning its environment (Aldrich & Herker, 1977) and how open the organization is perceived to be towards external influences (Scott, 2003). Typically, a boundary is viewed as the limit, demarcation or interface between an organization and its environment (e.g. Leifer & Delbecq, 1978).

Although research on organizational boundaries has mostly focused on the firm as a unit of analysis and studied inter-organizational boundaries, intra-organizational boundaries are also of high importance (Balogun et al., 2005; Yan & Louis, 1999). Within an organization, boundaries can be identified between functional units, other work units, different tasks, teams or informal groups (Lynn, 2005; Yan & Louis, 1999). The boundaries of temporary organizations have started to attract attention in recent research (Crawford & Pollack, 2004; Ratcheva, 2009; Turner & Müller, 2003). This study focuses on the boundaries of temporary change programs.

There are several reasons for why organizational boundaries exist, and various types of boundaries can be distinguished. First of all, the division of labor, specialized tasks and focused goals of organizational entities generate *task boundaries* (Hirschhorn & Gilmore, 1992; Miller & Rice, 1986). In a change program context, the program's task is to create a change in the parent organization, whereas the parent organization's task is to maintain stability and operate routine processes. The different task orientations result in a boundary between the temporary organization and its context. Secondly, the division of authority (both formal and informal) promotes *authority boundaries* (Hirschhorn & Gilmore, 1992). In the program context, the program's organizing structure includes the division of authority, defined and constrained by the authority structure of the surrounding parent organization. Thirdly, *physical or spatial boundaries* (Hernes, 2004; Scott, 2003) are manifested by either physical structures or formal rules and regulations that regulate human interaction. In the temporary organization context, project and program teams may be

physically isolated from their surroundings in a separate location (Lakemond & Berggren, 2006). Also, access to electronic databases such as project-specific intranet sites and project management software tools may contribute to the physical and spatial boundaries.

*Temporal boundaries* (Scott, 2003) are created by the temporal distance between organizational activities and promoted, for example, by schedules and office hours. Projects and programs involve a specific time bracket and a sense of urgency (Lundin & Söderholm, 1995), distinguishing them from other organizational activities. Finally, *social or identity boundaries* (Hernes, 2004; Hirschhorn & Gilmore, 1992) are determined by the identity and social bonding between people, and reflected in loyalty, trust and norms. Such boundaries are related to values and address the question "who is – and isn't - us" (Hirschhorn & Gilmore, 1992). In a project context, the development of a common project team identity may result in "us vs. them" feelings (Lakemond & Berggren, 2006), further contributing to the social detachment of the project personnel from others in the organization.

The different boundary types listed above do not exist in isolation, but they interact in a complex manner (Hirschhorn & Gilmore, 1992). All these aspects are likely to contribute to the existence of boundaries between change programs and their parent organizations. Organizational boundaries also differ in terms of their *permeability*, referring to the extent to which boundaries are open or receptive to inputs (Leifer & Delbecq, 1978). Although Miles (1964) suggested in his early depiction that a temporary system's boundaries tend to be fairly clear and non-permeable, more recent research has acknowledged that the permeability can vary from project to project (Crawford & Pollack, 2004). Previous research has described how the boundary between a change program and its parent organization is likely to be considerably permeable (Atkinson et al., 2006; Crawford & Pollack, 2004; Ekstedt et al., 1999). Unlike delivery projects that typically include explicit contracts and well-defined plans that help establish clear project boundaries, internal change projects and programs cannot be as clearly defined and distinguished from the rest of the organization (Atkinson et al., 2006). Change programs are in many ways embedded in their context and they often require negotiation, co-operation and a common sense of ownership across the parent organization's units (Crawford & Pollack, 2004). Staff is often shared with the functional units and other projects, further blurring the boundary (Atkinson et al., 2006).

It is largely recognized that organizational boundaries are difficult to distinguish, and thus establishing the boundaries of an organization is often a challenging task (Manev & Stevenson, 2001; Scott, 2003). For a researcher, the definition of an organization's boundaries is both a

theoretical and an analytical problem that depends on the specific conceptual and empirical context (Aldrich & Herker, 1977; Scott, 2003). In the case of organizational change programs, the problem of boundary definition is highlighted due to the programs' embeddedness in their context (Ekstedt et al., 1999). Especially during the early phase of a program, the boundary is likely to be highly blurred and hard to define. The boundary definition also depends on the perspective adopted. Even if managers may define and promote the change program explicitly, employees at the lower level of the organization may find it hard to distinguish and define the program (Blomquist & Packendorff, 1998). Adding to the challenge of boundary definition, organizational boundaries are not static but they often fluctuate over time (Hernes, 2004; Leifer & Delbecq, 1978; Scott, 2003). A change project's or a program's boundaries are especially dynamic. For example, a project's boundaries may expand as the project proceeds and more people get involved in the project-related activities (Ratcheva, 2009).

### 2.4.2 Boundary spanning and its theoretical origins

*Boundary spanning* refers to the set of activities involved in the organization-environment interaction (Jemison, 1984). Boundary spanning is about linking an organization to its environment (Aldrich & Herker, 1977) and coordinating the boundary. The terms *external activities* or *external functions* are used in the same manner to refer to those organizational activities that relate to the organization's interaction with its environment (Ancona & Caldwell, 1988; 1992a). Although the term boundary spanning refers to the actual bridging of the boundaries, other boundary related activities may be included, such as setting and shaping the boundaries, and buffering or guarding them. Correspondingly, Yan and Louis (1999: 29) propose the wider term of *boundary work* and define it as "the activities in which a system is engaged to deal with its environment, ranging from preserving resources in the face of competing demands to preventing environmental disruptions and collecting resources and support". As boundary spanning is an established term in organization theory, the term is used in this section. In the later chapters of the dissertation, the attention is centered towards a wider set of boundary-related activities, and thus the term *boundary activity* is employed.

The basic premise of boundary spanning is that organizations control their boundaries in order to reduce uncertainty and maintain autonomy (Russ, Galang, & Ferris, 1998). Thompson (1967) was among the early scholars who discussed boundary spanning, pointing out that organizations face a paradox of simultaneously sustaining internal stability and being responsive and adaptable to changes stemming from the external

environment. Thompson proposed buffering as a way to resolve this paradox. Based on the idea of core technology, Thompson stated that organizations seek to buffer environmental influences in order to protect their technical core, and to smooth out or level the input and output transactions in order to reduce environmental fluctuations. If environmental influences cannot be buffered or leveled, organizations seek to anticipate environmental changes and adapt to them. (ibid.)

The early literature on boundary spanning primarily represented the information processing view of the organization (e.g. Aldrich & Herker, 1977; Dollinger, 1984; Keller & Holland, 1975; Leifer & Delbecq, 1978; Leifer & Huber, 1977). According to this view, the demand for boundary spanning activities stems from the information requirements of the decision makers and from the perceived uncertainty: information about the environment must reach organizational decision makers so that they can make appropriate decisions in line with relevant environmental conditions and contingencies (Leifer & Delbecq, 1978). Decision makers thus determine the information gathering requirements of the organization based on their perception of uncertainty. Environmental uncertainty is a subjective matter: it is a question of the uncertainty the decision maker perceives rather than a simple attribute of an environment (ibid). Also, organizations face multiple environments, and thus have a variety of boundaries and different kinds of boundary roles (Aldrich & Herker, 1977).

From the information processing perspective, boundary spanners monitor the environment and transfer information across boundaries (Keller & Holland, 1975). Boundary spanners act as exchange agents between the organization and its environment (Leifer & Delbecq, 1978). They are both facilitators and filters of information transmission, as they protect organizations from information overload by filtering, consolidating, interpreting, delaying, storing, summarizing, and directing information (Aldrich & Herker, 1977). Determining which flows to admit and which to exclude is a difficult task, and the criteria may vary from time to time and from location to location (Scott, 2003). In a sense, boundary spanners absorb uncertainty on behalf of others in their organization (Leifer & Delbecq, 1978).

Boundary spanning has several purposes. It is a means for recognizing and dealing with trends or changes in an organization's environment (Jemison, 1984), and the information gained through boundary spanning activities may promote innovation and change (Aldrich & Herker, 1977; Leifer & Delbecq, 1978). In addition to information processing, boundary spanners are involved in acquiring resources and representing the organization (Aldrich & Herker, 1977). Boundary spanning is also a political

task, and boundary spanners act as negotiators between organizations (Perry & Angle, 1979). This negotiator and representative role may contribute to maintaining or improving the organizational legitimacy and image (Aldrich & Herker, 1977).

The information processing perspective has been criticized of viewing organizational members as instrumental in their information transfer behavior, and of regarding knowledge as objective, external and explicit (Kellogg et al., 2006). While the study of boundary spanning has been dominated by the information processing perspective, more recent research has taken alternative standpoints. Boundary spanning has been examined as communication (Katz, 1982; Manev & Stevenson, 2001), coordination (Kellogg et al., 2006), and knowledge integration (Teigland & Wasko, 2003). In recent studies, boundary activities have been analyzed from knowledge-based and practice-based views (Carlile, 2004; Kellogg et al., 2006; Levina & Vaast, 2005). Recent research has also emphasized the cultural aspects of boundary spanning, and the political aspects of knowledge (Kellogg et al. 2006). These studies highlight how boundary spanning is not only about information processing, but involves a wider set of purposes and activities.

While many organizational positions involve interaction with elements external to the unit or the organization, certain positions involve intensive interaction with the environment (Aldrich & Herker, 1977). People in such positions have been given a wide range of names in the literature. They have been called boundary spanners (Leifer & Delbecq, 1978), boundary role persons (Perry & Angle, 1979), boundary spanning individuals (Tushman & Scanlan, 1981a, 1981b), gatekeepers (Allen & Cohen, 1969; Tushman & Katz, 1980), and boundary spanners (Levina & Vaast, 2005; Nochur & Allen, 1992). Previous research has acknowledged how project and program managers are in an important boundary spanning position (Wilemon & Cicero, 1970; Wilemon & Gemmill, 1971). Especially in a matrix organization, project managers need to balance between the requirements of the project and those of the functional organization. Indeed, many of the core responsibilities of project and program managers are essentially boundary spanning activities (Wilemon & Cicero, 1970).

Being in a boundary spanning position can have both positive and negative consequences for the individual. Boundary spanners make decisions on what information passes through the boundary, to whom, when, and in which form. They may become powerful within the organization, as the organization relies on their expertise and discretion (Aldrich & Herker, 1977; Spekman, 1979). Being in a boundary role permits individuals to improve their bargaining position and thus increase their job

satisfaction and even help them advance in their careers (Aldrich & Herker, 1977). On the other hand, the multiple roles of boundary spanners can come into conflict and the position of boundary spanners may cause role pressure and stress (Aldrich & Herker, 1977; Levina & Vaast, 2005; Marrone, Tesluk, & Carson, 2007), especially if the goals of the organizations being spanned are incompatible and the expectations towards the boundary spanners are conflicting (Keller & Holland, 1975).

The current study focuses on the activities of boundary spanners in the context of change programs. Next, attention is turned to the literature on different types of boundary activities.

### 2.4.3 Boundary activities in organizations

Probably due to the strong information processing perspective as the theoretical background, early empirical studies on boundary spanning typically did not distinguish between different types of boundary activities, but examined boundary spanning through the frequency of communication (e.g. Keller & Holland, 1975; Tushman, 1977; Tushman & Scanlan, 1981a, 1981b). More recent research has acknowledged that there is a wide variety of boundary activities that have different aims and consequences. Especially Deborah (Gladstein) Ancona and David Caldwell (Ancona, 1990; Ancona & Caldwell, 1988, 1990, 1992a; Gladstein, 1984; Gladstein & Caldwell, 1985) have in their seminal work examined boundary activities, their role in organizations, and relations with organizational performance.

Although some studies examine organizational boundary spanning at the firm level (Jemison, 1984), most empirical studies have analyzed boundary activities of smaller organizational entities such as work groups or teams (e.g. Ancona, 1990; Cross, Yan, & Louis, 2000; Druskat & Wheeler, 2003; Levina & Vaast, 2005). Even though not explicitly examining temporary organizations, several studies have drawn empirical evidence from a temporary organization context, typically examining boundary activities of product development projects (Ancona & Caldwell, 1988, 1992a; Katz, 1982). Earlier studies have not explicitly addressed the change programs' boundary activities. In a related study, Balogun and her colleagues (2005) examined boundary-shaking practices of change agents in managing change initiatives that cross intra-organizational boundaries. By boundary-shaking practices they referred to the practices that change agents utilize when they attempt to enroll others to the change cause. While demonstrating the importance of boundary spanning behavior in the context of organizational change, Balogun et al. did not explicitly identify the boundary surrounding a change program and did not examine activities concerning this boundary, but instead studied change initiation activities that aim at shaping an organization's established boundaries.

Table 7 lists earlier empirical studies that distinguish and classify different types of boundary activities of teams, units and organizations (for a more in-depth review of team-level boundary spanning, see Marrone, 2010). The table describes the focus of each study and the context where boundary activities have been studied, as well as the related empirical data. In addition to actual boundary spanning activities, also those boundary activities are included that concern buffering or guarding the boundary.

Table 7 Summary of earlier studies of boundary activities

| Author(s) | Focus of the study | Boundary spanning activities | Isolative boundary activities | Research context and data |
|---|---|---|---|---|
| Jemison, 1984 | The influence of extra-organizational boundary spanning in strategic decision making | Information acquisition and control<br>Domain determination and interface, i.e. managing the customer interface<br>Physical input control | Control activities | 15 organizations from three industries: food processors, financial institutions and general hospitals (124 department heads, questionnaire survey) |
| Ancona & Caldwell, 1988 | Group members' activities in managing dependence on external groups | Scout<br>Ambassador | Sentry<br>Guard | Product development teams (interviews with 38 team managers and log data) |
| Ancona, 1990 | Team leaders' strategies toward the teams' environment | Informing<br>Parading<br>Probing | | Consulting teams (5 teams, observation, interviews, surveys, and log data) |
| Ancona & Caldwell, 1992a | Boundary spanning behavior, strategies and performance | Scout<br>Ambassador<br>Task coordinator | Guard | Product development teams (45 teams, interviews and questionnaire survey) |
| Druskat & Wheeler, 2003 | Boundary spanning behavior of external team leaders | Relating<br>Scouting<br>Persuading<br>Empowering | | External team leaders in manufacturing (19 team leaders, interviews, focus groups and surveys) |
| Levina & Vaast, 2005 | Boundary spanning and boundary objects in practice | Navigating<br>Negotiating<br>Use of boundary objects | (Not engaging in the boundary spanning activities) | Cross-unit or cross-organizational IT system implementation (two longitudinal case studies, observations and interviews) |
| Balogun et al., 2005 | Boundary shaking during organizational change | Adjusting measurement systems<br>Aligning agendas and selling<br>Engaging in stage management<br>Managing up, i.e. lobbying<br>Gathering intelligence | | Change agents in managing cross-organizational change initiatives (7 embedded cases, interviews, log data, and focus groups) |
| Kellogg et al., 2006 | Coordination across boundaries | Display<br>Representation<br>Assembly | | Post-bureaucratic organization, i.e., collaboration between communities (single case, interviews, observation, and document review) |

As can be seen from the list of studies in Table 7, the presented categorizations of boundary activities are diverse. Presumably, some differences across the categorizations are caused by the different theoretical backgrounds and perspectives adopted by the authors. For example, Kellogg et al. (2006) relate to the knowledge-based view of an organization, whereas Levina and Vaast (2005) base their study on practice theory. Some authors have categorized boundary activities based on the type of behavior (Kellogg et al., 2006), while others have used the direction of information and the resource flow (Ancona & Caldwell, 1988) or the aim of each activity (e.g. Druskat & Wheeler, 2003) as the basis for categorization. Despite these differences in perspectives and the observation that boundary spanning behavior may vary from context to context (Aldrich & Herker, 1977), common patterns concerning the boundary activities and their functions can be distinguished across the studies listed in Table 7.

Firstly, a central part of an organization's external activity focuses on searching for information in the organization's environment (Ancona & Caldwell, 1992a; Druskat & Wheeler, 2003; Jemison, 1984). Such *information scouting activities* aim at acquiring relevant external information that is useful for the focal organization in fulfilling its tasks. As an example, Ancona and Caldwell (1992a) found that scout activities in the context of product development teams involve general scanning for ideas and information about the competition, markets, and technology, and include mapping, information gathering, and scanning activities. Secondly, some studies highlight the transfer of information from the focal organization to its environment (e.g. Ancona, 1990). These *informing activities* aim at making the organization's environment aware of its activities. Thirdly, boundary spanners often serve as external representatives or ambassadors of the organization, lobbying for more resources, persuading others to support their organization, and managing its image (Jemison, 1984; Ancona & Caldwell, 1992a). Such *ambassadorial activities* include opening up communication channels, "selling" ideas and plans to others, persuading, negotiating, and influencing the external environment (Ancona & Caldwell, 1988, 1992a; Druskat & Wheeler, 2003).

Information about the focal organization's activities and about external activities may have to be traded in order to coordinate work with external parties (Ancona & Caldwell, 1992a). According to Ancona and Caldwell (1988, 1992a), such *task coordinator activities* aim at coordinating technical or design issues and include discussing design problems, obtaining feedback on the design, and coordinating work with the outsiders. Task coordinator activities are often targeted at actors that are tightly coupled with the focal organization, and there may be a high degree

of interdependence between the two (Marrone, 2010). Finally, earlier literature has acknowledged the need to guard and protect organizations, or in other words buffer organizational boundaries (e.g. Ancona & Caldwell, 1988, 1992a, 1992b; Cross et al., 2000). A further distinction can be made between controlling inputs and outputs (Jemison, 1984). Ancona and Caldwell (1988) distinguish between *guard activities* that aim to avoid releasing information outwards from the focal organization, and *sentry activities* that are about controlling the inward flows to protect the organization from external pressures.

The studies listed in Table 7 show how organizations such as project teams simultaneously engage in many kinds of boundary activities. Research by Ancona and Caldwell (Ancona, 1990; Ancona and Caldwell, 1992a) has shown how teams demonstrate different strategies for approaching the environment, and how some strategies may be more successful than others. In a study of 45 product development teams, Ancona and Caldwell (1992a) found how a comprehensive strategy, including a wide variety of boundary activities, was the only one positively related to performance over time, measured by achieving budget and schedule objectives and the team's long-term innovativeness. More limited strategies, such as those focusing on technical scouting or isolating the team from its environment, indicated poor performance over time. Although opening up the team's boundary may also have negative impacts on the team in terms of taking up time and energy from internal activities (Ancona, 1990; Choi, 2002), frequent external activity has generally been linked with higher performance (e.g. Ancona, 1990; Dollinger, 1984). For example, Ancona and Caldwell (1992b) showed that top managers are more likely to rate a team's performance as high if the team has actively engaged in external communication. Still, previous research has suggested that too much focus on external activities may threaten a group's or a team's existence by dissolving its boundary (Ancona & Caldwell, 1992a; Choi, 2002).

Different types of boundary activities are related to each other (Ancona & Caldwell, 1988), and also to the team's internal activities (Choi, 2002; Drach-Zahavy & Somech, 2010). Druskat and Wheeler (2003) examined boundary activities of external leaders of work teams and found relations between boundary spanning behaviors. For example, scouting information within the team concerning a problematic issue may enable the leader to collect additional information on the issue from the larger organization, to seek external resources to help solve the problem, and to intervene to influence the team's response to the problem. Ancona (1990) has also emphasized how a team's interaction with its environment is two-

directional: the environment constrains and enables the team, and the team influences its environment.

Next, attention is turned to boundary activities in the context of projects, programs and other temporary organizations.

### 2.4.4 Boundary activities during the early stage of change programs

Although there is very limited research on boundary activities within project and program management literature, boundary activities have received some attention in project management publications during the past decades. Projects as such have been acknowledged as boundary spanning devices, bringing together people that represent different organizations and possess different knowledge and skills (Bengtsson & Söderholm, 2002). The importance of spanning a project's boundaries has also been acknowledged in several studies. For example, scanning the project's environment for relevant information has been identified as an important part of the risk management (or uncertainty management) process (Perminova, Gustafsson, & Wikström, 2008). External information is described to enhance the project manager's understanding of the requirements and expectations towards the project and of the related threats and opportunities (Olsson, 2007), and active boundary spanning is also suggested to manage deviations (Hällgren & Maaninen-Olsson, 2005). Related to boundary activities, a growing stream of research has examined the use of boundary objects, i.e. shared artifacts or symbols that enable collaboration across organizational domains and facilitate boundary spanning (e.g. Carlile, 2004; Levina & Vaast, 2005). Within recent years, boundary objects in project contexts have started to receive academic attention (e.g. Koskinen & Mäkinen, 2009; Ruuska & Teigland, 2009).

Although boundary activities have rarely been the focus of study in project management research, several authors have touched upon activities that cross the project's boundaries. Actually, project management literature has acknowledged all main types of boundary activities, but by using other terminology. Firstly, the requirement for acquiring information outside the project team, i.e. *information scouting*, has been largely reported. Previous research has described how project teams may seek external expertise and occasionally bring in external professionals with relevant knowledge (Ratcheva, 2009). Particularly, customer needs may need to be actively surveyed (Motwani et al., 2002). The temporary organization perspective similarly underlines how the project task evolves in active cooperation between the project and its stakeholder organizations (Vaagaasar & Andersen, 2007). The importance of the outward-directed *informing activities* has also been acknowledged. For example, Müller (2003) has examined external communication in projects.

*Ambassadorial activities* in projects have also been recognized. Woodward (1982) found that in planning a large project, a key task is to achieve organizational acceptance for the project by managing the relations outside the planning team, including activities of defending the team and its output, recognizing the role conflicts related to matrix organizations, consulting others during the planning, and keeping others informed of the procedures and the progress of the project. Jensen et al. (2006) suggested that in temporary organizations that are heavily dependent on their parent organization, project teams need to spend time on negotiations and legitimacy building at the expense of solving problems related to the project's task. Gaddis presented already in 1959 how project managers must constantly "sell" the project to fight for the resources and even for the project's existence.

The early accounts of projects and temporary organizations also recognized the importance of *guarding activities*. Gaddis (1959) described how project managers must balance in shielding the experts of their project teams from external queries and pressure, whilst allowing them with adequate freedom to develop their skills and advance their careers. Goodman and Goodman (1976) noted how the managers of a temporary organization are in a position where they have to continually resist pleadings and pressure both from the team and from its environment. More recent research has similarly described how the project manager may need to actively buffer external demands to protect the project team, so that the project can operate in peace (Blomquist & Packendorff, 1998; Faraj & Sambamurthy, 2006)

As depicted above, authors on project management have often discussed actions that can be labeled as boundary activities. Still, very few studies have specifically addressed boundary activities in a temporary organization context. The current study takes up the task to explore boundary activities related to change programs. In this context, *boundary activities are defined as the set of activities with which a program organization manages the interaction with its environment* (adapted from Jemison, 1984 and Ancona & Caldwell, 1990).

Change programs are likely to demonstrate a significant need for boundary activities. Firstly, change programs are dependent on their parent organizations in terms of funds, personnel resources, information, and other input (Choi, 2002). Change programs also involve a high level of uncertainty, especially during program initiation, related to the goals, means and the environment of the program. According to the classic argument of the information processing perspective, higher uncertainty is associated with increased requirements for external information (Leifer &

Delbecq, 1978). More specifically, Leifer and Delbecq (ibid.) suggest that the requirements for boundary spanning activities are likely to increase in situations where the organization has diverse or unclear goals, an uncertain technology is utilized, and when the required information cannot be procured (at a reasonable cost) from the internal memory of the organization. Emerging change programs may demonstrate all these properties. Furthermore, the findings by Ratcheva (2009) suggest that projects (and programs) with high levels of complexity demonstrate greater requirements for multidisciplinary knowledge integration and thus higher levels of involvement of external parties.

The boundaries of change programs or other temporary organizations guiding change have not received much attention within the literature on organizational change, either. Although change management literature has not explicitly addressed the boundary that emerges between the guiding team and the rest of the organization, it has more indirectly acknowledged the potential gap between the advocates of change, i.e. active change agents, and the recipients of the change effort. Correspondingly, many of the presented intervention techniques, participation methods, and suggested forms of communication in the change management literature (e.g. Bryson & Anderson, 2000; Kotter, 1995) can be interpreted as boundary crossing activities between the change leaders and the change recipients. Also the need for isolative activities has been briefly acknowledged (Partington, 2000; Stoddard & Jarvenpaa, 1995).

Since a contextual view to change programs is adopted in this study, it is worthwhile to emphasize that boundary spanning is a contextual activity: the types and amounts of boundary activity vary from context to context (Ancona, 1990; Ancona & Caldwell, 1988; At-Twaijri & Montanari, 1987; Choi, 2002; Gladstein, 1984; Russ et al., 1998). Antecedents of boundary activities can be found at multiple levels, including the organization level, program level and individual level. Organization-level antecedents of boundary activities include issues such as multi-team membership, i.e., the extent to which people are engaged in several teams simultaneously, the level of openness in the operations and the extent to which the organization is linked to its stakeholders (Ancona & Caldwell, 1988). Studies relying on the information processing perspective have frequently linked environmental uncertainty to the amount of required boundary activity (At-Twaijri & Montanari, 1987; Leifer & Delbecq, 1978), and issues such as organizational structures, informal processes and overall organizational climate have also been identified as possible antecedents of a team's boundary spanning activity (Joshi, Pandey, & Han, 2009).

Related to the program-level antecedents of boundary spanning, the nature of a group's task, the group's composition, dependence on other groups, and the group's internal processes may have an effect on the boundary activities (Ancona & Caldwell, 1988; Choi, 2002; Joshi et al., 2009). Individual-level antecedents include the boundary spanners' position, skills, knowledge, prior experience, personal characteristics and need for power, which all may influence boundary spanning behavior (Ancona & Caldwell, 1988; Joshi et al., 2009). Boundary spanning may also be performed differently by different individuals. For example, different boundary spanners may use different sources of information: some rely on personal communication, some on impersonal, codified information (Allen & Cohen, 1969). The focus of boundary activities may also vary depending on the needs and wants of the boundary spanners' superiors (Leifer & Delbecq, 1978). As these different antecedents of boundary activities are interrelated, empirical studies have been encouraged to adopt multi-level approaches (Joshi et al., 2009). The present study will follow this suggestion by examining individual, program-level, and organization-level contextual factors involved in change program initiation.

Previous studies show how boundary management may depend on the team's lifecycle stage (Ancona, 1990; Ancona and Caldwell, 1992a; Katz, 1982; Tushman, 1977), suggesting that the boundaries as well as boundary activities are especially important for emerging organizations (Choi, 2002; Katz & Gartner, 1988). First of all, the early stage of a temporary organization necessarily includes boundary setting. Vaagaasar and Andersen (2007) describe how the permanent organization directly or indirectly describes the project's authority and responsibility and thus defines its boundaries, creating a basis for the project's identity. In addition to boundary setting, the early stage of a temporary organization presumably requires boundary crossing, as the temporary organization is established in cooperation with different stakeholder groups. Correspondingly, external support has been identified as particularly important in the beginning of a project team's existence (Gladstein & Caldwell, 1985). The findings by Woodward (1982, see page 69 of the dissertation) concerning the tasks of planning a large project also highlight external activities, as most of the identified early tasks are in essence boundary activities that aim at positioning the project in the wider organization. Studies on boundary spanning note that the early project or program phase is about idea generation, and thus involves significant information scouting (Gladstein & Caldwell, 1985; Tushman, 1977).

Earlier literature illustrates the relevance of boundaries within and outside an organization and provides examples of how boundaries are

managed. With the rise of the contextual view of projects and programs, there is a need for research evidence on boundary activities in the temporary organization context. In particular, further empirical research has been called for to study boundaries beyond product development contexts (Choi, 2002) and to distinguish between the different types of boundary activities in the varying contexts (Drach-Zahavy & Somech, 2010). Existing studies do not explain how a boundary emerges between a temporary program and its parent organization, or how this boundary is managed during the early program stage through different types of boundary activities. The current study aims to address these gaps in the extant literature.

## 2.5 Synthesis of the literature review: Research framework

This section summarizes the literature review. From the perspective of the current study, the examined streams of literature are compared and the main points are summarized. The initial framework guiding the research is constructed and detailed research questions are presented.

### 2.5.1 Summary of the literature review

This dissertation focuses on change programs, defined as temporary organizations in which multiple projects are managed together to deliver a change in the parent organization. The temporary organization perspective advocated by the contemporary Scandinavian school of project management provides a basis for the study. Change programs are analyzed as temporary organizations that operate within permanent parent organizations. This perspective directs attention to the temporary organization's relations with its organizational environment, which have largely been neglected within the traditional, task or vehicle-oriented project management research.

As the study focuses on change programs, the research is also informed of the literature on large-scale organizational change. Although research on organizational change has brought forward models, guidelines, and best practices for managing large-scale change in organizations, it has not given much attention to the program nature of change and to the program team, a temporary organization that is put in charge of managing change. On the other hand, traditional project management wisdom has not sufficiently taken into account the special nature of organizational change. Compared to the conventional project management principles, program management literature aims to address many of the acclaimed shortcomings of the project management approach, providing an alternative to the traditional closed-system, tool-based project management. Program management provides structure and control for managing change, simultaneously

allowing flexibility and reflection. In all, the emerging field of program management research can be viewed as an attempt to integrate project management knowledge with the special features of strategic, large-scale organizational change.

Previous research has shown how programs differ from projects in many respects, and thus require different management approaches. This study focuses on the early program stage where these differences are especially visible. Due to the high levels of uncertainty and complexity the content of the program may not be planned in detail, but the content will evolve during the program lifecycle. Program initiation is likely to differ from traditional projects in the sense that the focus is not on developing detailed action plans. Instead, other kinds of activities are likely to be emphasized. The role, goals and scope of a change program need to be clarified and communicated and resources must be acquired. Also, the parent organization as a target and a client of the resulting change must be prepared for change, and thus actively involved in change initiation and planning. The aim of the early program activities is defined in this dissertation as creating readiness for change implementation.

Research fields of temporary organizations, program management and organizational change all highlight the contextual nature of change efforts and advocate careful management of a change effort's (a program's) external relations. All these streams of literature have mobilized calls for more empirical research on these processes. One perspective to these interactions is offered by the research on organizational boundaries and boundary activities. Boundary activities are performed to build, shape, cross, and guard the boundaries between organizational units. A change program's boundary is presumably permeable and dynamic and requires active management. Although the importance of boundary activities in temporary organization contexts has been acknowledged, previous research has not explicitly examined boundary activities in the context of large-scale change programs. The current study attempts to link these boundary activities of change program initiation with the conception of readiness for change, thus integrating research streams on temporary organizations, program management, organizational change, and boundary activities.

### 2.5.2 Research framework and research questions

This dissertation examines the management of the early stage of a change program and focuses on the interplay between the program, viewed as a temporary organization, and its parent organization, viewed as the client and the environment of the program. More specifically, the study examines the boundary that emerges between a change program and its parent organization, and identifies different kinds of boundary activities that the

change program's central managers perform during the early program stage. The association of the boundary activities with the success of change program initiation is explored by analyzing the connection of boundary activities to readiness for change program implementation.

The aim of the study is to increase understanding of the central activities that are required to make a change program viable and implementable. The study further aims to analyze the role the organizational environment plays in this process. Contextual factors are examined on three levels, including the program's characteristics, the parent organization's characteristics, and individual characteristics of the involved managers.

The main research question of the study is:

*How are the boundary activities concerning the boundary between the program and the parent organization associated with the success of change program initiation*?

More detailed research questions guiding the study are listed below:

1. *How is the boundary between a change program and its parent organization manifested?*
2. *How, through what kinds of activities, is the boundary between a change program and its parent organization managed during program initiation?*
3. *What are the indicators of successful change program initiation in terms of readiness for change program implementation?*
4. *How are the boundary activities associated with creating readiness for change program implementation?*
5. *Which contextual factors may impact the use of boundary activities in building readiness for change program implementation?*

The first research question characterizes the nature of the boundary between the emerging program and the parent organization. Following Aldrich and Herker (1977) and as in most of the empirical research on organizational boundaries, in this study the existence of the boundary is assumed, and the boundary is drawn from the organizational perspective. Change programs are viewed as temporary organizations, and the characteristics of a temporary organization, especially in terms of the devoted team, special task, and limited time (Lundin & Söderholm, 1995), are viewed to define the program and its boundaries. The goals of a change program define the program in terms of tasks and activities, and the limited time frame defines the program in terms of time. The program organization

is viewed as consisting of the program core team, including those actors that are heavily involved in the initiation and planning activities. Following the realist approach to boundary definition (Scott, 2003), who is included and who excluded in the core program team is determined by the definitions that the program participants themselves use. While the existence of the boundary is taken for granted, different aspects of the boundary are analyzed. According to the literature review, boundaries between organizational entities are built up by different aspects and can be viewed from different perspectives, including temporal, spatial, task, authority, social, and identity boundaries. In line with the first research question, different indicators of the boundary between a change program and its parent organization are examined.

The second research question aims to identify activities through which change programs' boundaries are defined, strengthened, bridged, and guarded. In common with previous literature on boundary spanning, this study takes the viewpoint of the focal organization whose boundaries are being spanned. Thus, change programs are analyzed "from the inside", by taking the perspective of the program organization. The focus is on the activities of the program's core team that is in charge of managing the early program stage. To some extent, the study aims to identify the targets of boundary activities by examining how activities concern different groups in the parent organization, such as top managers and lower level employees. While typical studies on boundary activities do not make a distinction between different organizations or groups at the other side of the boundary, literature on project stakeholder management acknowledges that different stakeholders may have different positions and interests and thus require different management approaches (e.g. Aaltonen & Sivonen, 2009; Aaltonen 2010). Correspondingly, the boundary activities of a change program towards different stakeholder groups can be expected to vary both in type and in frequency.

The third research question examines the performance of the change programs. Since it may be very difficult if not impossible to determine the link from the early boundary management to the ultimate success of the change program, the present study focuses on the success of change initiation, defined as readiness for change program implementation. Based on the literature review, readiness is perceived as including two main dimensions: shared intent for change and required resources for implementing change. Both these dimensions further consist of different factors (see the first two dimensions presented in Table 6).

The fourth research question links the boundary activities to the program's success. The study aims to examine the purpose and contribution

of each type of boundary activity in advancing the program progress and in creating readiness for change program implementation. Based on this analysis, the study aims to build propositions on the associations between a temporary change program's external activities and the program's early success.

The fifth research question examines the role of contextual factors. Indicators of parent organization-level, program-level and individual-level contextual factors are examined, analyzing their association with the boundary activities and with readiness for change program implementation. The aim is to identify key contextual factors that may impact the use of boundary activities in building readiness for change program implementation. While the external environment of the parent organization may be in a significant role in the change program, for example, by providing the rationale for the whole change effort, this dissertation focuses on the relationships within the parent organization, i.e., on the inner context of organizational change (cf. Pettrigrew, 1990).

The research framework is summarized and illustrated in Figure 3.

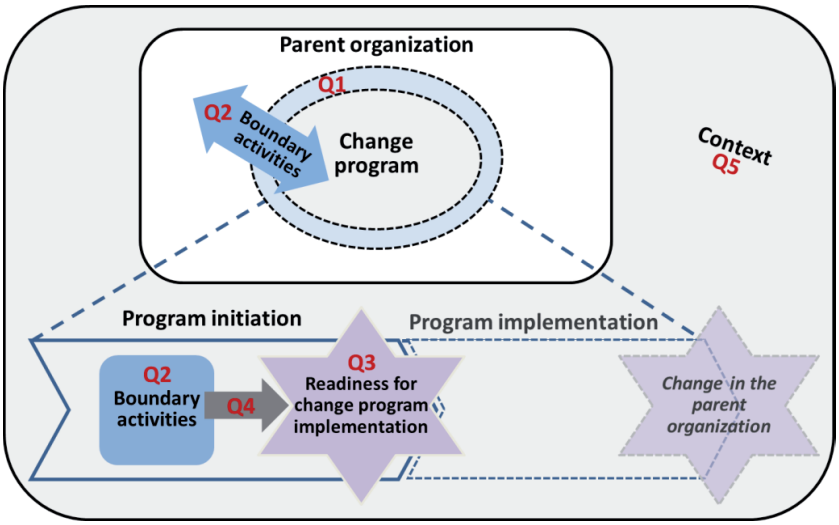


Figure 3 Research framework

The study focuses on program initiation. While the history of the examined programs is also briefly discussed, the analysis of a change program's boundary activities starts from the birth of the formal program organization, typically from an explicit decision to allocate resources for program preparation. In this dissertation, the early program stage is defined to encompass program definition and planning activities that take place before detailed project-level planning and program implementation.

Readiness for change is assessed at the end of the early stage, when the program moves to implementation. In practice it may be difficult to define where the specific stages of a change effort begin and end (Child & Smith, 2000), especially in the case of iterative change programs. Thus, case-specific judgment is used in defining the duration of the early program stage in the empirical analysis.

# 3. Research methodology and data

This chapter presents the research methodology of this dissertation. First, underlying assumptions about the nature of scientific enquiry are discussed, after which the choices concerning the research approach and methodology are described. The research data and the analysis methodology are also presented.

## 3.1 Nature of the research

Researchers are encouraged to state their position in terms of their views and assumptions regarding the nature of scientific enquiry. The profound questions concern the researcher's views of ontology and epistemology. *Ontology* refers to the conceptions of being and existence, and the basic question for the researcher is "what exists", or "what is reality". *Epistemology* concerns the nature of knowledge, and here the basic question for a researcher is "what can be known", or "how we can know". The answers to these questions have a fundamental impact on the choice of the research methodology.

A distinction can be made between two main schools of thought: the realist approach and the interpretivist approach (e.g. Suddaby, 2006). The realist approach assumes that the reality exists objectively, i.e., independently of the knowledge of the observer, and that research objects are concrete and measurable. The interpretivist approach views the external world as socially constructed and subjective, believing that human beings actively create their own realities. The current study does not follow either of these contrasting views, but the approach rather resembles an alternative perspective called *critical realism* (e.g. Modell, 2009; Reed, 2005). Critical realism provides a way to bridge the polarized positions of the extreme realist and interpretivist (or social constructivist) approaches in organization and management studies (Modell, 2009). Critical realism holds a realist perspective to ontology, assuming that research objects exist and are real, but simultaneously adopts a relativist epistemology, acknowledging that we do not have full and direct access to observe and study research objects (Durand & Vaara, 2006; Reed, 2005). Thus, critical

realism refuses to adopt the extreme, even naïve realism that suggests that the external world is as it is perceived. Instead, critical realism recognizes that perception is a function of the human mind, and knowledge of the external world can only be acquired by critical reflection on perception. In this sense, the critical realist perspective is positioned in between the two extremes of the realist and the interpretivist approaches.

A basic idea involved in critical realism is that human beings cannot directly observe or have knowledge of the all the underlying structures and mechanisms that affect events. Instead, critical realism suggests that the world is stratified and consist of three domains: the empirical, the actual and the real (cf. Leca & Naccache, 2006). The domain of empirical consists of experienced events, including the actors' sensations, impressions and perceptions. This level is accessible and observable for the actors. The domain of actual includes the events that actually happen, whether they are observed or not. Researchers may be able to identify some events even if the actors themselves are not able to view them, due to the researchers' particular focus and training. Finally, the domain of real concerns the underlying structures and causal powers that generate the events, providing causal explanations for what takes place in the domain of actual and what is observed in the domain of empirical. The author of the dissertation shares the assumption that deeper structures or mechanisms shape the events that are observed at a surface level. The researcher's task is to make an attempt to illuminate the effects of these underlying structures and causal mechanisms. Another, related assumption of the critical realist perspective is also shared by the author, stating that organizational actors are simultaneously constrained and enabled by reality, and also able to affect reality (Leca & Naccache, 2006).

Critical realism emphasizes ontology over epistemology in the sense that it does not dictate which research methods are the most appropriate (Fleetwood, 2007). Still, the critical realist perspective has some implications for the methodology of the current study. By highlighting the stratified nature of reality, critical realism favors qualitative in-depth exploration (Fleetwood, 2007). The critical realist approach also directs attention to the contextuality of phenomena, as contextual conditions are believed to dictate the way how the causal powers of structures develop (Leca & Naccache, 2006). In the current study, this directs attention to the organizational context of the investigated phenomenon, boundary activities at change program initiation, highlighting the need to characterize contextual factors of change programs and analyze causal mechanisms that might explain the observations. Recognizing the difficulties in studying the events, underlying structures, and related causal mechanisms, careful

characterization and evaluation of the selected research methods is also required.

## 3.2 Research approach

The aim of the research and the nature of the research questions affect the choice of the appropriate research strategy. The purpose of the current study is to explore how the boundary between an emerging program and its parent organization is managed during change program initiation. As the research questions presented in the previous chapter indicate, the research includes both descriptive and explanatory elements. The aim is to depict what happens in program initiation by providing an in-depth description of the emerging boundary between a program and its parent organization (RQ1), boundary activities at that boundary (RQ2), and indicators of readiness for change program implementation (RQ3). The research also aims to reveal associations between the boundary activities and readiness for change (RQ4), and provide explanations for these observations by identifying key contextual factors that affect the investigated phenomenon (RQ5).

As described in the literature review, previous research has not explicitly addressed boundary management of early-stage change programs, although related issues have been studied either from other perspectives or in other contexts. Due to the nature of the research questions and the early stage of theory development in the field, a quantitative approach that would build on theory testing is not suitable for the current study. Instead, the current study follows the qualitative paradigm. Unlike purely inductive research that builds on empirical observations and is ideally free from prior theoretical frameworks and ideas, the present study is informed of the previous research, applying concepts such as boundary activities and readiness for change introduced by earlier studies. The aim of the present study is to extend the existing theoretical understanding by studying the dynamics of change program initiation in the interaction between empirical data and existing theory.

The chosen research approach can best be characterized as *an abductive multiple case study* (Dubois & Gadde, 2002). Abduction provides an alternative to the traditional choices of scientific inference, deduction and induction. Deductive research is a theory testing process that starts with a general law or theory and applies that to specific empirical observations to test whether the theory applies to those instances. Inductive research starts from empirical observations and aims to make a generalization based on them to create new theory. Pure induction without theoretical reference can prevent the research from benefiting from earlier research findings,

whereas pure deduction may inhibit creative development of new insights and novel theory (Lukkari & Parvinen, 2008). Abductive research, in turn, is characterized as a dialogue between theory and empirical data. The abductive research process starts with an empirical phenomenon or observation, and the researcher aims to apply, extend and refine existing theories to explain the findings (Spens & Kovácks, 2006). Abductive research is closer to inductive approaches, such as grounded theory (Corbin & Strauss, 1990; Glaser & Strauss, 1999), than deductive approaches. Still, compared to inductive studies, in abductive research the continuous interplay between theory and empirical observation is emphasized, as the approach builds more on refining and expanding existing theories, which is also the purpose of the present study.

The abductive case study methodology follows *the case study approach*, which refers to the detailed investigation of a limited number of cases (such as organizations or groups) within their real life context to gain an understanding of the phenomenon under study (Meyer, 2001; Voss, Tsikriktsis, & Frohlich, 2002; Yin, 1994). From the researcher's perspective, cases are complex configurations of events and structures in concrete spatial and temporal contexts, preserving the character of the phenomenon under study (Dubois & Araujo, 2004). Case research has several advantages: it allows a holistic view of the phenomenon in question (Meyer, 2001), it may lead to new and creative insights, and it can have great validity with practitioners (Eisenhardt, 1989; Voss et al., 2002).

The case study approach is particularly suitable for the current study due to several reasons. Firstly, case studies have been advocated as especially appropriate for answering "how" and "why" types of questions (Yin, 1994), which most of the research questions of the current study also represent. Secondly, case studies are described to suit situations where the boundaries between the research phenomenon and its context are unclear (Dubois & Araujo, 2004; Yin, 1994). This applies to the current research because based on the literature review, the investigated phenomena, change programs, are in many ways embedded in their context, and the early stage of a change program is characterized by high ambiguity. Furthermore, case studies are particularly suitable for theory building (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Voss et al., 2002). Although there has been a lot of debate on what constitutes theory, there seems to be a common agreement that a theory describes factors (concepts, variables or constructs) and their relations and provides an explanation of why a logical connection exists between them (e.g. Nayak, 2008; Whetten, 1989).

The present study aims to extend and refine the existing theoretical understanding in the interaction between empirical data and existing

theory. The chosen approach, abductive multiple case study, is described by Dubois and Gadde (2002) as "systematic combining" or "theory matching", in which the theory interacts with the methods and with the empirical observations. The research process is iterative in nature: the research questions and the research framework are elaborated during the study in line with the fieldwork and the recognition of possibly relevant theoretical discussions. In abductive research the theoretical framework, empirical fieldwork and case analysis evolve simultaneously, and the evolving framework provides a cornerstone for the abductive study (Dubois & Gadde, 2002).

The abductive case study methodology is relatively novel and has not been fully established in organizational and management studies. Still, in recent years the abductive research methodology has become increasingly common (e.g. Haddadj, 2003; Lukkari & Parvinen, 2008; Skaates & Seppänen, 2005). Abductive methods have also been increasingly applied in the field of project management (e.g. Nobelius, 2001; Ruuska, 2005; Ruuska & Teigland, 2009), particularly in project marketing research (e.g. Jalkala, Cova, Salle, & Salminen, 2010; Skaates, Tikkanen, & Alajoutsijärvi, 2003). Additionally, research reviews have shown how there is a number of studies that utilize abductive reasoning, although they are not explicitly reported as abductive (Kovács & Spens, 2005; Spens & Kovács, 2006). Providing support for this observation, the case study approach as such is described as open to the use of existing theory or conceptual categories to guide the analysis (e.g. Meyer, 2001), indicating that case studies often rely on iterative abductive tactics.

*A multiple case study approach* is chosen for this study, as the aim is to generalize beyond the specifics of a single case and to enable some comparison and contrasting of findings from different environments (Meyer, 2001; Yin, 1994). Multiple case studies are viewed to provide a stronger base for theory building than single case studies, as the proposed theory is grounded in varied empirical evidence (Eisenhardt & Graebner, 2007; Yin, 1994). On the other hand, a desire for an in-depth understanding of each case and the limited resources of the researcher imply that the number of cases must be fairly small (Meyer, 2001). In this dissertation the number of cases is limited to three. The empirical research is based on qualitative data from three change programs, each from a different organization. As the focus is on the interplay between the program and its parent organization, the term "case" refers to the firm or public sector organization that is implementing a change program, whereas the program in question is referred to as the "case program".

## 3.3 Case selection strategy and description of the selected cases

Following the abductive multiple case strategy, the case selection is based on *theoretical sampling* (instead of statistical sampling). The basic idea behind theoretical sampling is that cases are selected because they are viewed as particularly suitable for illuminating and extending the studied phenomenon (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). To fit with the purpose of the present study, the selected case programs had to pursue significant change, include multiple projects, and truly be temporary, i.e. have a planned closure at some point of time. Yet another criterion was that the programs had to be internal, i.e. mainly implemented inside one parent organization, although external consultants, suppliers and other stakeholder organizations could be involved. A practical criterion for case selection was reasonable access to the programs. Additionally, case selection aimed to ensure that the cases would be similar to some extent but also demonstrate enough differences to provide a rich and multifaceted view of the research topic (see e.g. Pettigrew, 1990).

Regarding *the similarities across the selected cases*, all three case organizations represent large Finnish service sector organizations. At the time of data gathering, all three studied case programs were still ongoing and had been initiated 1–5 years earlier. Although the focus on ongoing programs prevents from analyzing the eventual effects and the ultimate success of the programs, it ensures that the program still was a topical issue at the time of data gathering, and program initiation ought to be fresh in the minds of the program participants.

Regarding *the differences between the cases*, two of the case programs were from the public sector and one from the private sector. The type of the intended change differed. One case program mainly focused on Information Technology (IT) based change, and the other two focused on renewing processes and services. Furthermore, the way how the programs were organized differed. The programs were at different stages during the beginning of the data gathering: one program was already in early implementation, whereas the other two were still in initiation. The perceived success of the programs also differed. Although all the programs demonstrated some indicators of success and some specific problems or challenges, one program was actually terminated sometime after the data gathering and was largely considered a failure. From the researcher's perspective, the variation in the programs' level of perceived success is useful in analyzing the associations of early boundary activities with program success.

As all of the case programs involved confidential aspects e.g. related to the scope and schedule of the attempted changes, it was agreed with the case organizations that the cases were to remain anonymous. As a result, the identities of the organizations, the studied change programs and the informants are not revealed. Instead, the three selected cases were given pseudonyms after the characteristics of the case organizations.

The first case, "*Center*", is a non-profit organization, a central agency for a consortium of a wide number of public organizations in multiple service businesses. Center supervises the interests of its member organizations of the consortium, provides various expert services to them, and conducts research and development activities in its field. The case program in Center aimed at renewing the service system concerning both Center and its member organizations. The program was terminated early, largely due to severe internal problems.

The second case, referred to as "*Bureau*", represents a complex change program implemented by a large public sector organization that can be characterized as a traditional government institution. Bureau's case program was a part of a larger structural reform and it aimed at rationalizing the IT management of Bureau by renewing the system architecture, the related network infrastructure, organization, and management system.

The third case program is implemented in a large private service sector organization, here called "*Chain*", which provides services for consumers and business customers. The change program under investigation was related to transforming the company's central service processes in the company's largest business area. The transformation included establishing new infrastructure, reorganizing operations in regional units, renewing the services, and developing and adopting new ways of working.

Table 8 provides a summary of the three case organizations and their case programs. The cases are described in more detail in the Results chapter.

Table 8 Summary of the cases

| | Case Center | Case Bureau | Case Chain |
|---|---|---|---|
| **Description of the parent organization** | Central agency of a network of public organizations operating in multiple service businesses<br>Organized into ten units and several subsidiaries | Large public sector organization<br>Organized into three main branches and supportive functions, and into tens of regional units across Finland | Large company that provides services for consumers and business customers<br>Organized into three main divisions, with regional units across Finland and operations in several other countries |
| **Goal of the change program** | Transforming the service system regarding Center and its member organizations, including service products, delivery systems and structures | Rationalizing IT management by renewing the system architecture, network infrastructure, organization, and management system | Transforming the company's central service process, including the related infrastructure |
| **Planned program duration** | About three years<br>(The program was terminated early, after two years of initiation and planning activities) | About eight years<br>(Initiation and planning took almost three years, and implementation was intended to take four years) | About five years<br>(Initiation and planning took about two years, and implementation was intended to take 2–3 years) |
| **Number of program participants** | Around 40 people participated in initiation and planning activities | Around 200 participants during initiation and planning and over 500 participants during implementation | Around 150–200 participants involved during initiation, and the number was expected to grow during implementation |

## 3.4 Data gathering

While case studies may be either qualitative or quantitative, the current study relies on qualitative data, which is particularly appropriate for examining complex change processes (Eisenhardt & Graebner, 2007). *Semi-structured interviews* provide the main method of data gathering, complemented with secondary material. Interviews have been described as an efficient way to gather rich, empirical data on episodic phenomena (Eisenhardt & Graebner, 2007). Even though direct observation of program initiation activities might have resulted in a more in-depth picture, observation-based methods were not employed due to limited resources and the long duration of program initiation and planning (several years in all case programs). Also the question of accessibility spoke for the (largely retrospective) interview methodology, since organizations in the early phase of change may be reluctant to let outsiders in, and in the very early phases it may not be clear whether a change initiative will actually result in a change program.

In line with Meyer (2001), data gathering involved the collection of both retrospective and real-time data. In two of the cases (Center and Chain), two rounds of interviews were conducted to map the early initiation activities and to follow up on the progress of the planning activities. Such longitudinal case research designs have been acknowledged as especially valuable in analyzing the relation between cause and effect (Leonard-Barton, 1990; Voss et al., 2002). In the third case (Bureau), just one round of interviews took place, as the program was already in early implementation at that time. Data collection proceeded case by case, i.e. one case was addressed at a time, and initial analyses were conducted and compared with literature, following the abductive methodology (Dubois & Gadde, 2002).

In line with the recommendations of several case study researchers (Eisenhardt & Graebner, 2007; Glick, Huber, Miller, Doty, & Sutcliffe, 1990; Meyer, 2001), multiple informants were included to view the phenomenon from diverse perspectives. In each of the three cases, the interviewees included top managers, program management staff, project managers, and project team members who had been involved in the program initiation in different roles, such as founders, active participants, or key decision makers. The selected interviewees were expected to be knowledgeable about the change programs and in each case they *represented both sides of the program-parent organization boundary*. Some interviewees were or had been active members of the program core team, whereas others had a peripheral role in the initiation and planning activities. Following the realist approach to boundary definition (Scott, 2003), the decision on who was included and who excluded in the core program team in the analysis was determined by the definitions that the program participants themselves used. For example, in case Center, program steering group members were viewed to be outside the program boundary, while in case Bureau most of the steering group members were actively involved in the program and were counted as key actors of the program organization. In each case, decisions related to which persons should be interviewed were made together with the representatives of the case organization. As the initial interviews were agreed upon, a snowball sampling strategy (e.g. Saunders, Lewis, & Thornhill, 2009) was used: the first interviewees were asked to identify other key persons involved in the program, and these people were interviewed if it seemed to contribute to the study and was feasible.

The primary data consists of *58 semi-structured interviews* with people involved in the change program initiation in the cases. All interviews were conducted face to face, typically by two researchers from the STRAP–PPO

project research team (see section 1.2 for a description of the research project). The author of the dissertation was present in 49 of the interviews. All interviews took place at the case organizations' premises. In Center and Chain, some people were interviewed during both rounds of the interviews, and thus the total number of interviewees was 48. The interviews lasted between 31 and 145 minutes, the average duration being 76 minutes. Written notes were taken during the interviews, and all interviews were tape-recorded and transcribed. Information on the number of interviews in each case and the formal roles of the interviewees is provided in Table 9.

Table 9 Description of the interviews in each case organization

| | Case Center | Case Bureau | Case Chain |
|---|---|---|---|
| **Number and timing of interviews** | 25 interviews conducted in two rounds (21 interviewed persons)<br>Round 1: 10 interviews during initiation and early planning<br>Round 2: 15 interviews during later planning | 11 interviews conducted in one round, during early implementation (11 interviewed persons) | 22 interviews conducted in two rounds (16 interviewed persons)<br>Round 1: 12 interviews during initiation and planning<br>Round 2: 10 interviews during early implementation |
| **Interview duration** | Ranging from 31 to 96 minutes<br>Average duration 69 minutes | Ranging from 44 to 118 minutes<br>Average duration 75 minutes | Ranging from 35 to 145 minutes<br>Average duration 82 minutes |
| **Interviewee roles in the program** | **Round 1:**<br>Program manager , program coordinator, six steering group members (top managers), a head of a related subsidiary and an expert involved in program ideation<br>**Round 2:**<br>Program manager, seven steering group members, an expert involved in program communications, five peripheral program participants and an expert involved in program ideation | Former program manager, four unit managers from related units, two project managers, a support group manager and three project participants | **Round 1:**<br>Program coordinator, chairman of the program steering group, two steering group members, five sub-program managers, two project managers and an expert involved in program communications<br>**Round 2:**<br>Program manager (former program coordinator), new chairman of the program steering group, three steering group members, three sub-program managers, a project manager and an expert involved in program communications |

The interviews were guided by *semi-structured interview outlines*, meaning that there was a predefined agenda for the interviews, but there was still room for flexibility to emphasize certain themes, based on the interviewee's knowledge and perspective. At the beginning of each interview, the focus

and purpose of the interviews was explained. The anonymity and confidentiality of the research was also explained, and the interviewees were encouraged to openly share their experiences and views regarding the change program in question. Each interview included a discussion on the program's current situation as well as the previous activities. The early days of the program were discussed retrospectively, starting from its origin and proceeding towards the current activities. The interviewees were asked to describe the early program phases, including the motive to implement the program, the structure of the program, central program-related activities, the challenges encountered, and perceptions on the progress of the program. Similarly as reported by Ericksen and Dyer (2004), neutral interrogation style follow-up questions, "What happened after that? Why did you do that?" were asked to clarify unclear points and to dig more deeply into potentially important issues.

During each case study the interviews became somewhat more structured as they key people, events, and issues specific to the case were identified. Also, in line with the abductive multiple case study approach, the interview questions became more focused as the study proceeded and the research framework was elaborated based on the empirical observations and the existing theories. Thus, during the first round of interviews conducted in case Center, the questions addressed program initiation more broadly, while the interaction between a change program and its parent organization was highlighted more during the later interview rounds. Some additional variation in the interview questions across the interview rounds was caused due to the differing stage of the programs.

The first rounds of interviews in each case included data collection about the origin and history of the case programs. The second rounds of interviews in cases Center and Chain discussed the current state and the elapsed time from the first round interviews, focusing on central events and activities that had taken place since the first round of data gathering. Although the interview outlines used in the second rounds of interviews were more focused, there was still room for the interviewees to express their views of topics that were not covered by the predefined questions. Similarly as Meyer (2001) noted, the second rounds of interviews provided interesting observations of unanticipated effects and changed attitudes.

The interview outlines from each round of interviews can be found in Appendix 1. In addition to the interview questions presented in the Appendix, the interviews in the first and the third case (Center and Chain) included a larger variety of topics, as they served as a data source for other ongoing studies, focusing on roles in program management, program

control, and coordination. In this study, data from these other questions serve as background information.

*The retrospective nature of the interview accounts* can be considered as a limitation due to recall bias, post-hoc rationalization, and difficulties in determining cause and effect related to the events (see e.g. Glick et al., 1990; Leonard-Barton, 1990; Voss et al., 2002). People have a tendency to impose order retrospectively on phenomena that have actually been complex, ambiguous, and in conflict (Kimberly & Bouchikhi, 1995). The elapsed time between the events and the interviews may have been especially problematic in one case (Bureau) in which the program had been initiated as much as four years before the interviews. The use of multiple cases with multiple informants, and the review of program-related documents are assumed to diminish the problems related to the retrospective analysis. Also, as Kimberly and Bouchikhi (1995) argue, the subjective tendencies related to the retrospective accounts are "part of the story", since organizations can be simultaneously viewed as the contexts for and the results of human behavior. Thus, rather than focusing solely on objective indicators and avoiding what some researchers would treat as errors and "validity threats", subjective accounts can rather be viewed as useful material for analytical purposes in the pursuit of uncovering the deeper patterns that lie beneath the surface (ibid.).

Regarding each case, the interview data was complemented with *secondary material* to support the analysis and to enable the triangulation of data sources (Eisenhardt, 1989; Jick, 1979; Yin, 1994). Program-related *documentation* was gathered in each case, including program and project level plans, presentation materials, reports, press releases, and e-mails to the research group. Extranet documentation about the case organizations and case programs was also collected. Concerning cases Center and Chain, there was also additional interview material available, describing the organizations' other programs and projects. These interviews were used as complementary material to gain a deeper understanding of the case organization and its way of conducting program and project-based work.

Concerning the first case, Center, three workshops were organized in the case organization jointly with the university research team during the last six months of the program, before its termination. In the first workshop, general principles of program management were discussed. The last two workshops concerned the case program in particular and included attempts to clarify the program's goals and scope. In these workshops, preliminary results from the interviews were utilized to discuss the challenges related to the program. A fourth workshop was organized two years after the program was terminated to discuss the reasons that had led to the premature

termination and to identify lessons learnt. Initial findings of the dissertation were presented in this workshop to facilitate the discussion.

Table 10 provides a summary of the research materials concerning each case.

Table 10 Summary of the research materials

| Case | Primary interviews | Documentation on the case program and the case organization | Additional interviews on other programs and projects | Theme workshops with program participants |
|---|---|---|---|---|
| Center | 25 | X | X | X |
| Bureau | 11 | X | | |
| Chain | 22 | X | X | |

## 3.5 Analysis

The data analysis in this dissertation is qualitative and iterative. As described in the previous section, data was gathered one case at a time, preliminary analysis was conducted for the early data and the observations were compared with existing theories. The findings from this preliminary analysis were used to further focus the study and to develop the framework for the following rounds of data gathering. Intermediary results of the study have been reported in several articles and conference papers (e.g. Lehtonen, 2007; Lehtonen & Martinsuo, 2008, 2009; Martinsuo & Lehtonen, 2007).

During the final analysis for the dissertation, all data was re-analyzed with a consistent approach. The analysis was conducted in three phases during which the data was reduced, organized and analyzed. The aim of the first phase of the analysis was to provide a consistent understanding of the case organizations, their case programs, and the program progress, and the resulting descriptions served to establish the change context in the three cases. The second phase of the analysis was about identifying the indicators of the investigated phenomena in the research data, including the indicators of the program boundary, different types of boundary activities, readiness for change program implementation, and potentially relevant contextual factors. The purpose of the third phase of the analysis was to examine associations between the identified factors. During this phase, the identified boundary activities were examined in detail and their associations with readiness for change program implementation were analyzed. Simultaneously, the effects of the contextual factors were further examined.

As described above, 58 semi-structured interviews formed the main data source for the analysis. Additional material listed in Table 10 was utilized

mainly during the first phase of the analysis in characterizing each case program and creating a description of its progress. The last two phases relied mainly on interview data. Table 10 provides an overview of the analysis process. Next, each phase of the analysis is described in detail.

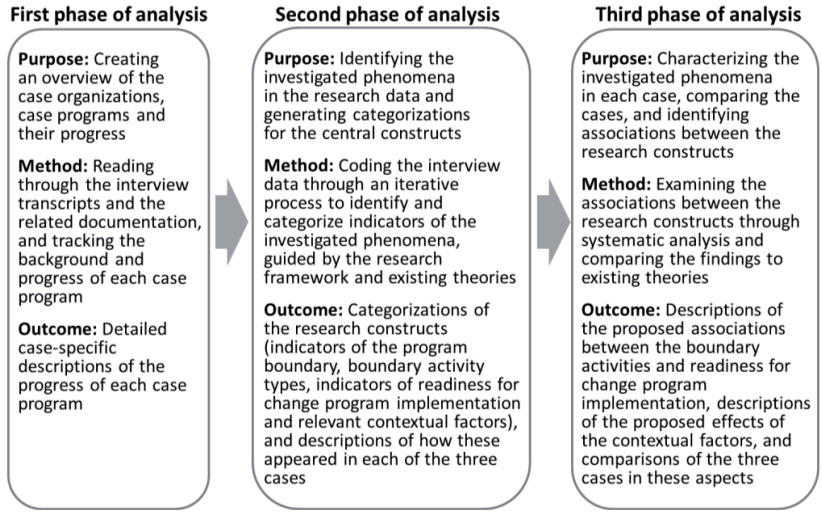


Figure 4 Description of the analysis process

### 3.5.1 The first phase of the analysis

The first phase of the analysis was case-specific. The analysis of each case began by reading through all the interview transcripts and getting familiar with the program-related documentation. Following the recommendations of previous research (Meyer, 2001; Voss et al., 2002), a description of the early program phases was constructed for each case and a chronology was established to gain an understanding of how the program had emerged and developed. Program documentation was especially useful in tracing the history of the change programs and providing support for the statements made by the interviewees (Meyer, 2001). For the purposes of further analyses, the start and end points of the program initiation were defined case-specifically.

As suggested by many authors on organizational change (Armenakis & Bedeian, 1999; Barnett & Carroll, 1995; Pettigrew, 1987), the content, context and process of change were all examined. However, the principle of anonymity of the case organizations unfortunately limits the extent to which the context of change as well as the content of change can be described in this thesis. Even though considerable effort is made to portray both the change context and the change content in a requisite detail, the

main focus of this study is on the process of change, which thus receives the greatest attention in the case descriptions.

The first phase of the analysis provided descriptions of how each case program had emerged and proceeded during the early stages. Shortened versions of these descriptions are presented in the beginning of chapter 4. The aim of these accounts is to briefly depict the case organizations and provide an overall view of the change programs and their progress.

### 3.5.2 The second phase of the analysis

While the first phase of the analysis was case-specific, during the second phase the data from all three cases was merged and coded to identify indicators of the investigated phenomena in the interview data. During the coding process, the parts of the interview texts (typically, partial or full sentences or small paragraphs) that discussed a similar theme were marked and grouped. The coding process was guided by the initial research framework (see section 2.5.2). In line with the research questions, the coding focused on identifying and categorizing indicators of the program boundary, boundary activities, readiness for change program implementation, and possibly relevant contextual factors. These issues were identified from the interview transcripts and coded with the help of the Atlas.ti 6.0 software. Following the suggestion by Glaser and Strauss (1999), memos were written actively during the coding process and linked to the quotations or codes. These memos were utilized to describe and record potentially relevant observations and ideas that had risen during the coding process, such as indications of associations between the investigated themes.

The analysis followed an iterative approach, and as the analysis proceeded, new codes and more detailed categorizations were generated. The coding methodology during the second analysis phase resembled that of grounded theory studies (Glaser & Strauss, 1999), but was, following Dubois and Gadde (2002), more heavily influenced by the existing theories and conceptual categorizations than “pure” grounded theory studies. The existing literature summarized in the literature review provided a starting point for the analysis. To give an example, many candidates for boundary activity types were found in previous studies. When an instance of boundary activity was identified in the interview data, it was compared and contrasted with these previously reported activity types to judge whether the identified activity represented one of these types. If it did, the activity was coded accordingly. If, however, it appeared to represent a novel type, a new code with an appropriate title was created for that activity. The iterative nature of the analysis required going back and forth in the data, looking for similarities and using judgment on whether different parts of

the interview transcripts referred to the same phenomenon or concept and whether these potential patterns recognized in the data deserved a new code category. During the analysis, these emergent categories were constantly compared with the existing literature. This systematic combining (Dubois & Gadde, 2002) was conducted until robust categorizations with explanatory power had been achieved for each of the main constructs (i.e. indicators of the program boundary, boundary activity types and indicators of readiness for change program implementation), indicating that theoretical saturation (Eisenhardt, 1989; Glaser & Strauss, 1999) was reached. The code framework that guided the coding process is presented in Appendix 2.

For the indicators of the program-parent organization boundary, previous literature discussed in section 2.4.1 was used as a basis for identifying and naming the different aspects of the boundary, building especially on the categorizations of organizational boundaries presented by Hirschhorn and Gilmore (1992) and Scott (2003). In the identification of the boundary activities, the studies summarized in section 2.4.3 were utilized in identifying and naming the various boundary activity types. The indicators of readiness for change program implementation described in section 2.2.4 provided the starting point for analyzing the success of change program initiation. During the analysis the initial categories of shared intent and required resources and the factors included in them (see Table 6) were refined and the concept of readiness was extended based on the empirical findings.

In the analysis of the contextual factors, the division into three levels (individual, program, and parent organization) described in section 2.5.2 was utilized. The rich research data included numerous indications of contextual factors at different levels of the case context. The analysis did not aim at reaching an exhaustive categorization of these factors, but the purpose was rather to identify the contextual factors that appeared to be the most relevant to the investigated phenomena. Regarding the contextual factors, the analysis rather followed an inductive than an abductive approach by letting the key factors emerge from the empirical data.

The identification and categorization of the boundary activities was one of the main tasks during the second phase of the analysis. In the interviews, the interviewees had described their own efforts in managing the program's boundary, as well as the activities of other core team members. Broadly defined as activities with which a program organization manages the interaction with its environment, the indicators of these boundary activities were sought from the interview transcripts according to a number of predefined principles. One key principle was that the study focused on the

program core team members' boundary activities, leaving the program-related actions of outsiders out of the analysis (except when these had triggered core team members' boundary activities). Other principles concerned the focus, nature, timing, and target of the activities. Table 11 describes the principles that were used in determining whether the identified activities were interpreted as boundary activities.

Table 11 Principles for identifying boundary activities during the analysis

| Principle | Description |
|---|---|
| Focus on the program-parent organization boundary | The activity must somehow address the boundary between the program and its parent organization, either by defining, crossing or blocking the boundary. The program's internal activities that do not address the boundary are not included in the analysis. |
| Focus on human action | The activity needs to directly refer to human action. (Example: mentioning the existence of a formal integration mechanism such as a reward system or a decision making process is not interpreted as a boundary activity. However, creating those mechanisms in the negotiations between the parties or utilizing those mechanisms by communicating across the boundary may be counted as a boundary activity, if other conditions apply.) |
| Program core team member(s) as actor(s) | The activity must be performed by a representative of the program organization. Still, the activity may be triggered by the actions of those representing the parent organization. (Example: if a certain group in the parent organization is actively lobbying against the program, this is not interpreted as a boundary activity. However, the counteractions of the key program actors, such as negotiations and communications between that group and the program's key actors may be counted as boundary activities, if other conditions apply.) |
| Target of the activity within the parent organization | The activity needs to be directed at those representing the parent organization. Extra-organizational boundary activities that cross the parent organization's boundaries, such as communication and cooperation with external consultants or suppliers, are not included in the analysis, unless they simultaneously concern those within the parent organization. |
| Timing of the activity | The activity must occur during program initiation. The duration of the initiation stage was defined case-specifically during the first phase of the analysis (see section 4.1 for these definitions). |

When going through the interview data, every time when an excerpt was identified in the interview transcripts that fulfilled the defined criteria for a boundary activity, the quotation was recorded as a boundary activity and it was connected to the code representing the corresponding boundary activity type. If a corresponding code did not yet exist, a new code was created or an existing code was extended and relabeled to include the newly identified activity type. It became apparent during the early days of the analysis that many activities described by the informants were not related to just one type of boundary activity, but simultaneously represented two

types. In the coding process, such quotations were connected with two boundary activity types. The decision regarding how each instance of boundary activity was coded depended on how the interviewee described the activity. Thus, quotations describing the same or similar activities could be interpreted as representations of different boundary activity types.

To illustrate these decisions made during the coding process, and example is given. If an interviewee explained that a meeting was organized with the key program actors and the line managers of the parent organization to discuss a topical issue, and the interviewee further described that the aim of the meeting was to gain insight from all units, then this quote was viewed as a representation of a boundary activity type called “information seeking”, and coded accordingly. If another interviewee described the same meeting and explained that the aim of the meeting was actually to make every unit aware of the importance of the program, then that quote was viewed as a representation of another boundary activity type labeled “legitimating and committing”. If both intents were mentioned by the same interviewee, the quote was connected with both boundary activity types, i.e. simultaneously as “information seeking” and “legitimating and committing”. In this way, during the coding process each quotation referring to a boundary activity was recorded and linked with one or two boundary activity types. Figure 5 illustrates the process of coding the boundary activities and identifying the boundary activity types.

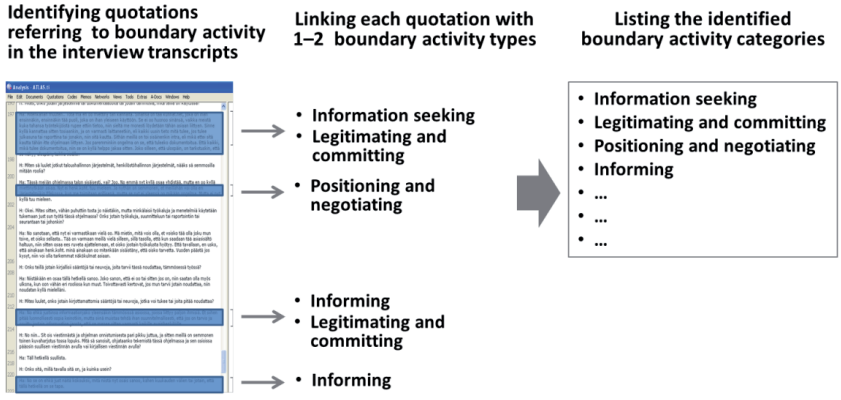


Figure 5 Illustration of identifying the boundary activity types

The second phase of the analysis yielded the categorizations of the investigated phenomena: different boundary activity types, indicators of the program-parent organization boundary, and indicators of readiness for change program implementation. Also, a list of potentially relevant contextual factors that might explain the findings was generated. At this

point, all these issues were coded in the interview transcripts by connecting the quotations with the corresponding codes. The next step in the analysis was to dig deeper into the associations between the central constructs, to create case-specific descriptions of these phenomena and to compare the cases in the cross-case analysis. These tasks were in the focus during the third phase of the analysis.

### 3.5.3 The third phase of the analysis

In the beginning of the third analysis phase, the data was again divided based on the three cases, and case-specific analyses were conducted to characterize the studied phenomena in each case. The categorizations created during the second analysis phase provided a framework for this analysis. Firstly, the identified aspects of the program-parent organization boundary were analyzed by examining if and how they appeared in each case. The overall boundary strength of each case program was also characterized. A same kind of an analysis was conducted for the indicators of readiness for change program implementation, describing whether each identified aspect of readiness was present in the cases at the end of the initiation and planning stage. While in cases Center and Chain two rounds of interviews had been conducted, the assessment of readiness for program implementation mainly relied on the data from the latter rounds of interviews. In Bureau, the only round of interviews was conducted when the program had just moved to the implementation stage, so readiness for program implementation was judged based on the situation at the time.

During the third phase of the analysis, the boundary activities were analyzed in more detail and their associations with readiness for change program implementation as well as the related contextual factors were examined. For the purpose of this analysis, a spreadsheet format was chosen and Microsoft Office Excel 2007 was used as a tool. The data set coded in Atlas.ti software during the second phase of the analysis was revisited, focusing on the identified boundary activities. All quotations referring to boundary activity were copied into the MS Excel spreadsheet. One row in the spreadsheet was dedicated to each of these quotations. For each quotation referring to a boundary activity, the following issues were coded to the spreadsheet in separate cells: the actual quote from the interview, the pseudonym name of the corresponding case, the interview identification number, the type of the boundary activity, the possible second type of the boundary activity, a short description of the distinct boundary activity, the actor who had performed the activity, the target of the activity (e.g. top management/employees in general), the perceived effect on the readiness for change program implementation, and the possibly related contextual factors. Furthermore, an additional data field

was reserved for other remarks for the purpose of making notes during the analysis. Figure 6 illustrates the spreadsheet used as a framework in this analysis and provides examples of how the spreadsheet was filled out.

| | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Quote from the interview | Case | Interview ID | Boundary activity type | 2nd boundary activity type | Descpription of the activity | Actor(s) | Target recipient(s) | Link(s) to readiness | Related contextual factor(s) | Other remarks |
| 2 | "During that phase I organized a series of workshops, for which I gathered about 150 persons throughout the organization … The idea of those [planning] workshops was, in addition to gathering lots of information and practical knowledge for the consultancy work, to communicate to 150 key persons that they cannot get over this with traditional resistance to change: if they want to oppose this program, they must be able to justify their views and come up with a constructive alternative." | Bureau | 26 | Information seeking | Legitimating and committing | Gathering personnel from all units for ideation and planning workshops | Program manager | Representatives of all organizational units | Advancing the program plans, incrasing the legimacy of the program and making the organizational environment more receptive | - | - |
| 3 | "From the beginning we realized that if we'll do [this project] with a low profile, we'll get fewer comments from others. Thus we started to do this very independently, keeping a low profile, and we don't really report to anyone either. … It provides us with freedom and enables fast operation." | Bureau | 35 | Enclosing | - | A project keeping low profile and not reporting to anyone officially, except for own superior | Project manager | All others in the organization | Providing autonomy for the project | Might be related to the high level of bureaucracy in organizational procedures | This approach is critized in interview 36 |

Figure 6 The framework for analyzing the boundary activities

All the quotations referring to boundary activities were coded into the spreadsheet in this manner. As Figure 6 shows, some of the information was not available or not applicable for every identified boundary activity. For example, the interviewees often did not specify the recipients of the boundary activity, or there was no clear link between the activity and any indicator of readiness for change or any identified contextual factor. However, at least the basic information was coded for each quote (columns "A–D" in Figure 6), and additional information (columns "E–K" in Figure 6) was recorded when feasible.

The systematic coding process of the boundary activities allowed for comparing the amount of boundary activities across the cases by counting the related quotations. Even though the analysis was qualitative in nature, frequencies were calculated to demonstrate the rate of occurrence of boundary activities across the cases (Miles & Huberman, 1994). With the help of the created spreadsheet, case-specific counts were made concerning the overall amount of quotations referring to boundary activities, and the number of instances of each identified boundary activity type. Such counts provided an overview of the amount of boundary activity in each case. Average values were also determined for the quotations referring to boundary activities per interview to illustrate the potential differences across the cases.

One goal of the detailed analysis of the boundary activities was to determine the number of different boundary activities appearing in each

case. The quotations listed in the spreadsheet included many descriptions of the same activities. In each of the three cases, different interviewees referred to the same activity, such as certain workshops, meetings or discussions, and some interviewees addressed a certain activity many times during their interview, which resulted in several quotations that represented the same actual activity. To give an example, practically everyone in Bureau who had been involved in the early program activities mentioned the series of planning workshops, and some interviewees mentioned these workshops several times during their interview, resulting in altogether 19 quotations (i.e. rows in the spreadsheet) referring to these workshops. To support the calculation of such overlapping descriptions, one data field in the spreadsheet was reserved for describing each activity briefly. All the quotations referring to the same actual boundary activity received the same description. Thus, when all reported boundary activities of a case program were coded in the same way, it was possible to calculate the number of different boundary activities manifested in the case data.

When defining the number of distinct boundary activities in each case, each activity was only counted once regardless of how many times the activity had occurred during program initiation. For example, the same kind of joint ideation workshops with the same group of participants might have been organized three times during the program initiation, but they were calculated to represent just one mechanism of boundary activity. The actual number of occurrences of each activity was not analyzed, as for the majority of activities this information was not available in the data and it was not viewed as a critical piece of information. Rather, the analysis aimed to reveal the variety of different mechanisms of how the case programs' boundaries were managed in the cases.

This analysis generated case-specific counts of different boundary activities and provided a more in-depth view of the total level of boundary activity in each case. The total number of boundary activities across the three cases was not calculated. The reason for this was that somewhat similar but not fully identical activities were used across the three cases, and it would have been very difficult to determine whether they should be treated as the same activity. For example, the key program actors had interviewed those representing the parent organization in both case Bureau and case Chain, but the interviews were used in a somewhat different way, targeted at different persons and aimed at different outcomes, which makes it difficult to determine whether they should be treated as the same activity.

Figure 7 illustrates the process of coding and counting the boundary activities described above.

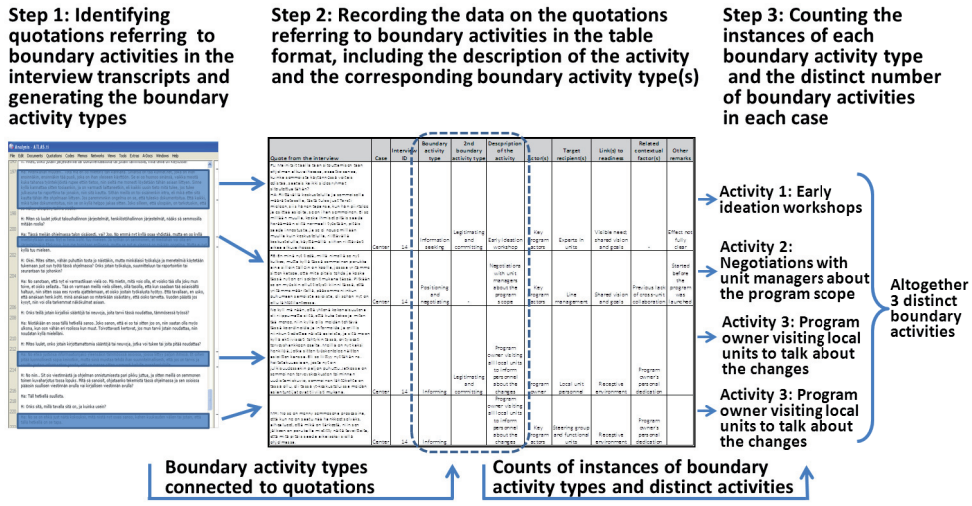


Figure 7 Illustration of the analysis of boundary activities and their types

Another major task during the third stage of the analysis was to analyze the associations between boundary activities and readiness for change program implementation. The spreadsheet described in Figure 6 was utilized also in this analysis. Although the research setting was not designed to allow for systematically testing causal relations, the data provided numerous indications of potential associations between boundary activities and indicators of change readiness. Simultaneously as the boundary activities were recorded in the spreadsheet, their role in creating readiness for change program implementation was judged based on the expressed intents of the actors and the actual or expected consequences of the boundary activities. This often required going back to the original interview data to examine the boundary activity and its effects more closely in a larger context. If a connection was found between the quotation referring to a boundary activity and one or more identified indicators of readiness for change program implementation, the connection was described in the specific data field of the spreadsheet (in column "I" in Figure 6).

In some cases, the connection between a described boundary activity and an indicator of readiness for change was described in a straightforward manner. Sometimes the interviewees articulated clearly that "We did x to gain y". For some other quotations, their connections with readiness for change program implementation required more reasoning and interpretation. For example, an interviewee could have described a challenge that indicated a lack of readiness for change program implementation, and immediately after that mentioned a specific boundary activity. If a clear logical link was found between the described boundary

activity and overcoming the articulated challenge, a connection was concluded. If a clear link between the boundary activity and readiness for change program implementation could not be found, the corresponding data field in Figure 6 was left empty.

In the final judgment concerning the associations between specific boundary activity types and specific indicators of readiness for change, similar patterns were sought in the spreadsheet. If the interviewees repeatedly associated a boundary activity of a certain type and a certain aspect of readiness for change program implementation, and if this connection was observed in more than one interview, then an association was assumed. This resulted in a matrix table that reported whether each boundary activity type was associated with each indicator of readiness for change program implementation. Potential explanations for the identified connections were also simultaneously recorded.

Furthermore, the third phase of the analysis included an examination of the contextual factors that might explain the observations and cross-case differences concerning the frequency of boundary activities, the level of readiness for change, and the identified (or missing) associations between the boundary activities and the indicators of readiness. Potentially relevant contextual factors had been identified and recorded during the coding process. The numerous memos created during the coding process as well as the observations recorded in the spreadsheet (column "K" in Figure 6) provided additional information on the characteristics, conditions, enablers and limitations related to each case. Common patterns were sought from all this data and the three cases were contrasted to detect the most central contextual differences. Existing literature was also utilized to inform this search. This resulted in a list of main contextual factors that were suggested to have a central role in explaining the differences in the findings across the three cases.

During the third phase of the analysis, the results of the empirical study were recorded. Following the suggestions by Miles and Huberman (1994) and Eisenhardt and Graebner (2007), illustrative forms of data display were utilized to summarize the case evidence, including tables, cross-tabulations, figures, and charts. In reporting the results, direct quotes from the interviews are also used extensively to illustrate the findings and provide more depth for the observations. As the interviews were conducted in Finnish, all quotes appearing in this thesis have been translated into English.

# 4. Results

This chapter presents the findings of the empirical research. The chapter starts with the descriptions of each three case programs. After that, the results from the analysis are presented, addressing one research question at a time. The indicators of the program-parent organization boundary are described, after which the identified boundary activities are presented and the indicators of readiness for change are presented. The identified associations between the boundary activities and the readiness indicators are reported, and finally the potential effects of contextual factors are discussed. Regarding each research question, the section begins with an overview of the findings concerning the phenomenon under study, after which the case-specific results are briefly introduced and the three cases are compared.

## 4.1 Description of program initiation in the three cases

In this section, detailed descriptions of the case programs in Center, Bureau and Chain are provided. For each case, the initiation and planning stage of the case program is described from the emergence of the program idea to early program implementation.

### 4.1.1 Case Center

Center is a non-profit public sector organization in Finland that acts as a central agency for a consortium of a wide number of public organizations operating in multiple service businesses. The member organizations of the consortium are Center's primary customers. Center has three main forms of activities. The first is to supervise the interests of its member organizations, for example, by representing them in different forums. The second task is to provide various expert services to the member organizations at their request. The third task is to conduct research and development activities that are guided by the strategic objectives of the organization and typically implemented in a project form. Center is organized into ten functional units that employ a few hundred experts. Additionally, Center has seven relatively independent subsidiaries.

Center has a long tradition of R&D projects. There is an R&D unit that focuses on service development activities, but service development projects are also carried out in other units throughout Center. The number of projects and the nature of project management practices differ across units. Center's service development projects range from small feasibility and evaluation studies to improving the current services and to developing and piloting new services with the member organizations. In recent years, significant effort has been put to developing project and portfolio management practices of Center's R&D projects. However, Center has no experience of internal change programs or systematic program management.

Due to various changes in society and legislation, as well as evolving expectations of the general public and authorities, Center and its network of member organizations were experiencing strong renewal pressures concerning their services and service production. The member organizations demanded more visible support from Center to their own renewal efforts, and the national government was also expressing concerns about the future of the field. As a response to these pressures, Center launched a change program that aimed at renewing the service system of Center and its member organizations. Center had previously conducted activities related to the program's topic as a part of its day-to-day operations and through single small-scale projects.

The idea for establishing the change program emerged when the unit manager of Center's R&D had a planning session with a senior expert and they came up with an idea to introduce program management in Center. The program concept had previously been in use in Center's research activities and in Finnish governmental organizations with which many of Center's experts cooperated. Now the program concept and the related management approach were hoped to serve Center's purposes in directing and coordinating change efforts.

During the ideation session, the unit manager and the senior expert found four areas where programs could be established. The ideas where introduced to the Center's management group that selected two areas that they felt were the most important for Center's future. The renewal program was the larger of these two initiatives. The rationale for establishing the program was to improve the coordination of Center's fragmented service development activities and thus to gain wider and deeper impact at the national level. The program was supposed to generate novel services for Center's member organizations, as well as a new framework for organizing service production. The program involved both those services that Center provided to the member organizations and the services that the member

organizations offered further to their customers. The program was supposed to involve practically all of Center's ten units and seven subsidiaries and it aimed to impact many stakeholders, including but not limited to the member organizations, legislation, regional and national government, local subcontractors, and other partners. The program also aimed to contribute to Center's internal development by providing mechanisms for coordinating cross-functional activities, as the initial goals of the change program also included the adoption of the program management approach and the development of program management practices in Center.

After the launch decision had been made by the management group, the search for a competent program manager begun. From early on, there were different views about the position and it seemed hard to find a suitable person. When the unit manager of R&D refused the position due to the lack of time to devote to the program, some top managers suggested that the program manager could be found outside Center, among the top managers of Center's member organizations. Still, after a lengthy search, a senior expert from Center's R&D unit was appointed as the program manager, although he was not very willing to accept the position. The actual program work was to be implemented largely in the line organization and by various service development projects, and the program manager's role was supposed to be rather coordinative, lacking significant authority. Reflecting this, the program manager was not admitted the title for a program manager commonly in use in other Finnish organizations [Ohjelmajohtaja in Finnish] but was instead appointed as "the manager of the program" [Ohjelman johtaja in Finnish] that would not indicate a high-ranking managerial position in the line organization.

One of Center's vice presidents was appointed as the program owner to oversee the program. A coordination group consisting mainly of Center's unit managers was established to oversee the development of the program, and a part-time program coordinator was also appointed. During the program initiation, three focus areas, or sub-programs, were chosen and more detailed goals, plans, resources and expected outputs for each of these sub-programs were being planned separately. For each sub-program, a manager was nominated to guide the planning. The core program team included the program manager, the managers of the sub-programs, the program coordinator, and the manager of the R&D unit. Everyone worked in the program in addition to their normal duties in Center's functional units. Figure 8 illustrates the initial structure of Center's program.

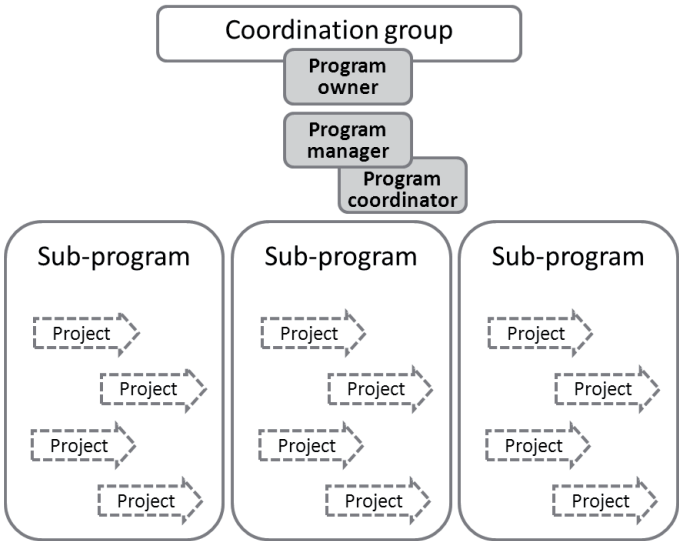


Figure 8 The program structure in Center

The first round of interviews was conducted by the research team about a year after the program launch. At that time the program was still in the early initiation and planning stage. The early program activities involved various seminars, meetings and discussions. The aim of these events was to generate ideas, analyze pressures coming from the environment, and develop a shared understanding of the goals and scope of the program. At the time of the interviews, the sub-program managers had only just been named and there seemed to still be a substantial confusion about the program's goals and content. The expectations and the level of ambition seemed high, but it had proven problematic to convert them into tangible and measurable program goals. Besides general discussions and negotiations, there were few concrete efforts to advance the program's content. Even though various projects related to the program's topic were ongoing in the organization, it was unclear whether these were, or should be, parts of the program. Many interviewees criticized the slow progress and poor outcomes of program planning. Both those involved in the core program team and those more peripheral to the program had complaints. There were unclear and dissenting views concerning the change goals and the program's role in implementing those changes. The resources assigned to the program did not seem to be in line with the high expectations. In addition, a lack of practices and guidelines for program work was reported.

After the first round of interviews, our research team was invited to organize three workshops with the key actors of the change program, targeted at those involved in the program activities. The first workshop was

about good program management practices and the aim was to introduce the basic program management concepts, processes and practices to the participants. The last two workshops were focused more on supporting the goal setting of Center's program, and the role of our research team was to provide tools and templates for program planning and to facilitate group discussions. The workshops mainly received positive feedback from the participants, but they did not attract as many attendees as desired. The workshops participants openly criticized the low number of Center's top managers taking part in the workshops.

The second round of interviews was conducted six months after the first round, between the second and the third workshop described above. Compared to the first round of interviews, the program's situation had not changed significantly. Although there had been attempts to define the scope of the program and assign responsibilities for advancing the program, planning was not progressing in the desired manner. There had been some concrete advances, but it seemed that they were not visible to those outside the core program team. For many peripheral participants, the workshops organized jointly with our research team had been the only program-related activity they had been involved in. The common view was that the emerging program could not demonstrate concrete plans and results, and thus was not able to proceed to implementation. Practically all of the Center's managers that were interviewed expressed their dissatisfaction with the program's slow progress, whereas the core program team complained about the lack of top management's attention and direction. Further increasing the difficulties, the vice president who had acted as the initial program owner had left Center, and the other top managers were not able to decide who should take over the program owner role. At the time of our interviews, this question had been left open for several months. In practice, it seemed that the manager of the R&D unit served as an informal program sponsor who supported and motivated the key persons and promoted the program both within and outside the organization.

During the interviews, various explanations for the program's poor progress were presented. Many of the renewal program's key actors felt that their authority was not clear and they did not have enough resources and support. Both the program team and those representing the parent organization mentioned challenges related to Center's organizational characteristics and culture that did not seem to support this kind of work. Many pointed out the lack of experience in cooperating across the unit boundaries and the related challenges in integrating the units, subsidiaries and member organizations into one change effort. The variety of expectations, interests and intents was seen as a source of complexity that

made the change extremely challenging and even threatening towards the existing order. A program as an organizing form also seemed to meet visible resistance. The other program established at the same time had quickly been absorbed into the daily routines of Center. Some interviewees described this as a failed attempt of adopting the program management approach in Center.

Fairly soon after the second round of interviews and the third workshop, governmental authorities launched an initiative that aimed at renewing the service system from a national perspective. This new initiative forced Center to react immediately as it evidently overlapped with Center's program. Due to the slow progress and other severe problems, it was clear that Center's program was not a strong enough endeavor to compete with the new initiative. Thus, a decision was made to terminate the Center-led program and to assign the resources to the government initiative. The formal decision to terminate the program was made by the board of Center, which was followed up by rapid ramp-down activities.

In the analysis, program initiation in case Center is seen to start when the management group made the decision to form a change program of the proposed initiative. The analysis covers the program initiation and planning activities until the program's termination. Before the termination decision, initiation and planning activities had taken almost two years.

#### 4.1.2 Case Bureau

The second case represents a change program implemented by a large public sector organization. The case organization, here called "Bureau", is a government institution organized into three main branches and supportive functions, and into tens of local units decentralized across Finland. Bureau works in close cooperation with a government ministry, and political decision making affects Bureau's operations. There is a clear division of hierarchy, and there are formal rules and procedures guiding the activities. Bureau has a long history of projects and project management, but there are no standard procedures specifically designed for program management.

The case study concentrates on a program that was an essential part of a larger structural reform in Bureau. The aim of the reform is to rationalize national public sector activities by restructuring activities, merging Bureau's units into broader entities, and closing down some of its local units. The changes aim at personnel cuts of about one third of the employees. Cost cuts of tens of millions of euros per year have been predicted for several forthcoming years.

The case program was among the earliest endeavors related to this larger reform. The program aimed at renewing Bureau's Information Technology (IT) management, including the system architecture, the network

infrastructure, the organization, and the management system. IT had become increasingly important for Bureau in its core activities and administration, but the existing system was considered too complex, decentralized, and costly. As an example, there were hundreds of different IT systems and programs in use across the Bureau's units. With the change program, Bureau sought a more centralized, flexible, and cost-effective IT solution. From the many units of Bureau, the IT unit and one department within the headquarters were the most active in the program. However, more than 500 employees participated in the program, and the results were planned to affect practically all of Bureau's thousands of employees. An internal change program of this magnitude had never before been implemented in Bureau. The planned program duration was eight years, from which initiation and planning took about three years.

Program initiation can be traced back to a specific event. A large IT company approached the government ministry which was formally in charge of Bureau's operations and made an offer to take over Bureau's IT management. As there were pressures to rationalize public sector operations, this was an attractive offer for the ministry. However, not all of Bureau's managers agreed. The CEO of Bureau discussed the offer with a manager working closely with IT management, the future program manager, and they agreed that the offer was unrealistic and it was not in the best interests of Bureau. Still, they saw this as an opportunity to start developing Bureau's IT management. As the soon-to-be program manager stated, they wanted to exploit the momentum created by the IT company's offer.

To assure the decision makers in the ministry that the external offer by the IT company should be declined, Bureau's CEO appointed the soon-to-be program manager to come up with an alternative plan. With some help from a colleague, the program manager outlined a solution by synthesizing the ideas that had been discussed during the past few years about how to develop Bureau's IT management. The CEO and the ministry's decision makers accepted the plan and decided to proceed with the idea. The program manager was officially appointed to lead the emerging program. For the next month, the program manager elaborated the plans, and after the initial solutions were outlined, he hired a consultancy company to support the initiation process. Two months after the initial meeting the first phase of the program was officially launched.

The first phase, the analysis of the current state, was led by the program manager and a few other experts in Bureau. With the help from the external consultants, they introduced a workshop-based method for collecting and analyzing data on the current state of Bureau's IT management. Employees

from Bureau's various units participated in collecting the data and presenting it in a series of workshops. The core program team of around ten people and the consultants analyzed the data between the workshops. There were altogether nine workshops during this phase, with a total of about 50 participants. The phase took six months and was concluded in a report prepared by the consultants, summarizing the current state of Bureau's IT management.

During the program initiation, a new director coming from outside the Bureau organization was appointed for the central unit involved in the program. He was the new superior of the program manager, and he was assigned as the program owner. He participated actively in guiding the early program activities and he started to actively sell the program idea to the top management of Bureau. With the results of the current state analysis, he was able to convince the top management to make a decision to continue with the program to the second phase.

The goal of the second phase of the program was to address the weaknesses of Bureau's IT management identified during the current state analysis and to create basic solutions and guidelines for the proposed new solution. The work method was similar to the first phase. The program owner, the program manager, the same core team and consultants guided the work that was organized around almost twenty workshops, with subgroups concentrating on specific parts of the solution. During this phase, nearly 200 people from different units of Bureau participated in the workshops. Many participants were highly motivated as they felt they finally had an opportunity to address the problems they constantly encountered in their daily work. The core team and the consultants elaborated the plans between the workshops. Contrary to the Bureau's traditional way of operating, the team also decided to open up. They presented their framework openly to various external actors and also asked for advice and offers from several IT companies, even though they were not yet ready to send out the official requests for proposals. They also benchmarked similar programs implemented in other organizations and gained various ideas that could be used as a basis for solution design.

The series of planning workshops and meetings was concluded in a two-day seminar where the development work was synthesized. After this final seminar, the consultancy contract ended in handing over a final report. Many participants of the planning workshops were satisfied with the process and its results, although some described that the participants' conflicting interests and varying knowledge in technical issues had made the discussion challenging. Some interviewees also stated that the participatory process resulted in several compromises and some sub-

optimal solutions. The key program managers were happy that a large number of people had been involved in program planning and they were satisfied with the results.

Next, the program owner and the program manager engaged in more detailed planning based on the report prepared by the consultants as they revised the solutions to better fit Bureau's interests. They presented the proposed goals and guidelines to Bureau's top managers, which resulted in long-term negotiations. Finally, the CEO and the other key top managers signed a document stating the goals and guidelines for the program. The program manager described the program goals as ambitious, and he regarded that the signed document was the most important result of the early program phase, since it indicated, at least formally, top management commitment to implement the program.

In the course of the next few months, the program owner and the program manager, assisted by a few key persons, created a project structure for the program. After that, the plan was again taken to the top managers for approval. The iterative process of negotiations, decision making, and further planning took almost a year. The program scope was extended from what was originally planned: to exploit the created momentum, wider changes were introduced under the program title and also other development areas than those related to IT were included in the program.

The beginning of the third phase of the program involved detailed planning at the project level. Four key projects and four support teams were established. The projects focused on specific parts of the new solution, such as the architecture and the network infrastructure. The support teams focused on other than technical issues, such as management structures, processes and human resources. A dedicated project manager was assigned for each project and support team. The project managers were Bureau's middle managers, whereas most of the project staff were IT experts. Almost everyone worked in the projects part time in addition to other duties. A program steering group consisting of managers of related units had also been established to oversee the program. The program structure is depicted in Figure 9.

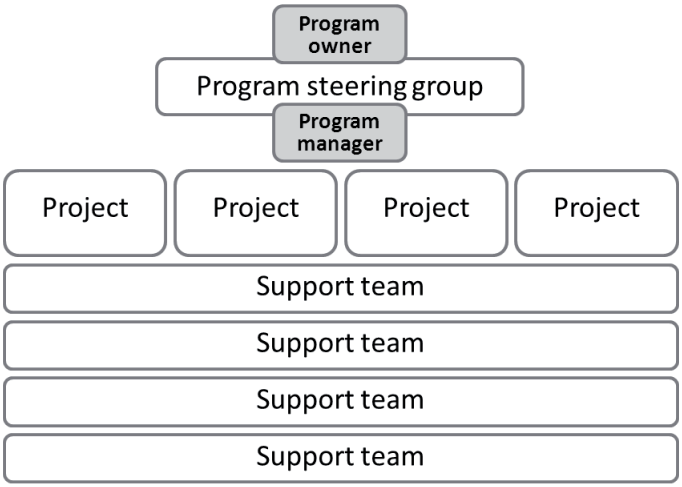


Figure 9 The program structure in Bureau

The management approach of the program was changed for the detailed planning phase and the responsibility for planning was decentralized. At this stage, the program manager and the program owner both left the program organization for other duties. Each project was assigned a schedule and some guidelines, but the details of the technical implementation were left to be worked out by the project managers and their teams. The projects were interrelated, but operated fairly independently and were scheduled to reach implementation at different stages. There were no program-wide consultants or contractors, but each project chose its own partners. There was very little program-level coordination, and very few program-level management mechanisms. The program steering group did not meet very often and was described by the interviewees as fairly inactive. The communication between the projects relied largely on the personal networks of the project managers.

Different projects took very different approaches to detailed planning. In some projects, the planning work was led by a determined project manager with a clear vision and a strong authority. In other projects, external contractors took over the responsibility for planning. The high level of autonomy in project planning seemed to motivate some of the project managers, whereas others desired more guidance and clearer specifications and their projects did not proceed as fast as had been desired.

At the time of the interviews, the program was in early implementation. One project had reached closure and its results were handed over to the line organization. Another project was about to reach completion, one year ahead of the original schedule. This project was regarded as highly successful, although some criticized the project manager of defining the

scope of the project in a way that did not cover all parts of the original plans. The third project had been in serious trouble and was running a year late. As one cause for the delay, the project team claimed that the division of work between the project and the line organization was unclear. The team also claimed that they did not have clear enough specifications to work with, nor the skills or knowledge required for the project. They had spent almost a year searching for an external contractor to take responsibility for planning, which had heavily delayed the project. The troubles in this third project had affected the related fourth project that was planned to be implemented based on the experiences gained during the previous project. Personnel from the third project were supposed to move to the fourth project, and thus the delay had escalated.

During the time of the interviews, the problems related to the third project were recognized and the program management board had made some corrective actions to help the project meet its revised deadline. Overall, the program was seen to progress quite well despite the delays, and most of the interviewees expected it to eventually be at least somewhat successful.

In the analysis, program initiation in case Bureau is seen to start when the soon-to-become program manager was requested to sketch a plan on how the IT management of Bureau could be developed. Program initiation in Bureau includes the first two program phases, i.e. the analysis of the current state and the development of the guidelines for the solution, and also the beginning of the third phase, detailed planning, during which the key projects were initiated and planned. The program initiation is viewed to end when the first projects reached implementation. Altogether, program initiation in case Bureau lasted for almost three years, and the implementation was planned to take four years.

### 4.1.3 Case Chain

The third case program was implemented in a large private service sector organization here called Chain. The company provides services for both consumers and business customers. Chain has three main business areas, many regional units across Finland, and some operations in almost ten other countries. During the past decade, Chain has invested significantly in developing project and portfolio management practices and processes, and the project management culture in Chain is relatively mature. Although some programs have been implemented in recent years, there are no separate guidelines for program management established in the organization.

The change program under investigation was related to transforming the company's central service processes in the company's largest business area,

"Domain" (a pseudonym). The rationale for the program stemmed from several sources. There was a well-anticipated need to update the infrastructure related to the service process. Also, significant changes were foreseen in the markets and in the legislation that regulated Chain's operations. As the infrastructure for the central service process was becoming obsolete, some pre-study projects had already been conducted concerning the forthcoming investment needs. Also, scenarios on market development had been investigated in separate projects. There was clear pressure to cut costs and make changes due to the changing markets. Instead of just making the standard replacement investments concerning the infrastructure of the service process, the Domain's management board decided to establish a large-scale renewal program.

The change program aimed at transforming Domain's key service processes. The program called for significant investments, but it also sought considerable cost reductions for the forthcoming years and pursued competitiveness in the long run. The transformation was planned to affect all parts of Domain's central business process, and it included renewing the infrastructure, reorganizing the operations in Chain's regional units, and developing and adopting new ways of working across the company. The aim was to make the service processes more efficient by optimizing each process phase and by increasing automation. The program also involved significant changes in the services offered for Chain's customers. Ultimately, the program aimed at ensuring profitability in the changing markets.

The program idea was developed and the early program structure was sketched during the Domain's management board's strategy seminar. To set a goal for the program, the top management defined a figure for the desired cost savings in Chain's future operations. The key members of Domain's management board also designed the overall structure for the program. The structure was based on three development areas that each included several sub-programs, further consisting of projects. Additionally, support groups were included in the program structure (see Figure 10).

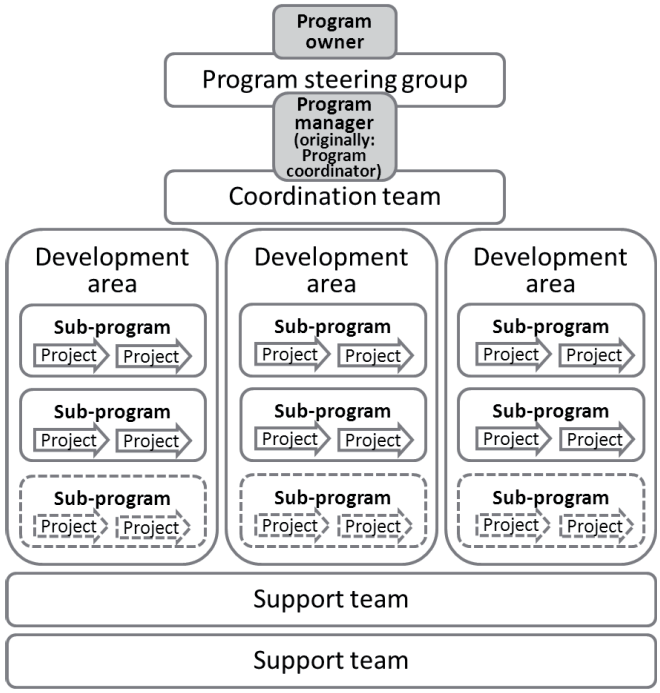


Figure 10 The program structure in Chain

At the time of the program launch, there were a few existing projects that had been initiated to plan and prepare the infrastructure investments and to develop human resource usage related to the Domain's business processes. Due to this, two of the program's development areas already had ongoing projects and development activities, which were officially included in the program. The third development area was established from scratch at the time of program initiation. New projects were initiated under each development area during program initiation and planning.

The program was officially launched by the Chain's management group and the main responsibilities related to the program were divided among Domain's central managers. A program owner was appointed, serving also as the chairman of a program steering group that was put in charge of the program. For each development area, a member of the program steering group was assigned as the responsible manager. The newly appointed managers of the development area were supposed to come up with plans for more efficient operations that would contribute to the cost savings goal stated by the top management. For each sub-program within the development areas, sub-program managers were appointed to plan and coordinate the actual projects. Each project had a project manager and a project team. The projects were diverse in terms of focus, scope, and timeframe.

Instead of an official program manager, a program coordinator was appointed for defining a management procedure for the program and administrating the program. Based on the discussions with a number of Domain's central managers, the newly appointed program coordinator designed a management approach for the program where the projects formed a portfolio, and the program steering group had regular meetings to make portfolio decisions on project starts, milestones and closures. Apart from the centralized portfolio decisions, the program coordinator let each development area, sub-program, and project to design their own management structure, including the reporting and documentation procedures and the potential steering groups. To ensure some level of coordination across the program activities, the program coordinator gathered a coordination team of active people from different parts of the program organization, whose task was to serve as a support team in program-wide coordination and administration.

The first round of interviews was conducted about a year after the program initiation decision, when the program as a whole was still in the early planning stage. At that time there were around 30 projects in the program, most of them in the planning phase. A couple of projects that had been started before the program was established were already in execution. Some projects were implemented solely by Chain's personnel, while others involved suppliers and partners. At the time of the first round of interviews, the program was being planned mainly within Chain's headquarters. Although the program was supposed to affect the work of practically all employees in Chain's local units, not much had been communicated about the program to those employees.

The first round of interviews revealed how Chain's program had initially been quite dispersed, but in the course of time, as the number of projects had increased and numerous interdependencies between the projects had been identified, mechanisms for program-wide coordination had been established. These included shared reporting templates, joint workshops and meetings as well as informal communication at different management levels of the program. The role of the coordination team had evolved, and at the time of the interviews there was still active debate about how to define the coordination team's activities and make them more efficient. Most of the interviewees thought that the program was little by little finding its course. Still, some people described how it was difficult to proceed with detailed planning since there was so much uncertainty related to the plans. They complained about the lack of a concrete vision of the future state of the organization. Several people also pointed out that one of the

development areas was still lacking focus and compared to the other two it was clearly behind the planned schedule.

The second round of interviews was conducted nearly one and a half years later. Program planning had proceeded mainly as planned, and while some projects were still being planned, altogether the program was in early implementation. The one development area that had originally been struggling was said to have found its course. At that time the program included almost 50 projects, and altogether a few hundred people were involved in the program activities. Compared to the situation during the first round of interviews, the program organization had experienced some visible changes. There had been personnel changes in Domain's management, and in line with these changes the chairman of the program steering group, i.e. the program owner, was replaced. The new program owner took a more active approach in getting involved in the program work, and he also made sure that all of Domain's top managers were actively involved in the program-related decision making, as members of the program steering group and as the directors of the development areas.

The role of the program coordinator had also changed significantly from the early days. The program coordinator had gained a lot of insight into the program's content by actively participating in workshops, seminars, steering group meetings, and other events at different levels of the program. In the eyes of those involved in the program, the program coordinator was largely associated with the program-related management structures and procedures, and his activities seemed highly appreciated across the program organization. Largely due to the program coordinator's increased insight into the program's content and his proven managerial competence, the newly appointed program owner wanted to further authorize the program coordinator and make his central role more visible. Thus the former program coordinator was officially appointed as the program manager, which others also viewed as a more proper title for his role. Program-wide coordination was viewed to mainly depend on the program manager's activities, as well as the discussions in the steering group meetings. The coordination team that had originally been established to support program-wide coordination and administration was no longer active.

At the time of the second round of interviews, some results from the early implementations could already be seen and these were described by the interviewees as visible quick wins. As the most prominent example, a round of negotiations with the representatives of Chain's personnel union had resulted in a revolutionary labor agreement that included more flexible terms for working hours and the related compensation. Altogether the

program was seen to be on track, although some individual projects had suffered from delays.

To plan the implementation phase of the program, local change groups had been recently established in Chain's local units. Some people were still concerned that the local units had not been involved enough in the program, which caused uncertainty concerning the forthcoming implementation efforts. At the time of the second round of interviews the implementation phase was planned to take another two years, after which the pursued savings were hoped to be realized.

In the further analyses, the program initiation in case Chain is viewed to start when Domain's management board sketched the early program structure in the strategy seminar. The program initiation took about two years and ended just before the second round of interviews, when most of the program's projects had finalized their plans and reached early implementation.

## 4.2 Indicators of the boundary between a change program and its parent organization

The first research question addresses the boundary between a change program and its parent organization. Next, the identified indicators of the boundary are presented, results for each case are described, and the findings are summarized.

### 4.2.1 Indicators of the program-parent organization boundary

To gain a more in-depth understanding of the nature of the program-parent organization boundary, the indicators of the boundary were analyzed. With the help of previous literature on organizational boundaries, a categorization of different aspects of the boundary was constructed during the analysis of the research data. Building on the categorizations of organizational boundaries presented by Hirschhorn and Gilmore (1992) and Scott (2003), the boundaries between the change programs and their parent organizations were analyzed to be formed from six types of boundaries: task boundaries, authority boundaries, temporal boundaries, physical and social boundaries, social and identity boundaries, and knowledge boundaries. Table 12 describes how each of these boundary types appeared in the research data, and Figure 11 provides an illustration of the different boundary types.

Table 12 Different aspects of the program-parent organization boundary

| Boundary type | General description | Description of how the boundaries were illustrated in the research data |
|---|---|---|
| Task boundary | Caused by differences in the nature of work, and by the specialized tasks and goals of organizational entities. | • Program work involves different goals than the daily operations: change programs pursue specific goals to change their parent organizations, whereas the daily work in the parent organization focuses on maintaining ongoing operations and on small-scale development.<br>• The logic of action and way of working in programs differ from the daily tasks that involve routine and standard procedures. Program work requires non-routine activities and novel work methods.<br>• Program management is considered a novel approach especially if there is limited experience of internal change projects. The program management approach also differs from project management, since projects should have clear objectives from the beginning, while programs can be initiated with vaguer goals and a higher level vision. |
| Authority boundary | Caused by the division of formal and informal hierarchy in organizations. May be clearly defined or may emerge in social interaction. | • The extent to which a program's authority is constrained and supported by the surrounding parent organization may differ. The role and position of a program within the parent organization's management system may be clearly defined, or the program may lack a clear position.<br>• The authority of the key program managers may be formally defined in relation to the authority structure of the line organization. The key program managers may possess authority via their high-ranking positions in the line organization, and they may acquire authority during the program by demonstrating managerial capabilities. |
| Physical or spatial boundary | Caused by different locations and access restrictions to physical and virtual spaces. | • The program team may be located in a different office location than the rest of the organization, setting physical boundaries around the program<br>• Early program activities may be conducted in one location (e.g. the headquarters), while the program may aim to affect the entire organization. Thus, there may be some distance between the emerging program and the change recipients. |
| Temporal boundary | Created by a temporal distance between organizational activities, and promoted by different time orientations and schedules. | • Change programs tend to involve a different pace of work than daily operations. Programs are temporary endeavors characterized by schedules and deadlines, and program work may involve a sense of urgency. On the other hand, programs typically involve a time horizon of several years, whereas ongoing operations focus on shorter-term achievements. Due to busy schedules related to daily work it may be difficult to schedule cooperation across the program's boundaries.<br>• If work time is not clearly allocated to program work or if the program is not prioritized over line work and other projects, there may be a lack of time to devote to program work. |
| Social and identity boundary | Caused by different identities, values and social orientations. Related to who people interact with and who they trust. | • The program's identity is constructed during the early program stages. The shared identity of the program team can contribute to the social detachment of the program personnel from the rest of the organization.<br>• The program management approach as such may be unfamiliar, and some people may not identify with the related principles.<br>• The extent to which people identify with a program may differ. The identification pattern does not necessarily follow the program's formal organization chart, but there may be varying views of whether the participants regard themselves as members of the program organization, and who else they include. |
| Knowledge boundary | Caused by the lack of knowledge about the state of affairs. | • Even people that are viewed as central program participants or key stakeholders may lack knowledge about the program, its goals, status and its ongoing and planned activities.<br>• Knowledge boundaries can often be interpreted as consequences of other boundary types, referring to the peripheral program participants' lack of time, authority, interest, or means to gain knowledge about the program. |

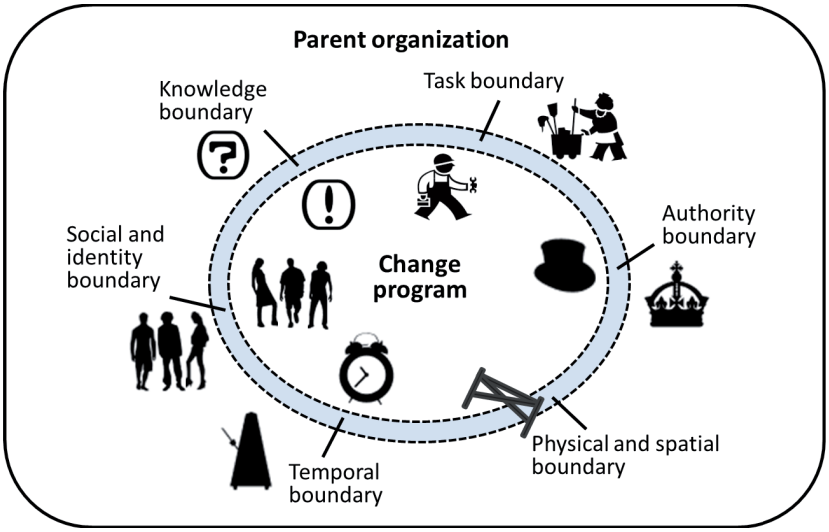


Figure 11 Illustration of the different boundary types

Each of the boundary types described in Table 12 and in Figure 11 illustrates one aspect of the overall boundary between a change program and its parent organization, and each type contributes to the strength of the overall boundary. Next, the program-parent organization boundary in each of the three cases is characterized and discussed. After that the cases are compared and a summary of the perceived boundary strength in each case is provided.

### 4.2.2 Program-parent organization boundary in the three cases

In this section, the program-parent organization boundary in Center, in Bureau and in Chain is described in terms of the six identified boundary types. For a more detailed description of how the boundaries were manifested in the cases, case-specific tables are included in Appendix 3, presenting indicators of the boundary types in each case as well as illustrative quotes from the interviews.

**In Center**, the boundary between the case program and the parent organization was quite visible. Firstly, there were clear indications of *a task boundary*. While the program management approach was considered as a new way of conducting development activities in all the three cases, program management as an approach was considered especially novel in Center, where systematically led internal development projects had also been rare. Many program participants in Center expressed their confusion about the nature of change programs, and some found it hard to distinguish the program as a concept from single projects and from small-scale development activities. Although nobody in Center seemed to question the importance of the program's topic area and goals, the role of the change

program in implementing those goals remained unclear, and some found the program management approach unclear, strange, and very different from what they called "normal work". The following quote from a peripheral program participant illustrates this confusion:

> Q1 (Center, peripheral program participant): "*This is a program, this is not a project but a program, so it is a novel approach … It might be just me, but it does make one wonder what on earth this is about. Who has come up with this, and do [the top managers] on the top floor even themselves know what they are thinking about?*"

While the program management approach was considered novel, the case program focused on developing the same issues that people dealt with in their daily work. Thus, the task boundary was not very high in terms of the content of the work. Correspondingly, some experts in Center reported that the boundary between the program work and the line work was so fuzzy that it was sometimes hard for them to distinguish between program work and other work.

*The authority boundary* in Center was quite evident. Center's change program did not seem to have a clear position in the management system, and the program's authority seemed very limited, whereas the parent organization had strong authority structures. The following quote describes how the division of authority between the program and the line organization was still unclear during the second round of the interviews:

> Q2 (Center, steering group member): "*One thing that we need to do fast is to define the authority [of the program]… After that we would be able to further clarify the reporting practices and the rules of the game in relation to the line organization.*"

When compared to Center's strong units, the change program seemed to lack authority, and the internal work of the units was prioritized over cross-functional program work. Additionally, some top managers in Center viewed the program as a threat towards the existing power structure and it seemed that they tried to understate the program's significance and the related authority. The program manager described the situation in the following way:

> Q3 (Center, program manager): "*There have been political interests or fears that this kind of a larger program would aim at altering the power relations among the top managers. It is quite a mess.*"

Also related to the authority boundary, Center's program manager felt that he did not possess the required authority to conduct large-scale changes. The program manager described how his position was still unclear during the second round of the interviews:

> Q4 (Center, program manager): "*My authority was never defined … There was never any discussion on that. I was given a task, but the related authority, the direction and the goals had not been defined, and I felt left alone with that.*"

In contrast to the other boundary types, *physical and spatial boundaries* were not particularly visible in Center. There were no clear physical boundaries surrounding the program as the program team was not isolated from the rest of the organization: the participants contributed to the program work from their permanent office locations and were thus in constant interaction with the colleagues that were not actively involved in the program. Case Center still demonstrated some indicators of spatial boundaries. Program initiation and planning activities took place in the Center's headquarters, but the changes promoted by the program were supposed to affect Center's numerous geographically scattered member organizations. Thus, there was a clear distance between the emerging change program and the recipients of the change. Additionally, many of Center's experts spent much of their work time outside Center, typically in the member organizations' and other stakeholders' premises, which made it difficult to schedule program-related meetings between the key program actors and other experts in Center. One program participant described the situation in the following way:

> Q5 (Center, program participant): "*Communication is always a problem in this kind of an organization where everyone is travelling two or three days a week.*"

Many indicators of *the temporal boundary* could also be identified in Center. The differences in the time orientation between the change program and the parent organization's daily operations were noticeable, and many program participants, both managers and experts, complained about the lack of time to devote to program work, blaming the busy schedules of the daily routines. Some also stated that since the early program work had not involved predefined deadlines, they had prioritized other smaller tasks that were more clearly defined and involved short-term deadlines. Furthermore, as described above, there were difficulties related to scheduling meetings as many of the Center's experts spent a considerable amount of their work time outside Center's premises, and these difficulties contributed to the perceived lack of time for program-related cooperation.

The analysis also revealed traces of *social and identity boundaries*. The identification with the change program did not seem to fully follow the programs' formal organization chart, but there were varying views of whether the program participants saw themselves as a part of the program organization or not, and who else they included as program members. In Center, the interviews showed how both managers and experts seemed to identify more with their home units and their daily work than with the

change program, and some even connected the program with the special interests of the R&D unit, instead of viewing it as something that would concern their own unit and themselves. Although the interviewees in Center were pointed out by the contact persons as central program participants, most of the interviewed people did not truly identify with the change program, but rather saw their own role as an external observer or as a peripheral, casual participant. For example, the steering group members did not view themselves as a part of the program organization, but rather thought that they were monitoring and evaluating the program from the outside. Some people also expressed skepticism towards the entire program management approach, especially in their particular organizational context, and did not want to identify with the approach. In the following quote, a top manager characterizes his position in the program:

> Q6 (Center, top manager): "*I'm currently an observer. I observe [the program] from aside … I'm still doubtful about what this program can offer us.*"

Finally, in addition to the above discussed boundary types, it seemed that in Center many interviewees lacked knowledge about the program, its goals and the current status. These observations were interpreted as demonstrations of *a knowledge boundary*, indicating unequal distribution of knowledge across the change program's boundary. The following quote from a peripheral program participant illustrates the knowledge boundary:

> Q7 (Center, peripheral program participant): "*If we ask people, I think that half of them would say they are familiar with this, but another half hasn't even heard of this. … The unit managers are aware of this, but at the expert level it depends on whether one has a general interest in these things*."

To summarize the observations concerning case Center, the overall boundary between the change program and the parent organization was noticeably high. Authority boundaries, temporal boundaries, and social and identity boundaries were especially visible. The program was viewed as very different and distinct from the other parts of the organization. In Center, the program--parent organization boundary remained high during the initiation stage and did not seem to evolve significantly across time.

**Case Bureau** demonstrated some differences but also certain similarities with Center in terms of the program boundary. Firstly, related to *the task boundary*, in Bureau some of the program participants also reported that their responsibilities in the program dealt with similar issues as their daily work. Consequently, some of these interviewees stated that it was sometimes hard to distinguish between program work and line work. An expert participating in one of the projects in Bureau's program described the situation:

Q8 (Bureau, project participant): "*Of course, when the same people do similar tasks in the line organization and in the project, it is very difficult to identify whether it is project work or line work.*"

Compared to case Center, the program management approach caused less confusion in Bureau, where there was a long history of systematically managed internal projects. Still, internal change programs of this magnitude had never been implemented. Many interviewees recognized that the program involved a mode of working that was distinct from the traditional work mode of Bureau. As an example, one program participant characterized the differences in the mode of working in the following way:

Q9 (Bureau, middle manager of a central unit involved in the program): "*One noticeable difference in the work methods is that in [the program] we have clearly sought for partnerships and partner companies, and we have outsourced larger entities than before.*"

Bureau's hierarchical organization structure and the organization's fragmentation into separate, strong units were reflected in the change program as indicators of *an authority boundary*. The responsibilities in Bureau's program were mostly clear and well-defined, but they were largely dictated by, and restricted by, the authority structure of the line organization. One support team manager described:

Q10 (Bureau, support team manager): "*The implementation of a large program is a huge challenge in a functional, hierarchical organization such as ours. In principle, the program or project manager's resources and authority are precisely as high as his or her position in the line organization.*"

The original program manager and the original program owner utilized Bureau's formal decision-making hierarchy and gained the required authority by actively lobbying for top management support for the program. When the top management was convinced about the need for change, the program was granted substantial authority. Thus, the authority boundaries evolved during the early program stages due to actions of the key program actors.

The geographical fragmentation of the Bureau's organizational units was also manifested as *physical and spatial boundaries*, providing challenges for cooperation during program planning. In Bureau, virtual communication tools were quite actively utilized to maintain contact between the geographically scattered units. Such tools were also utilized in the program work.

Related to *a temporal boundary*, the findings in Bureau resembled those in Center. Some peripheral program participants in Bureau stated how it was hard to find time to participate in program planning due to other

duties. The program also required a work pace that differed from Bureau's norms. The planning horizon of Bureau's normal operations was long and the culture promoted a steady pace of work. However, the early phase of the program had often required working overtime to meet the strict deadlines of data gathering, analysis, and program planning. The program manager described this difference in work pace:

> Q11 (Bureau, program manager): *"[Besides external consultants] our own people also have to fully commit to the goal and to the work method. As I said to the people in the core team, if a problem appears, we'll stay at work until midnight, whether or not this suits the office culture."*

*Social and identity boundaries* were not very visible in Bureau. Most people who had participated in the program planning activities were highly motivated to participate in renewing the organization's IT management, and they clearly identified themselves with the program. Still, they also seemed committed to their permanent organizational units and their permanent positions. As one project participant stated:

> Q12 (Bureau, project participant): "*I think that people have had the opportunity to do something that they relate to, something that they are motivated to do and that will benefit them in their own work in the future.*"

Yet, some interviewees in Bureau suspected that the employees (especially those in the local units) who had not been involved in the early program activities were not familiar with the change program and thus were not committed to the program's goals. Also, the program had originally been promoted as mainly technical and IT related, and some still connected the program solely with IT instead of regarding it as a wider attempt to renew Bureau's management.

Finally, similarly as in Center, there were some indicators of *a knowledge boundary*, as the program was supposed to affect virtually every employee in Bureau but not everyone was aware of the program and its status. At the time of the interviews, during the early implementation, some people in Bureau expressed their concerns related to the program's distance from the top management and from the eventual end-users of its results. The following quote describes this situation.

> Q13 (Bureau, project participant): "*In general, one might say that there has been too large a distance between the top management and [the program's key actors]. The top managers' view of the end state and the direction is not transmitted to those implementing the program.*"

To sum up the findings, in Bureau the overall boundary between the program and the parent organization was somewhat less apparent than in Center, but still quite visible. Apparently, the boundary had become

stronger during the course of the program. It seemed that after the program had been divided into projects, the program had become more distant from the rest of the organization. The projects were considerably autonomous and there was little program-wide coordination that would link the program to the line organization's management structure.

**Case Chain** seemed to differ from the other two cases in some aspects related to the program boundaries. Firstly, concerning *the task boundary*, the program management approach did not cause much confusion. In Chain, temporary organizing was familiar to the personnel: there was a long tradition of internal projects, and there had been some attempts of smaller programs, even though these programs were described as somewhat unsuccessful. Overall, program work was viewed as similar to project work and the program as a way of organizing internal development activities was fairly well understood and accepted. Still, a few people compared the program to simpler and clearer projects and complained about the program's lack of clear targets and a vision of the end state:

> Q14 (Chain, sub-program manager): "*Somehow it still bothers me that I cannot see the overall picture … We do not know the end result. And this in my opinion makes the program so challenging*."

In Chain, *the authority boundary* between the program and the parent organization seemed weak. The program structure was designed in a way that linked the program closely to the line organization's decision making processes and forums. Many of the central managers of Domain's (the main business division involved in the program) operations became heavily involved in the program based on their position in the line organization and their management board role. They were appointed as the managers of the program's development areas, and they together formed the program's steering group. This provided a clear connection between the program and Chain's permanent activities. The following quote from a steering group member describes this connection:

> Q15 (Chain, steering group member): "*In my own [development area], I also genuinely have the business responsibility for this entity, so one could say that I have a deeper interest to take care of all these entities and to make sure that each reach their results*."

Further related to the authority boundary, Chain's program coordinator did not originally possess much formal or informal authority, but he gradually gained more authority in the program as he demonstrated managerial capabilities and his knowledge on the program's topic area accumulated. The gained authority was visualized in the change of his title from program coordinator to program manager. Also, the original program owner was

replaced by a more active and powerful person. Together these changes in the positions of the program's key managers were reflected in the program's overall authority, and the program's overall status seemed to have increased.

Similarly as in the other two cases, there were no significant *physical and spatial boundaries* in Chain surrounding the program, although some office spaces (such as a special meeting room) were dedicated to program activities. Related to physical and spatial boundaries, many mentioned their worries related to the fact that the early program activities took place mostly within the headquarters, whereas the desired changes were to affect the whole organization.

In Chain, very few indicators of *temporal boundaries* could be found. Work time was clearly allocated to the program activities, and the program work was typically prioritized over other tasks. Consequently, even though most people worked part time in the program and a significant work load related to the program was often mentioned, very few complained about the lack of time to devote to the program work.

Similarly as in Bureau, the interviewees in Chain did not express many indicators of *social or identity boundaries* directly concerning themselves, but several people stated their worries related to the perceived distance between the program and the personnel in Chain's local units that would be the eventual recipients of the changes. Correspondingly, indicators of a *knowledge boundary* were identified as several interviewees expressed their worries related to the program's distance from some particular organizational units and especially the scarce participation of the local unit personnel in the early program activities. The following quote provides an example of these accounts.

> Q16 (Chain, support team manager and steering group member): "*In my [sub-unit], I'm sure that my colleagues there would say that they don't know anything about this program. … Despite the amount of communication and the comprehensive intranet site, it may still be that this remains distant for some reason.*"

To conclude the findings, case Chain demonstrated a fairly weak boundary between the change program and the parent organization. Even though the overall boundary was relatively weak, many boundary indicators were still recognized. The visibility of the boundary seemed to differ in terms of the different groups in the parent organization. The program was closely connected to the top management of Domain (the company's largest business area, where most of the program activities took place) and also fairly closely linked with many groups of experts located in the headquarters. However, the program seemed more distant from the

personnel of the local units, who represented central targets of the changes promoted by the program.

### 4.2.3 Comparison of the findings across the cases

As discussed in the previous section, all three cases demonstrated numerous indicators of a boundary between the change program and the parent organization. Although at least some indicators of all six boundary types could be found in all three case programs, the overall boundary strength seemed to differ across the cases. To summarize the results, Table 13 presents the perceived strength of the different boundary types in each case, as well an overview of the overall boundary strength. The perceived strength of each boundary type has been judged based on the qualitative analysis of the interview accounts.

Table 13 Summary: perceived program-parent organization boundary strength across the three cases

| Boundary type | Boundary strength in Center | Boundary strength in Bureau | Boundary strength in Chain |
|---|---|---|---|
| Task | Weak in terms of task; Strong in terms of process | Medium strong in terms of task; strong in terms of process | Medium strong in terms of task; medium strong in terms of process |
| Authority | Strong | Medium strong | Weak |
| Physical or spatial | Medium strong | Medium strong | Medium strong |
| Temporal | Strong | Medium strong | Weak |
| Social and identity | Strong | Medium strong | Medium strong |
| Knowledge | Strong | Medium strong | Medium strong |
| **Overall boundary strength** | Strong | Medium strong | Weak to medium strong |
| **Differences among the program's intra-organizational stakeholder groups** | Strong boundary in terms of top management and medium to strong boundary to other experts | Medium strong boundary to top management and weak to strong boundary to experts in local units | Weak boundary to top management, medium strong boundary to other experts, and strong boundary to shop floor level employees in local units |

As Table 13 indicates, in case Center the overall boundary between the change program and its parent organization seemed strong (or "thick"), whereas in case Chain the boundary was from weak (or "thin") to medium strong. Based on the analysis, case Bureau demonstrated a medium-strong boundary. As discussed in the previous section, the perceived boundary strength seemed to differ between the stakeholder groups within the parent organization. The main observations regarding the differences across the intra-organizational stakeholder groups are also addressed in Table 13.

The analysis further suggests that the different boundary types may be connected. For example, when peripheral program participants did not identify with the change program, indicating the existence of an identity boundary, they did not prioritize program-related work, thus reinforcing the temporal boundary. The fact that the perceived strength of each boundary type within each case seems to be quite well in line supports this observation. However, a more detailed analysis of the linkages between different boundary types is beyond the scope of this study.

As discussed briefly in the previous section, the findings also indicated that the boundaries were not static but they developed and evolved as the program initiation and planning proceeded. Nonetheless, the research setting does not allow for a systematic analysis of the boundary development over time, and a further investigation of the development of the case programs' boundaries will not be carried out within the scope of this study. Next, attention is focused on the boundary activities that concern the program-parent organization boundary.

## 4.3 Boundary activities at the program-parent organization boundary

During the analysis, boundary activities were identified and a categorization of boundary activities into different types was formed. The process of identifying and analyzing the boundary activities is described in detail in the methodology chapter (section 3.5).

### 4.3.1 Different types of boundary activities at the program-parent organization boundary

The analysis revealed altogether 606 quotations in the interview data that were interpreted to illustrate boundary activity. These activities were analyzed to represent ten different types of boundary activity. These ten types of boundary activities revealed by the analysis may be further categorized into four main categories according to their direction in relation to the program-parent organization boundary. The different types of boundary activities included in each category are illustrated in Figure 12. Next, each of the ten boundary activity types is characterized and illustrative quotes from the interviews are provided to describe the activities. After that, case-specific distributions of boundary activities are presented.

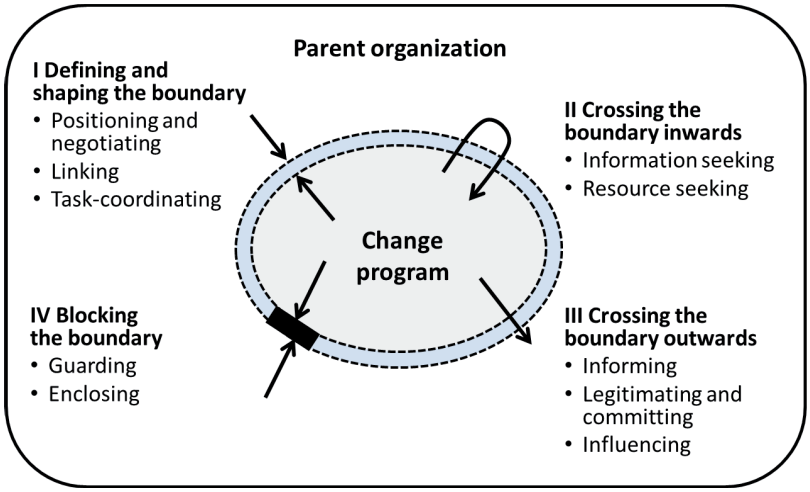


Figure 12 Different types of boundary activities categorized based on their directions

The first three types of identified boundary activities are related to defining and shaping the boundary (Category I in Figure 12). These activities determine where the boundary lies and how permeable it is. Firstly, *positioning and negotiating activities* refer to the discussions and negotiations between the program organization and those representing the parent organization, concerning the program's position. These activities are about defining the role, scope, and authority of the program with regard to the parent organization. Some activities in this category are clearly about positioning and some clearly about negotiating, but since many activities simultaneously represent both types and cannot be easily placed in either of the categories, positioning and negotiating activities are viewed as one common type of boundary activity. The examples below illustrate positioning and negotiating activities:

> Q17 (Center, sub-program manager): "*I'm practically the only participant from our unit in this program, and I keep in constant contact with my superior… We discuss this and if [our subsidiary's] views are required, then he will be the one defining them*."

> Q18 (Bureau, unit manager actively involved in the program): "*I have tried to gather as good and as wide a representation as possible in these steering groups … Although I was already given the mandate to implement this during the early decision making, if we want this to work in practice also in the future, we need to gain acceptance from all the parties involved. So in these steering groups we seek common views*."

*Linking activities* aim to establish connections between the program and its parent organization. They define how the change program is connected to

the parent organization and how the program actors are supposed to collaborate with those representing the line operations and other projects. Typical examples include establishing reporting procedures and communication channels, and linking the program to the existing decision making bodies and instances. The examples below illustrate these activities:

> Q19 (Chain, sub-program manager): *"The same managers were responsible for the development activities and for running the operations, so we naturally had a certain amount of contact with "the real life", with the people who have spent time thinking about these issues ... This discussion was constantly active in the background.*"

> Q20 (Center, program manager): "*We have this R&D portfolio and we have categorized its projects under the sub-program titles, we have held meetings to discuss these connections."*

Also representing boundary defining and shaping, *task coordinating activities* relate to the coordination between the program work and other work conducted within the parent organization, such as other projects or programs, and ongoing line operations. In practice, task coordination includes trading information, aligning plans and schedules, and solving problems across the program's boundary. Task coordinating activities are closely related to linking activities and sometimes difficult to distinguish from them, but while linking activities are about creating linkages and ensuring connections, task coordinating activities are about utilizing those connections and coordinating the actual daily work. In this way task coordinating activities both illustrate and contribute to the permeability of the boundary. Examples of such activities are given below:

> Q21 (Chain, sub-program manager): *"These [permanent] portfolio steering groups focus on the technology and IT perspective, they check the rationality of [the project] and also ensure that it fits to the entity of other ongoing projects. They also coordinate IT resources."*

> Q22 (Bureau, unit manager actively involved in guiding program implementation): *"We have our unit's management group meeting once every two weeks, and [the representatives of two central projects of the program] also participate in these meetings. They tell others about their projects' situation and needs, and we have discussions on where to find the required resources."*

The next two types of activities are about seeking input from the parent organization to the program work, and they represent the inward directed boundary activities (Category II in Figure 12). Firstly, *information seeking activities* aim at gathering information from the parent organization to advance the program work. Information is sought by utilizing different kinds of formal and informal methods, and it is used as input in program

planning. Information seeking activities include, for instance, organizing workshops and meetings with representatives of the parent organization, and requesting information through questionnaire surveys or by personal contact. The next two quotes illustrate these activities:

> Q23 (Bureau, project participant): *"There were different kinds of instructions and forms for data gathering that we filled out [in different units] and then we gathered up to analyze them."*

> Q24 (Chain, sub-program manager): *"The managers and superiors of local units have been involved in the planning phase of these projects… We need their local expertise, so even though they are not official members of the project groups, we have different kinds of workshops with them."*

*Resource seeking activities* are about looking for personnel resources for the program work. They may aim at finding new participants to the program, for example, by selecting new project managers, or they may refer to utilizing the line organization's resources in the program work in other ways. For instance, experts from the parent organization's support functions, such as Human Resources or Communications, may be invited to support the program work upon need. The following quotes illustrate resource seeking activities:

> Q25 (Chain, communications expert): *"We realized that this will require a lot of resources from the Communications department. We concluded that a full-time PR specialist is required and I was able to convince one person to take over this task."*

> Q26 (Bureau, program manager): "*We have utilized the secretary services of the line organization, as well as other support services*."

The next set of boundary activities is directed outwards from the program (Category III in Figure 12). *Informing activities* are about informing others in the parent organization about the program's existence, the rationale behind it, the goals and practices of program work, and the early results and effects of the program. This communication may be formal or informal and it can be directed at any group or individual within the parent organization. Examples of informing activities are given below:

> Q27 (Center, program manager): *"We have had these discussions with the CEO and the vice president, but we don't have any official, regular reporting systems.*"

> Q28 (Chain, sub-program manager): *"In the beginning, we informed people about the existence and participants of this [project], we had discussions, we prepared some communication material, and we also held a briefing session.*"

*Legitimating and committing activities* are about making the program legitimate in the eyes of others and getting people in the parent organization to commit to the program and support the program work. These activities may be about actively lobbying for support for the program and "selling" ideas and plans to others, or they may refer to more subtle activities, such as convincing and persuasive communication. Similarly as in the case of positioning and negotiating activities, some activities in this category are mainly about legitimating and some about committing, but as many activities seem to represent both, legitimating and committing activities are viewed as one common type. Examples of the activities are given below:

> Q29 (Bureau, program manager): "*[The original program owner] took care of the external relations, meaning that he sold this program to [Bureau's] top management and acquired the mandate to do this… and he also built awareness of this program*."

> Q30 (Chain, program owner): "*During the past year, I have probably spent 60–70% of my work time with this program … we made this one-time effort to spread this model to the field and to launch it by demonstrating top management commitment by going through the local units*."

As the third and last type of outward directed boundary activities, *influencing activities* are about changing the parent organization. What makes these activities distinct from e.g. legitimating and committing activities is that the target of influencing is not within the program's official scope, but it is something else within the parent organization. For example, early experiences from the program work may have effects on the organizational work practices or on other projects within the organization. The next quotes provide examples of influencing activities:

> Q31 (Center, unit manager actively involved in the program): "*Unrelated to this program, since I have responsibility of [a certain area], I have started to gather ideas on how to launch a good program, how to organize a program… So I have already started to plan a future program, but I cannot launch that yet since we need to focus on this one."*

> Q32 (Bureau, support team manager): "*This [support project] has also supported operations management and its development in the whole [Bureau]… It has contributed to the development of the IT support of these processes and the processes themselves*."

The last category of boundary activities is about blocking the boundary (Category IV in Figure 12), and this category includes two types of activities. *Guarding activities* are about blocking the inwards flows to the program and in this way protecting the program from external influences. In

practice, guarding activities may be about not including some organizational units or some people in the program, or refusing to utilize some of the parent organization's standard procedures in the program work. They may also be about purposefully scoping some issues out of the program. Examples are given below:

> Q33 (Center, coordination group member): "*A representative of our unit has not been invited to these meetings, even though this person is probably one of the leading experts [in this area] in Finland.*"

> Q34 (Bureau, project participant): "*There is this [project audit procedure] that should in principle be applied to all IT programs, projects and systems … But this is like the shoemaker's son going barefoot: the projects in [the program] have not followed [the policy].*"

Correspondingly, *enclosing activities* are about blocking the outwards flows from the program. These activities may include, for instance, keeping the plans within the core program team and restricting communications about sensitive issues to some groups within the parent organization. The following examples illustrate these activities:

> Q35 (Bureau, project manager): "*From the beginning we realized that if we do [this project] with a low profile, we will get fewer comments from others. Thus we started to do this very independently, keeping a low profile, and we don't really report to anyone either. … It provides us with freedom and enables fast operation.*"

> Q36 (Chain, development area director and original program owner): "*I think we have [communicated the plans] quite openly, except that naturally we have not told the specific figures of how many people will be affected and how much we have to decrease personnel.*"

Next, the three cases are compared in terms of the boundary activities.

### 4.3.2 Comparison of boundary activities across the cases

In this section, case-specific counts of boundary activities are presented and the cases are compared in terms of boundary activity. Altogether 606 quotations referring to boundary activities were identified in the three cases. Each of these quotations represented instances of one or two boundary activity types presented in the previous section. As described in the methodology chapter (section 3.5), the ten different types of boundary activities were in practice closely related. Many activities described by the informants were not related to just one type of boundary activity, and thus some quotes describing boundary activities were connected with two boundary activity types. Since all 606 quotes illustrating boundary activities

could be connected with one or two boundary activity types, the analysis resulted in 858 illustrations of the different boundary activity types.

Within the 606 quotes illustrating boundary activities identified in the interview data, there were many descriptions of the same actual activity. Thus, case-specific counts of different boundary activities were also conducted.

Table 14 presents the case-specific counts and the total counts of the identified boundary activities. For a more in-depth view of boundary activities in each case, Appendix 4 includes case-specific tables where each type of boundary activity is characterized and illustrative quotes from the interviews are provided.

Table 14 Comparison of boundary activities across the cases

| Boundary activity | Case Center | Case Bureau | Case Chain | Total (if applicable) |
|---|---|---|---|---|
| Quotations referring to boundary activities | 103 | 137 | 366 | 606 |
| Average number of quotations referring to boundary activities per interview | 4.1 | 12.5 | 16.6 | |
| Instances of boundary activity types | 139 | 187 | 531 | 857 |
| *Distribution of boundary activity categories (count and percentage):* | | | | |
| Defining and shaping | 43 (31%) | 51 (27%) | 161 (30%) | 255 (30%) |
| Crossing the boundary inwards | 32 (23%) | 46 (25%) | 115 (22%) | 193 (23%) |
| Crossing the boundary outwards | 58 (42%) | 80 (43%) | 211 (40%) | 349 (41%) |
| Blocking the boundary | 6 (4%) | 10 (5%) | 44 (8%) | 60 (7%) |
| *Distribution of boundary activity types (count and percentage):* | | | | |
| Positioning and negotiating | 25 (18%) | 10 (5%) | 55 (10%) | 90 (11%) |
| Linking | 11 (8%) | 30 (16%) | 95 (18%) | 136 (16%) |
| Task coordinating | 7 (5%) | 11 (6%) | 11 (2%) | 29 (3%) |
| Information seeking | 27 (19%) | 40 (21%) | 83 (16%) | 150 (18%) |
| Resource seeking | 5 (4%) | 6 (3%) | 32 (6%) | 43 (5%) |
| Informing | 50 (36%) | 39 (21%) | 151 (28%) | 240 (28%) |
| Legitimating and committing | 6 (4%) | 34 (18%) | 53 (10%) | 93 (11%) |
| Influencing | 2 (1%) | 7 (4%) | 7 (1%) | 16 (2%) |
| Guarding | 6 (4%) | 7 (4%) | 10 (2%) | 23 (3%) |
| Enclosing | 0 (0%) | 3 (2%) | 34 (6%) | 37 (4%) |
| | | | | |
| Average number of associated boundary activity types / quotation of boundary activity | 1.3 | 1.4 | 1.5 | |
| Distinct boundary activities | 32 | 66 | 114 | |
| Summary: overall relative level of boundary activity | Low | Moderate | High | |

Table 14 shows how case Center clearly indicates the smallest amount of boundary activities. While the data set in case Center was the largest (25 interviews), the number of boundary activities was the smallest of the three cases. Case Center demonstrated only 103 of the 606 quotes referring to boundary activities, averaging only as 4.1 quotes of boundary activities mentioned per interview. The other two cases, Bureau and Chain, indicated a significantly higher amount of boundary activity. In Bureau, 137 quotations referring to boundary activities were identified in 11 interviews, with 12.5 boundary activities mentioned on average in an interview. Case Chain manifested the largest amount of boundary activities, altogether 366 quotes referring to boundary activities. The amount of boundary activity in Chain was also the largest in proportion to the number of interviews, 16.6 quotes per interview.

As described, each of the quotes referring to boundary activities was connected with one or two of the boundary activity types. In total, the identified 606 quotes represented 858 instances of boundary activity types. Table 14 includes case-specific counts of these instances of boundary activity types. The average number of associated boundary activity types per one quotation of boundary activity was also calculated for each case. The results of this calculation indicated a subtle trend, where case Center again had the lowest result and case Chain the highest result. In Center, each quote was connected with 1.3 boundary activity types, while in Bureau the corresponding figure was 1.4, and in Chain 1.5. This indicates that in Chain, the boundary activities more often had several intentions behind them. For example, informing activities in Chain were frequently also about enclosing: careful measures were taken to pave the way for the changes by providing information about them, simultaneously ensuring that confidential plans about the personnel effects were not revealed too early.

Whereas the overall amount of boundary activity seemed to differ significantly across the cases, activities representing all four categories of boundary activities were found in all three cases. The distribution of boundary activities in terms of the categories was very similar across the three cases. Table 14 shows a clear trend in the distribution, where in all three cases around 30% of the boundary activities is about defining and shaping the boundary (ranging from 27 to 31%), a bit more than 20% is about crossing the boundary inwards (22–25%), around 40% is about crossing the boundary outwards (40–43%), and less than 10% is about blocking the boundary from inward and outward flows (4–8%).

While there seems to be a visible trend in the categorization of the boundary activities based on their direction, many differences were identified in the distribution of the boundary activities within the four

categories, based on the activity type. Still, boundary activities representing all ten types could be found in all three cases, with one exception: in case Center, no intentional enclosing activities could be found. Next, the most visible case-specific differences in the occurrences of boundary activity types are described.

In comparison to the other two cases, Center demonstrated a larger proportion of instances of positioning and negotiating activities (18% of all described activities in case Center, compared to 10% in Chain and only 5% in Bureau). A significant part of the early program activity in Center was formed of negotiations between the program's key actors and the managers of the line organization. Another type of boundary activity that was relatively more common in Center was informing (36% in Center, compared to 28% in Chain and 21% in Bureau). As an example, Center's program manager spent a lot of time attending various meetings, seminars, and events where he presented the main ideas behind the program.

Compared to the other two cases, case Bureau demonstrated a larger proportion of instances of legitimating and committing activities (18% in Bureau, while only 10% in Chain and just 4% in Center). Illustrating this finding, in Bureau the program activities were started with a current state analysis and a series of planning workshops that, according to the program's key managers, aimed at legitimating the changes. Case chain, for its part, demonstrated a larger proportion of instances of enclosing activities (6% in Chain, while only 2% in Bureau and none in Center). These enclosing activities consisted of active efforts to keep the confidential program plans within a small group of people.

A familiar trend across the three cases could also be observed in the number of distinct boundary activities (see Table 14). Case Chain demonstrated more than three times as many distinct boundary activities as Center and almost twice as many as in Bureau, indicating that in Chain a significantly larger spectrum of different activities were employed to manage the program's boundaries. Similar boundary activities were found across the cases, and in some instances a similar activity was reported in all three cases. As an example, informing activities in all case organizations included reporting to the management group about the program as well as organizing briefing sessions about the forthcoming changes to the personnel. Resource seeking in all three cases included a search for suitable project managers, and positioning activities included negotiation meetings between the key program actors and the top managers of line operations. The complete lists of distinct boundary activities in each case are not presented due to confidentiality reasons.

During the analysis, the targets of the boundary activities were also examined. A systematic analysis of the targets could not be conducted since they often were not mentioned by the interviewees, but a general view from each case was drawn. In case Center, boundary activities were largely focused towards the peripheral program participants and towards Center's top managers, and very few activities involved the main targets of the change program, i.e. the member organizations of Center. In the other two cases, boundary activities were targeted at all organizational levels and at various stakeholder groups within the organizations. In Bureau and in Chain, a relatively larger share of boundary activities was targeted towards the change recipients, in both cases referring mainly to the personnel in regional units. However, in all three cases several interviewees expressed fears that the change recipients had not been included actively enough.

Yet another central observation that relates especially to case Center was that instead of describing actual boundary activities, Center's interviewees often described what they thought that should already have been done or what should be done in the future. Consequently, an additional code category was created during the coding process, describing the desired or future actions. These hypothetical activities are naturally not included in the counts of boundary activities presented in Table 14, but they rather illustrate the lack of actual boundary activity in Center. As an example, several peripheral program participants stated that they knew very little about the program's situation, and they expressed their wishes for more communication. Many also complained that the program remained distant from the daily work of Center's experts and stated that this work could be linked better to the program. The quote below provides an example of these desired activities:

> Q37 (Steering group member of Center's program): "*[The program] should probably be made more visible and people within our organization should be informed about it. … The communication should be ensured and the program should be linked to the activities of our experts*."

To conclude the findings of the cross-case analysis, case Chain demonstrates a significantly high volume of boundary activity and clearly the most active boundary management across the three cases. When compared to the other two cases, case Center shows lower boundary activity, indicating relatively inactive boundary management. While case Bureau falls between these two, it still indicates fairly active boundary management, with a considerably high volume of boundary activity.

## 4.4 Readiness for change program implementation

During the analysis, indicators of program success were identified and analyzed in terms of indicators of readiness for change program implementation. In this section these findings are introduced.

### 4.4.1 Indicators of readiness for change program implementation

According to the literature analysis on the success factors of change program initiation (see Table 6), readiness for change program implementation requires that there is a clear intent for the change and that there are sufficient resources for implementing the changes. While the initial framework for analyzing readiness for change program implementation was created based on the literature analysis, the concept was further specified during the empirical analysis, based on the findings in the three cases. The refined dimensions of readiness for change program implementation are listed in Table 15.

Table 15 Dimensions of readiness for change program implementation

| Indicators of readiness for change | Description |
|---|---|
| **Intent** | There is a clear and shared intent, based on a shared understanding of what needs to be changed and why, and there are sufficient plans for starting to realize the intended changes. |
| Visible need and pressure for change and sustained momentum | |
| Clear and shared vision, a sense of direction, and commonly accepted goals | |
| Purposeful plan for change content, change process, and program structure | |
| **Resources** | There are sufficient resources for realizing the intent in terms of dedicated program managers and participants and external support. |
| Skillful and charismatic leaders, including both program owner and program manager | |
| Dedicated program team(s) with explicitly committed, motivated members | |
| Visible senior management support and involvement | |
| Receptive environment in terms of prepared recipients of change | |
| **Autonomy** | The program has a legitimate position in the organization and there is sufficient authority to use the resources and realize the intended changes. |
| Legitimate position in the organization | |
| Authority and autonomy to realize change | |

As the most visible development, the original concept of readiness for change was extended by adding a third main dimension of readiness, namely *the autonomy of the program*. A change program is viewed to have sufficient autonomy required for program implementation when the program has a legitimate position in the organization, and the program actors have authority to use the resources and realize the planned changes.

While the addition of the third main dimension was the most visible change to the original framework, the contents of other dimensions were also refined based on the findings. Within the first main dimension, *the intent for the change*, some additions were made. In addition to the visible need and pressure for the change, the analysis showed how the momentum needs to be actively sustained. As the initiation and planning stages alone may take several years, the early enthusiasm must be maintained and even actively fed by the program managers. Similarly, in addition to a vision and a sense of direction, the program should also have an explicitly stated goal that is commonly accepted. As programs differ from smaller and more clearly defined projects, the goals may still remain at a quite high level and they may not be fully translated into detailed objectives at the program level. Thirdly, in addition to the purposeful plan for the change content and the change process, the program's organization and governance structure must be planned, established, and stabilized.

Related to the second dimension, *the resources for the program*, the findings suggest that the skillful and charismatic leaders of change should include a program owner, representing top management and serving as the ambassador of the program within the wider organization, and a dedicated program manager who has sufficient authority in the program's internal issues. Also, a notion was added to the dimension regarding the dedicated program team that the resources should be explicitly allocated to the program (or to multiple hierarchical teams, as it often seems to be in programs), and the participants' motivation should be actively maintained. While the dimension of visible senior management support and involvement remained as such, the last dimension related to the resources was developed to more directly address the recipients of change. According to the analysis, it seems that a central part of the supportive and receptive environment is that the recipients of change are informed of the forthcoming changes, at least on a general level, and prepared for them.

### 4.4.2 Readiness for change program implementation in the three cases

Next, readiness for change program implementation in each three case program is analyzed as it appeared at the end of the initiation phase. For each case, a more detailed account of all dimensions of readiness can be found in Appendix 5, including exemplary quotes from the interviews. In cases Center and Chain, which included two rounds of interviews, the quotes in Appendix 5 are with just a few exceptions from the second round of interviews, when the change programs were supposed to already be in early implementation (but as stated in the case description in section 4.1.1, Center's program was still in the planning phase).

In **case Center**, the overall readiness for change program implementation appeared to be very poor. Firstly, Center's program lacked a shared *intent*. Although all seemed to agree that the program's topic was important and there was a need for change, the program's role, goals, scope and content remained unclear. Secondly, the program goals remained at a too high level and they could not provide the desired guidance for preparing more detailed plans and defining the scope of the program. The initial goals were defined as very ambitious and extremely relevant, but the key program actors were struggling to translate them into more tangible and measurable objectives. Also, while the basic structure for the program organization had been sketched, consisting of three sub-programs with responsible managers, there were visible difficulties in further defining the program management model and the activities of each sub-program. One expert who had been involved in one of the three sub-programs described the situation:

> Q38 (Center, peripheral program participant): "*It keeps bothering me that we don't seem to really know where we are with this program. The work approach has been somewhat loose, concerning both [this sub-program] and the coordination of this whole entity. It sometimes feels that we don't keep our feet on the ground.*"

Center's program also lacked *resources*, as there were clearly too few committed people. Illustrating this notion, the interviewees were nominated by the key program actors as central program participants, but based on their own accounts, most of them saw themselves as outsiders or as peripheral participants and did not truly identify with the program. Many of the interviewees of the second round of interviews were revealed to be unaware of the program's status, and they did not seem motivated to contribute to the program. With the exception of the program manager and program coordinator, work time was not clearly allocated to the program activities. The key program actors claimed that the resources for the program work were too scarce and in no proportion to the ambitious goals and initial schedules. Practically all of the more peripheral program participants stated that they were too busy with other duties to get more actively involved in the program. Many blamed the lack of dedicated resources for the slow progress of the program. An example of these accounts is given below.

> Q39: (Center, Sub-program manager): "*Doing this in addition to other duties, many other tasks, is a problem in our organization … That's why these initiation activities have taken so long. Not until our latest meeting did we agree on finalizing the sub-program plan. Obviously these things could have been done much faster.*"

Center's program was also struggling with the lack of *autonomy*. The program did not seem to have a strong enough position in the organizational hierarchy. In the eyes of the interviewees, the program's topic was legitimate, since everyone agreed on the importance of the service system renewal. Still, the program as a vehicle for change was not widely accepted, and several interviewees demonstrated skepticism towards program management in general and this program in particular. This skepticism was said to be even more common among those who were not involved in the program activities, and the overall management culture of Center was described as unsuitable and immature for program management. The next quote demonstrates how these doubts were expressed:

> Q40 (Center, peripheral program participant): *"There is a lot of room for development in the management of this organization, related to the practical management, managing people, HR management, planning and so on... That's why I wonder whether there really is place for this program management, since the whole management culture requires development. And if this never really opens up for discussion, then there really will never genuinely be room for it, and we won't gain the potential added value from it.*"

Additionally, the program team in Center felt that they lacked authority to actually change the prevailing order. Interestingly, the interviewed top managers of Center had a different view: they thought that the program was given the authority to start action, and they were waiting for the program to demonstrate progress and early results. Both parties accused each other for the situation: the program core team was frustrated due to the lack of top management commitment, direction and resources, and Center's top managers were waiting for the program to demonstrate concrete results so that they could truly become committed to the program. At the time of the second round of interviews the program's situation seemed very difficult: the program core team was seemingly discouraged by the lack of support, while the top management did not seem to have much faith in the program. The situation is illustrated by the following quotes. Representing the key actors, a program core team member stated:

> Q41 (Center, program core team member): "*Occasionally I've also felt a bit discouraged, because the management group has been sending a message that they are not pleased with this. So I wonder what we should do then, since we don't get any further instructions, but just the message that "we want to see results, we want to see results.*"

The top management had a different view of the situation, and they blamed the program core team for being inactive:

Q42 (Center, top manager): *"The current managers of the program apparently feel that they would have needed more guidance, more work and guidelines from the management group. But as a management group member myself I can say that all other programs, good programs, do that work themselves: they create plans and then get them accepted. It cannot be so that you just sit still for 1.5 years, wondering why the top management does not provide you with the instructions…*"

During the second round of interviews, the program should already have been in implementation, but it still could not demonstrate viability. The perceived lack of readiness of Center's program is in line with the decision to terminate the program prematurely, which was made a few months after the second round of interviews. Although there had been some advances and some small-scale effects stemming from the program, Center's change program was concluded to be more or less a failure.

In terms of readiness for change program implementation, **case Bureau** showed a very different story. Firstly, the program seemed to have acquired a shared *intent*, at least for the most part. Early program initiation activities in Bureau had aimed at providing rationale for the change through a systematic current state analysis. This phase was largely considered successful, resulting in a shared understanding of the need for change: all seemed to agree that Bureau's current IT management was outdated and required renewal. The participative approach of the second phase of program planning, implemented as a series of workshops, had also resulted in a high-level vision for the program, which was shared at least by those involved in planning. People seemed to have a common view of the purpose and main goals of the program. The general planning phase resulted in an overall plan for the program. One of the interviewees described the situation in the following way:

Q43 (Bureau, manager of a central unit involved in the program): "*There are still some issues, even major ones, to solve, but the program's main principles, goals and plans have been commonly accepted.*"

After the centralized planning phase, more detailed planning was left to the project teams. Key actors of different projects had varying views about whether the level of detail during the general planning had been sufficient and whether the instructions and guidelines given to the project teams had been specific enough. As a result, some projects were unable to come up with detailed plans in the original schedule. The following quote describes the situation:

Q44 (Bureau, manager of a central unit involved in the program): "*It would have been better if the projects had been able to concretize their plans in more detail. It would have made the follow-up easier and also decreased the number of*

*change requests and other surprises. If the plans are too vague, then there is too much leeway; then the alarm of things not going according to the plan goes off too late and you cannot anticipate it. On the other hand, in this kind of a large change you may never define everything in detail in the beginning*."

Despite the delays in some projects, at the end of the initiation stage the program as a whole seemed to demonstrate the required intent to proceed to change implementation.

In terms of *resources*, Bureau's program had initially had two skilled and committed managers. The original program owner and program manager were both described as charismatic leaders and they were largely recognized as the driving forces of program initiation. The program manager even got a nickname according to the program, "Mr. [abbreviation of the program title]". One key project participant described the roles of the program owner and program manager during the program initiation in the following manner:

Q45 (Bureau, project participant): "*I believe that [the original program owner] has been in a central role, as has [the original program manager]. There has to be someone with a vision … [ A program] needs these people who see the importance of it, who have an idea of what it will be and take it forward.*"

Through the active selling efforts of the program's original key managers, Bureau's top management had become committed to the program's goals. This top management support was largely recognized and well appreciated by the key program actors. The early efforts also contributed to making the organizational environment more receptive to change, as so many people across Bureau were involved in the planning workshops.

After the general planning phase, both the program owner and the program manager had left the program for other duties, and although new managers were appointed to take over the program, at the end of the initiation stage the program seemed to lack a strong leader. In terms of other resources, program work was conducted by fairly autonomous project teams. While most of the program participants seemed motivated and committed, some complained about the scarcity of resources. There was a lack of various kinds of technical experts and also a lack of competent program and project managers who would have a requisite understanding of the technology and also be competent in managing large projects and leading change. The following quote illustrates the situation:

Q46 (Bureau, unit manager involved in the program): "*Lately, resources have been the biggest issue in project steering group meetings. The reason is that the same people are involved in so many projects and they also have their normal*

*daily work to take care of... Since we cannot hire new people, the lack of resources is a real issue.*"

At the end of the initiation stage, Bureau's program seemed to have the required *autonomy*. The original managers had utilized their formal position and charisma to gain ground for the program during the early stage, and the change program was clearly viewed legitimate and had the authority to start implementing the plans. As the following quote shows, top management support was also viewed to contribute to the program's legitimacy:

Q47 (Bureau, manager of a central unit involved in the program): "*Top management has viewed this to be important and they have provided support to our decisions, even to the painful ones that we have had to make. Of course this helps us forward.*"

After the original program manager and program owner had left the program, the responsibility had been given to project teams who received high autonomy. The teams seemed to differ in their reactions to this position: one project manager appreciated the top management for trusting him by granting full authority and was motivated by the opportunity to design the project according to his preferences. His project quickly proceeded to implementation and was implemented well ahead of the original schedule. The key actors of another project, however, were frustrated with the lack of detailed instructions and guidance, and the initiation of their project had been very slow and unsuccessful. Thus, the managers of some projects seemed to have more autonomy than they felt comfortable with. Also related to this high level of autonomy, representatives of several projects wished for more active program-wide coordination and centralized management.

To conclude, the general readiness for change program implementation in Bureau was at a quite high level, although some problems had been encountered when the responsibility for detailed planning and implementation was given to project teams and some projects were not able to proceed in the desired schedule. There were also some doubts about the attitudes of those change recipients who were not actively involved in the program, and some worried whether the implementation and hand-over to the line organization was well prepared for. Still, most of those involved in Bureau's program believed that the program was on the right track.

The case program in **Chain** also indicated readiness for change program implementation. Firstly, Chain's program seemed to have the required *intent*. There was a general agreement on the need for change, as the program was based on the implementation of mandatory replacement investments. The drastic changes in Chain's business environment were

also commonly acknowledged, paving the way for the radical change program. Since the original goal had been set by the top management by merely defining a figure for the desired cost savings, there had been complaints about the lack of clear goals and a picture of the end state. On the other hand, the following quote from Chain's program coordinator from the first round of interviews describes how the lack of clear goals largely related to the general nature of programs:

> Q48 (Chain, program coordinator (future program manager)): "*It is difficult to communicate to some people that in a program the end state may not be fully clear, but it gets clearer along the way when decisions are made. Especially in the early days people seemed to have a remarkable need for a "big picture" that we are aiming at … And we still don't have that, and we don't need that either; we are moving forward and we still iterate over these goals. … You can still find people who would say that this program is not under control, since we don't have clear goals; that we lack the big picture and thus cannot do anything.*"

By the second round of interviews, Chain's program seemed to have found its direction and most interviewees found the goals to be clear enough. Even though some individuals still thought that the goals and plans should be more tangible, many recognized that the evolving environment and the long program duration entailed that the scope and the plans should not be fixed too early:

> Q49 (Chain, sub-program manager): "*It is always a challenge in these long-term programs and also in this [sub-program] that the environment evolves simultaneously during the implementation. One should be able to define the scope of the implementation to avoid unnecessary drifting, but on the other hand the end result should be such that it actually works in that environment when it is taken in use.*"

The organization structure and the management model of Chain's program also seemed to be working well. Especially the program structure and the decision-making procedure concerning the program's projects were described as purposeful and functional. Although the interviewees agreed that the program had a proper governance model, some still thought that it had taken too long to achieve this state:

> Q50 (Chain, program owner): "*This has been a learning opportunity, testing our ability to implement large changes with a fast pace. And in that sense I cannot grade our performance as excellent since it has taken us too long to get organized, to find out what we are doing and to identify the right roles.*"

Besides the common decision-making procedure, there were very few program-wide coordination or management practices in place, since projects were given a lot of autonomy in how to plan and organize their

work. At the time of the second round of interviews, most projects had finalized planning and were heading towards implementation.

Chain's program also indicated readiness in terms of *resources***.** At the end of the initiation and planning stage, after some reorganizing and personnel changes, the program appeared to have highly committed and skillful managers. The original program owner had been replaced by a more active owner who, as the chairman of the program steering group, had fostered top management commitment by ensuring that central line managers were actively involved in steering the program. The program coordinator had gradually gained deep knowledge of the program's content and had demonstrated considerable managerial capabilities with his active and rigorous management approach. The program coordinator's mandate was confirmed by officially appointing him as the program manager. The newly appointed program manager and other key actors were unanimous that top management was highly committed to the program. The actual program work was conducted by autonomous project teams that in general seemed to have the access to the required resources, and the key persons' work time was formally allocated to project work. Still, representatives of some individual projects reported a lack of expert resources, due to the reason that all of Chain's experts with the desired skills were already involved in the program and additional experts could not be found. The overall resource situation still seemed to be rather good, and the program work was often prioritized over other tasks. As the following quote from the first round of interviews shows, it was clear from the beginning that the program deserved the best resources available:

> Q51 (Chain, development area director and original chairman of the steering group): "*Since this strategy has been so clearly communicated, and there are such tangible threats… no one can remain unaware of the fact that we are doing something bigger here, and we need the best resources for that. And that's what has also happened, without any problems…. In that sense, the launch of this program has succeeded well.*"

Probably the biggest worry related to Chain's program concerned the lack of involvement of change recipients, especially the shop-floor level employees in Chain's local units across the country. While some individual projects had involved local unit personnel in project planning, the program had not been very visible to Chain's personnel outside the headquarters before the program reached the implementation stage.

Finally, Chain's program clearly possessed the required *autonomy* to start implementing the changes. The program had a legitimate status in Chain, and at least no one in Chain's headquarters seemed to question its status. In terms of authority and autonomy to implement the changes, the program

was not autonomous as such, since major program-related decisions were made in the line organization's decision-making forums by Chain's line managers. Still, the program seemed to possess the necessary authority due to its well-working management system that linked the program to the line organization's authority. Chain's program involved authority via the program owner's and steering group members' high-ranking organizational positions. Central managers of Domain (the main business division involved in the program) were responsible for the program's development areas and also members in the program steering group where major decisions related to the program's projects were made. The program coordinator and the program owner guarded the program's decision-making system actively and made sure that it was not bypassed. The program coordinator's authority also increased as he was formally appointed the program manager. The program manager described the program's authority in the following manner:

> Q52 (Chain, program manager): "*The prerequisite for me to accept this position was to have a well-functioning project portfolio management process for making decisions about the projects. That process may not be bypassed; the program simply cannot take any of that. So if the CEO asks some project to do something, we need to all agree that no one will act until we have discussed that in the program steering group, considered the effects and made a formal decision … If the CEO asked to put a project on hold, it would of course be put on hold. But not just by his request, but only after it had been decided in the steering group. … Everyone gets the idea, and I'm very satisfied with how this works.*"

To sum up the situation of Chain's program, the overall readiness for change program implementation was judged as high, and the program was able to proceed to implementation. People were in general pleased with the program's progress, although some thought that the insufficient involvement of the local unit personnel during the early stage might cause unforeseen challenges for implementation. There was in general a strong belief that the program was on the right track and making progress.

### 4.4.3 Comparison of the findings across the cases

As can be seen from the descriptions in the previous section, there were considerable differences across the cases in terms of the readiness for change program implementation. Table 16 summarizes the differences. For each of the three cases, each indicator of readiness for change is assessed to be either fully present ("Yes" in Table 16), somewhat present ("Yes to some extent") or lacking ("No"), depending on the frequency of the occurrences of supporting and controverting interviewee statements and other observations identified in the data. To summarize the findings, an overall

view of readiness for change is also provided for each case. As a conclusion from analyzing the different dimensions of readiness, case Center is judged to demonstrate low readiness, case Bureau moderately high readiness and case Chain a high level of readiness for change program implementation.

Table 16 Comparison of readiness for change program implementation in the three cases

| Indicators of readiness for change program implementation | Case Center | Case Bureau | Case Chain |
|---|---|---|---|
| **Intent** | | | |
| Visible need and pressure for change and sustained momentum | Yes | Yes | Yes |
| Clear and shared vision, sense of direction, and commonly accepted goals | No | Yes | Yes to some extent (some complained about the lack of a big picture) |
| Purposeful plan for change content, change process, and program structure | No | Yes to some extent (some projects lacked concrete plans) | Yes |
| **Resources** | | | |
| Skillful and charismatic leaders, including both program owner and program manager | No (no program owner, and the abilities of the program manager only recognized within the program core team) | Yes to some extent (original program owner and program manager had left the program and the program seemed to lack a strong leader) | Yes |
| Dedicated program team(s) with explicitly committed, motivated members | No | Yes to some extent (some complained about lack of time to devote to program work) | Yes |
| Visible senior management support and involvement | No | Yes | Yes |
| Receptive environment in terms of prepared recipients of change | No | Yes to some extent (local unit personnel was not actively involved) | Yes to some extent (local unit personnel was not actively involved) |
| **Autonomy** | | | |
| Legitimate position in the organization | No | Yes | Yes |
| Authority and autonomy to realize change | Yes to some extent (top management thought that the program had been authorized, but key program actors did not agree) | Yes (some felt that the projects had too much autonomy and there was a lack of program-wide management and coordination) | Yes (authority acquired through the program's connections with the line organization's authority structure) |
| **Overall level of readiness** | **Low** | **Moderately high** | **High** |

To better understand the evolvement of readiness for change program implementation in the three cases, the associations between the boundary activities and different indicators of readiness for change are analyzed in the next section.

## 4.5 The role of boundary activities in creating readiness for change program implementation

Simultaneously as the boundary activities were identified, their role in creating readiness for change program implementation was examined based on the expressed intents of the actors and the stated or expected consequences of the activities. The analysis revealed how the performed boundary activities could often be interpreted as active efforts to increase the level of readiness for change program implementation, and provided indications how the various types of boundary activities contributed to advancing the change programs and preparing the surrounding organization for change. Next, the role of boundary activities in creating readiness for change program implementation is discussed by examining each of the three dimensions of readiness. After that, a summary of the proposed associations is provided and the three cases are compared and contrasted.

### 4.5.1 Identified associations between boundary activities and intent

First of all, the analysis indicated that boundary activities were utilized to create a shared intent for the change programs. Table 17 describes how different types of boundary activities were analyzed to contribute to the three aspects of the change intent. Next, these relationships are described in detail and exemplary quotes from the interviews are provided to illustrate the identified associations.

Table 17 Identified associations between the boundary activities and the intent of the change program

| Boundary activity types | Intent | | |
|---|---|---|---|
| | Visible need and pressure for change and sustained momentum | Clear and shared vision, sense of direction, and commonly accepted goals | Purposeful plan for change content, change process, and program structure |
| **Positioning and negotiating** | | X | X |
| **Linking** | | | |
| **Task coordinating** | | | |
| **Information seeking** | | X | X |
| **Resource seeking** | | | |
| **Informing** | X | | |
| **Legitimating and committing** | X | | |
| **Influencing** | | | |
| **Guarding** | | | X |
| **Enclosing** | | | X |

As Table 17 indicates, informing activities as well as legitimating and committing activities were seen to contribute to *the visible need and pressure for change and sustained momentum*. The data indicates how boundary activities did not create the need and pressure for change, but they were utilized to make a wider audience of people aware of the need and to make them agree with the reasoning behind launching the change program. Firstly, according to the analysis, various kinds of *informing activities* were performed to communicate the need and pressure for change. In all three cases, the need for change had been acknowledged by the key managers even several years before the program launch, but after the change programs were officially initiated, informing others about the need for change became a significant activity. To give an example, the program owner in Chain described these activities in the following way:

> Q53 (Chain, program owner): "*To get people to wake up and realize that there is a need for change, and to point out that something is happening and we need to change in order to survive also in the future, all this has required a lot of discussion … Nowadays we don't need to talk about this that much, we don't need to assure people that something is happening. But we have spent a lot of resources on talking about those changes during the past two years.*"

Similarly as informing activities, the data shows how *legitimating and committing activities* aimed at making people acknowledge and accept the need for change, and also at sustaining the commitment to the change

program. Such legitimating and committing activities were especially visible in Bureau, where the early advocates of the program tried to actively convince both the top managers, i.e. the decision makers, and the employees, i.e. the recipients of change, that a change was necessary and that a program of this kind was the right way to implement it. The program manager in Bureau admitted that the current state analysis that was conducted during the program launch had been very purpose-oriented, as its main motive had been to provide a wake-up call for the top managers and to make them acknowledge the need for change. The program manager in Bureau described his reasoning:

> Q54 (Bureau, program manager): "*The aim of [the current state analysis] was to acquire legitimacy for this change … in my opinion, you cannot implement a radical change without pointing out the defects related to the current situation and clarifying the reasons why the change is needed, why we cannot proceed with just some minor improvements.*"

The three cases demonstrate how such legitimating and committing activities were also performed after the initial selling efforts. Since initiation and planning activities took several years in all three organizations, it was clearly a challenge to maintain the motivation and commitment, both regarding the top managers and the employees. The following quote from case Chain describes this challenge of sustaining momentum:

> Q55 (Chain, development area director and steering group member): "*From the leadership perspective, it has been a real challenge to find a way to motivate people. For the past two years we have elaborated on these themes on paper and we have not been able to start the implementation. It has been a challenge to maintain the good spirit, even towards the top management, regarding that we'll get this done.*"

As a central means to sustain the momentum for change**,** visible quick wins from early implementations were purposefully utilized in both Bureau and Chain to demonstrate the viability of the programs. Communication of these quick wins represents a form of legitimating and committing activity that aims at maintaining the pressure for change. The following quotes illustrate these activities:

> Q56 (Bureau, top manager of a unit actively involved in the program): "*It has been important to [demonstrate quick wins] and also to show those for top management so that their faith in this change is maintained … There was this one [outsourcing effort] that was very successful … we have already gained enormous savings with it.*"

> Q57 (Chain, program owner): "*It has been very important for us to show results, since 1.5 years ago there were many doubts of what we'll gain with this. … It*

*has been vital to show that benefits are already being realized from this [early implementation]; it has contributed to the positive atmosphere surrounding this program.*"

Table 17 indicates how boundary activities also contributed to reaching a clear and shared vision, a common sense of direction and an agreement on the program goals. Firstly, positioning and negotiating activities were performed to build a shared understanding of the program vision and goals. All three cases indicated active discussions between the key program actors and those representing the parent organization to set the program goals and scope. Such positioning and negotiating activities were especially frequent in Center, where the key program actors held several meetings with top managers to define program goals:

Q58 (Center, expert involved in program initiation): "*[Goal setting] was a process where we first decided upon the sub-programs … and after that we discussed the goals, and what should be achieved with the program. … Our top managers and unit managers have been involved in these discussions.*"

The analysis shows how *information seeking activities* were also utilized to build a shared intent for the programs and to define program goals. During program initiation, key program actors conducted interviews and had informal discussions with representatives of the parent organization with an aim to come up with a commonly agreed goal statement for the program. The following quote shows how a sub-program manager in Chain accentuated the importance of involving representatives of the parent organization in the early discussions:

Q59 (Chain, sub-program manager): "*The initiation stage and the related requirements specification are very important; it pays off to put effort to that phase and to have those discussions. That is how you seek the common goal and try to identify issues that should be worked out after the new solution is implemented.*"

Table 17 further shows how many different types of boundary activities seemed to have a role in *creating a purposeful plan for the change content, process and program structure*. Firstly, representing *positioning and negotiating activities*, the analysis indicates how negotiations with the line management contributed to developing the program plans. The following example from Chain illustrates this collaboration:

Q60 (Chain, development area director and original chairman of the steering group): "*[During the planning phase] we organized a workshop or two. We prepared for these workshops with a small project where a couple of experts gathered background information. This data gathering was, to a large extent, led by [a unit in the line organization] … but representatives and experts of other business units also participated in these workshops. … There we identified*

*areas for cost savings. Based on that work, we created the basis for this program in the sense that we identified these central entities.*"

Secondly, various kinds of *information seeking activities* aimed at gathering input for the program plans. In Bureau, as many as 200 people were somehow involved in the planning activities, and while the program core team actually had a good idea about the program's content from the beginning, the plans were fine-tuned based on the feedback from the larger audience. In Chain, the key managers of each sub-program and each project were allowed to decide upon their own ways of how to gather information during the planning stage. These methods included interviews, surveys, discussions, and joint planning workshops. In the following quote, a sub-program manager from Chain describes how it had been fairly easy to acquire the required input for the program plans:

Q61 (Chain, sub-program manager): "*I think that people get interested when something new is being done, they want to have an impact on how it will turn out. This is why we haven't had any problems with getting people involved in planning and getting them to express their views. If you do not come forward at this point, or if you skip this opportunity, then it's no use complaining later on that the needs of your business unit have not been taken into account.*"

Lastly, *guarding* and *enclosing activities* were performed to protect the programs from external disturbances during early planning, thus making the planning work more efficient. The following quote from Chain shows how guarding (by limiting the size of the planning team) and enclosing (by limiting external communication) were used simultaneously to come up with more creative solutions during program planning:

Q62 (Chain, sub-program manager): "*There were initially about 15 people involved in the project work … We held several meetings and listened to people but couldn't get anywhere with it. We were forced to change the organization and decrease the size of the project team. We even stopped communicating some of these issues, and started to prepare this with just 3–4 people. … Because it is typical for that kind of [original] organizing that you are unable to come up with solutions that are creative enough.*"

### 4.5.2 Identified associations between boundary activities and resources

Table 18 shows how the boundary activities were analyzed to be related with securing resources for the change programs. Next, these proposed associations are described and illustrative quotes from the interviews are presented.

Table 18 Identified associations between boundary activities and the resources of the change program

| Boundary activity types | Resources | | | |
|---|---|---|---|---|
| | Skillful and charismatic leaders, incl. both program owner and program manager | Dedicated program team(s) with explicitly committed, motivated members | Visible senior management support and involvement | Receptive environment in terms of prepared recipients of change |
| Positioning and negotiating | | | | |
| Linking | | | | X |
| Task coordinating | | | | |
| Information seeking | | | | |
| Resource seeking | | X | | |
| Informing | | | X | X |
| Legitimating and committing | | | X | X |
| Influencing | | | | |
| Guarding | | | | |
| Enclosing | | | | X |

As one of the most obvious linkages between boundary activities and readiness for change**,** *resource seeking activities* contributed to *securing resources for the programs***.** In the three cases, support resources were sought from the parent organization to help in program administration, which contributed to the commitment and motivation of the key program actors by enabling them to focus their time on the primary work. Resource seeking activities were also performed to find new members for the program core team, and to find competent project managers and other key experts to take part in the program. A common challenge during program initiation in all three cases was to find skilled people to serve as sub-program managers or as project managers. The following quote from case Chain indicates that good project managers may not necessarily be good (sub-)program managers, because program management is seen to require a different set of skills than single project management.

Q63 (Chain, Development area director and steering group member): "*We don't have many people who have the competence, since it's not enough to know this [substance] … A regular project manager who expects to receive an unambiguous goal and clear directions is unable to take over this kind of a program, where we just have a general framework and a high-level vision, and the contents may change – and also have changed. So this is neither clearly*

*defined nor linear. … It has been very important to find those people who can tolerate this uncertainty*."

Table 18 also shows how boundary activities were utilized *to commit and involve senior management* in the change programs. Firstly, various kinds of *informing activities* aimed at keeping top management informed of the program's key events and progress. The following example from case Bureau illustrates these activities:

Q64 (Bureau, middle manager of a central unit involved in the program): "*It has been communicated quite a lot towards the [line management], so the line managers have accepted this and realized its importance. It has also been communicated to the management of [the business division], so they know quite well how this will be done*."

As the previous quote shows, communicating about the programs to top management often aimed at ensuring line management's support for program work. The analysis demonstrated how *legitimating and committing activities* were performed to actively convince top management to get involved in the change programs and to visibly demonstrate their support. Such activities were especially common in Bureau, where the program manager explained that the ultimate aim of the current state analysis conducted at program initiation was to convince top management to support the program. The following quote shows how in Bureau the program owner was in a central role in gaining top management commitment.

Q65 (Bureau, program manager): *"After he was appointed, [the program owner] examined this for a couple of months and then he stated that "This is how we'll do it", and he started to take this forward with full speed. And through active efforts he was able to get every top manager in [Bureau] committed to this, which was very valuable*."

Table 18 shows how there were as many as four types of boundary activities associated with *making the environment more receptive to change by preparing the change recipients* for the forthcoming changes. Firstly, *linking activities* created connections between the programs and various parts of their parent organizations, which contributed to making the recipients aware of the programs' impacts. Such activities were especially common in Chain, where each of the program's projects established its specific connections to the line organization, such as to support units, permanent decision-making forums, and local units. The following quote illustrates these activities.

Q66 (Chain, sub-program manager): *"Naturally, when we proceed to the implementation stage, the role of [the local units] will increase. Thus, during*

*this fall we have established for each of these a local project group that will participate in planning and preparing the implementation.*"

Many kinds of *informing activities* were also targeted at the change recipients, with the aim of making them aware of the coming changes and preparing them for those changes. The following quote addresses the importance of informing the employees of the future impacts of the program:

Q67 (Chain, communications expert): "*Of course the role of internal communication is extremely important in this kind of a change program … We need to be able to tell people the benefits of the change, what kinds of changes are expected and how the company will support them in the change … We may still have [thousands of] employees out there who don't know about the program and don't acknowledge that "Hey, this will affect my work after a few years." So both kinds of communication are required: the kind that will calm people down and decrease their worries, and the kind that will wake up those who are still asleep.*"

Related to informing activities, representatives of all three case programs described how it was difficult to communicate about the changes to the personnel, as during the early stage the plans were still developing and remained quite intangible. A support team manager in Chain characterized the situation in the following manner:

Q68 (Chain, support team manager): *"In terms of communication, probably the biggest challenge is that people expect everything to be ready, but it's not. People can't stand living in uncertainty; it is very difficult for them. Since we don't know everything about this, we don't have all the answers to their questions yet, which is a challenge. And that is what we currently try to communicate.*"

As another challenge related to communication, in all three cases it was going to take a long time, at least a few years from program launch, before the changes would become visible to the shop-floor level employees. Several interviewees thought that the personnel was not sufficiently aware of the forthcoming changes and not involved enough in program initiation activities. The following quote describes how this may partly reflect the personnel's lack of interest towards the early stage program:

Q69 (Chain, communications expert): "*The communication about this is actually quite boring, since nothing visible has happened yet. When we actually have [the new work equipment], and we see what they look like and what one can do with them, then communication will be a lot more fun. That will be much more tangible, since currently everything is just on paper. And the challenge is that half of the employees of this company have not become interested in this, since nothing is really happening yet. "*

*Legitimating and committing activities* were also performed to communicate the program goals, plans and progress to a larger audience in order to gain wider support for the programs. Such efforts were especially visible in case Bureau, where the program manager confirmed that an important motive for organizing the early program planning phase as a series of workshops with broad participation throughout the organization was to gain wide commitment for the program. Although the program plans were fine-tuned based on the workshop participants' comments, the main purpose of these participatory activities was to make people aware of the program and committed to it. Bureau's program manager explained that when people who resisted the program idea had to justify their views and come up with alternatives, they were not able to keep up their resistance:

> Q70 (Bureau, program manager): "*The idea of those [planning] workshops was, in addition to gathering lots of information and practical knowledge for the consultancy work, to communicate to 150 key persons that they cannot get over this with traditional resistance to change: if they want to oppose this, they must be able to justify their views and come up with a constructive alternative.*"

The benefits of the participatory planning approach in terms of committing people had also been acknowledged in Chain, where the director of one development area stated:

> Q71 (Chain, development area director and steering group member): "*It has been somewhat comforting to acknowledge that the basic lessons taught in the universities about implementing change and committing people actually hold true. People need to feel that they themselves are genuine, active actors and that the changes are not just forced upon them from the higher level.*"

Finally, the analysis indicated that *enclosing activities* may help keep the organizational environment favorable for the change program. Especially in programs that involve staff reduction or other drastic employee effects, the key program actors may protect the evolving program by keeping the plans confidential and being sensitive in what to communicate about the changes. During the early days, plans concerning the potential negative effects of the coming changes may be shared with just a small group of key actors. Although a fully open communication policy is often promoted, several interviewees described how in practice this would bring forth resistance, which might hinder or slow down program planning. Thus, conscious enclosing activities were conducted to keep the atmosphere favorable. Such efforts were especially visible in case Chain, where a sub-program manager characterized the related challenge in the following manner:

> Q72 (Chain, sub-program manager): "*We are constantly seeking for the right balance and the right timing for [communicating about the cost cuts] to proceed with these plans.*"

### 4.5.3 Identified associations between boundary activities and autonomy

Table 19 illustrates how the boundary activities were analyzed to contribute to the autonomy of the change programs. Next, these proposed associations are described and illustrative examples from the interview data are given.

Table 19 identified associations between boundary activities and the autonomy of the change program

| Boundary activity types | Autonomy | |
|---|---|---|
| | Legitimate position in the organization | Authority and autonomy to realize change |
| **Positioning and negotiating** | **X** | **X** |
| **Linking** | | **X** |
| **Task coordinating** | | |
| **Information seeking** | | |
| **Resource seeking** | | |
| **Informing** | | |
| **Legitimating and committing** | **X** | |
| **Influencing** | | |
| **Guarding** | | **X** |
| **Enclosing** | | **X** |

Firstly, the analysis indicated how boundary activities had a central role in *establishing a legitimate position for the programs*. Not surprisingly, *legitimating and committing activities* contributed to the legitimacy of the programs. To make a change program legitimate, the central program actors presented their ideas and tried to make them accepted through various selling methods. While the earliest legitimating efforts were mainly about communicating the need for change, the dialogue between the key program actors and the representatives of the parent organization continued after the need for change was acknowledged. The next challenge was to make the program approach in general and the proposed change program in particular accepted as the appropriate way to address the need for change. Such legitimating and committing activities were especially common in case Bureau, where they were targeted both at the top management and the employees as the targets of change.

In this pursuit of legitimacy, Bureau's key program actors acknowledged the value of consultants as an external authority that could be utilized to justify the plans in the eyes of top management. In Bureau, a report summarizing the current state analysis was supposedly written by the

external consultants, but the program manager admitted that he had to a large extent dictated its content. The program manager characterized the role of consultants in legitimating the program plans in the following way:

> Q73 (Bureau, program manager): "*As in this kind of consulting work in general, if the consultants are properly instructed, the consultant writes [the report] as he is told to, and then I can present the document and say: "Look, the consultant has made the same conclusion as I have, the things are as I have always claimed them to be"*."

Similarly, the legitimacy of the change programs was fostered by *positioning and negotiating activities*. During early planning, representatives of line management were involved in negotiations and discussions, expressing their views and trying to ensure that their units' interests were accommodated in the plans. The following quote from case Chain describes how the key program actors had acknowledged the importance of gaining the line management's input and support for the program plans:

> Q74 (Chain, sub-program manager): "*The stakeholder relations within the organization were characterized by the fact that we needed to find a direction that the business management can support. This gave a certain flavor to [the planning]*."

*The authority and autonomy to realize change* was also fostered by several types of boundary activities. Firstly, positioning and negotiating activities contributed to clarifying and formally defining program authority, since the authority relations between the emerging programs and the line organization were decided upon in the negotiations between line managers and key program actors. The following quote from case Bureau shows that even though Bureau's program had initially been granted authority, the program's key managers still wanted to discuss the decisions with the line managers to gain a shared understanding and in this way to make the changes accepted.

> Q75 (Bureau, unit manager actively involved in the program): "*I have tried to gather as good and as wide a representation as possible in these steering groups … Although I was already given the mandate to implement this during the early decision making, if we want this to work in practice also in the future, we need to gain acceptance from all the parties involved. So in these steering groups we seek common views*."

*Linking activities* also contributed to providing the programs with authority by linking the programs with the authority of the line organization. This was especially visible in case Chain, where the change program acquired decision-making power through the involvement of

central line managers in program steering. The next quote characterizes the importance of this arrangement.

> Q76 (Chain, sub-program manager): "*Another [central enabler] is that the business management has committed to be active in the steering group. Even though the connection to the business is not always that tight, and they might not have deep knowledge about the details that sometimes pop up in the steering group's decision agenda, they are still actively involved.*"

To give another example of how Chain's program utilized the authority of the line organization, a sub-program manager in Chain explained how the program had gained a more powerful status when the chairman of the steering group (i.e. the program owner) changed:

> Q77 (Chain, sub-program manager): "*When [N.N.] started as the leader of the program, its status clearly increased, since [N.N.] has the formal title of [high-ranking title in Chain], which is higher in the hierarchy than what the original chairman of the steering group had.*"

From the three cases it seemed that Center's program was not able to gain the required authority. When the position of the program was discussed among Center's top managers, there seemed to be visible fears that the program would alter the power relations within the organization. A frustrated key program actor described the situation in the following way:

> Q78 (Center, program coordinator): "*The program has not been provided a strong authority to make decisions, for example. The management group of [Center] has retained that authority. … The discussions with the management group made it clear that this program, if I may exaggerate a bit, actually isn't allowed to change things that much. … The [management group's] meeting minutes actually state that "the program is a means to support projects and activities that aim at the same direction, in a way that increases effectiveness and synergy, but does not change the existing authority structure"*."

The analysis indicated that *guarding activities* also supported the programs' autonomy. Such guarding activities focused on making conscious choices of not utilizing the organization's normal procedures in the program if they were seen to endanger the program's capacity to produce change in an efficient way. To give an example, there was an organization-wide procedure in Bureau for auditing projects, but the change program's projects bypassed the procedure.

> Q79 (Bureau, project participant): "*There is this [project audit procedure] that should in principle be applied to all IT programs, projects and systems … But this is like the shoemaker's son going barefoot: projects in [the program] have not followed this policy.*"

A similar example can be found in case Chain, regarding the decision not to use the company-wide project reporting methods within the program:

> Q80 (Chain, sub-program manager): "*It's a bit embarrassing to confess that we have not used the company's general methods [in project reporting], since they are quite "heavy" when compared to the benefit that can be achieved by using them.*"

Lastly, *enclosing activities* were sometimes also utilized to foster program autonomy. Enclosing activities restricted communication and collaboration across the programs' boundaries, and in this way provided independence and leeway for the program teams' activities. Illustrating this, the next quote from Bureau describes how a project manager decided to protect his project by keeping a low profile:

> Q81 (Bureau, project manager): "*From the beginning we realized that if we do [this project] with a low profile, we'll get fewer comments from others. Thus we started to do this very independently, keeping a low profile, and we don't really report to anyone either. … It provides us with freedom and enables fast operation.*"

### 4.5.4 Summary of the proposed associations between boundary activities and readiness for change program implementation

Table 20 summarizes the findings described in the previous sections concerning the identified associations between the boundary activities and the readiness indicators. Next, the main findings as well as missing associations are discussed.

Table 20 Summary of the identified associations between boundary activities and readiness for change program implementation

| Dimensions of readiness for change program implementation | Intent | | | Resources | | | | Autonomy | |
|---|---|---|---|---|---|---|---|---|---|
| Boundary activity types | Visible need and pressure for change and sustained momentum | Clear and shared vision, a sense of direction, and commonly accepted goals | Purposeful plan for change content, change process, and program structure | Skillful and charismatic leaders, incl. both program owner and program manager | Dedicated program team(s) with explicitly committed, motivated members | Visible senior management support and involvement | Receptive environment in terms of prepared recipients of change | Legitimate position in the organization | Authority and autonomy to realize change |
| **Positioning and negotiating** | | X | X | | | | | X | X |
| **Linking** | | | | | | | X | | X |
| **Task coordinating** | | | | | | | | | |
| **Information seeking** | | X | X | | | | | | |
| **Resource seeking** | | | | | X | | | | |
| **Informing** | X | | | | | X | X | | |
| **Legitimating and committing** | X | | | | | X | X | X | |
| **Influencing** | | | | | | | | | |
| **Guarding** | | | X | | | | | | X |
| **Enclosing** | | | X | | | | X | | X |

As Table 20 shows, the boundary activity types demonstrate unique patterns in how they were analyzed to be associated with the different aspects of readiness for change program implementation. Most of the ten boundary activity types were associated with several aspects of readiness, typically representing more than one of the three main dimensions (intent, resources and autonomy). This finding supports the earlier observation that boundary activities may simultaneously have several intents regarding the change program's progress, and thus may contribute to creating readiness for change in several ways.

The findings summarized in Table 20 further suggest that in order to ensure each dimension of readiness for change, many kinds of boundary activities may have to be performed. To give an example, case Center showed active positioning and negotiating efforts, but Center's change program still could not reach a legitimate position in the organization, nor demonstrate viable goals and plans for the program, even though positioning and negotiating activities were found to contribute to both of these aspects of readiness for change. This suggests that one type of boundary activity, regardless of how active it is, may not be enough to secure the aspect of readiness in question, but also other types of boundary activities are required. Regarding this particular example, Table 20 indicates how, in addition to positioning and negotiation activities, also legitimating and committing contribute to providing a legitimate position for the change program. Similarly, information seeking, guarding and enclosing may be required (in addition to positioning and negotiation) to come up with a purposeful plan for the program.

In conclusion, the analysis indicates that focusing on just one or a few types of boundary activities may not be enough, but instead a wide array of boundary activities is required to create a robust basis for implementing a change program. The findings do not aim to suggest that boundary activities are the only way to promote readiness for change program implementation. However, the numerous identified associations between the boundary activity types and the different aspects of readiness suggest that boundary activities contribute to creating conditions for success in initiating significant change programs.

As can be seen in Table 20, not all of the boundary activity types were analyzed to be related to the indicators of readiness for change program implementation. Similarly, not all of the indicators of readiness for change were connected to the boundary activities. These *missing associations* are discussed next.

Unlike other types of boundary activities, task coordinating activities and influencing activities did not seem to directly contribute to readiness for change program implementation. *Task coordinating activities* mostly include mundane efforts to coordinate the daily tasks, resources and issues across the programs' boundaries. Instead of contributing to achieving readiness for change, task coordinating activities might actually rather be viewed as evidence of ongoing program operations and functioning cooperation across the program's boundaries.

Similarly, *influencing activities* could not be directly linked to building readiness for change. Influencing activities describe the program's early influences on non-program related issues within the parent organization.

Like task coordinating activities, influencing activities seem to indicate (rather than contribute to) successful program initiation, since their existence means that the program has started to have effects in its organizational context.

As can be seen from Table 20, boundary activities were analyzed to contribute to all other dimensions of readiness for change program implementation except for the existence of *skillful, committed and charismatic program leaders*. In this case the causality appears rather to run in the opposite direction: skillful, charismatic and committed leaders of the change programs were those who actively performed various kinds of boundary activities in order to achieve the required readiness. The role of the program's key managers in creating readiness for change is examined in more detail in section 4.6, where contextual factors affecting the findings are discussed. Before that, the three cases are compared and contrasted in terms of the amount of boundary activity combined with the level of readiness for change.

### 4.5.5 Comparison of the findings across the cases

The identified associations between the different types of boundary activities and the indicators of readiness for change program implementation may explain some central differences in the progress of the three case programs. As stated in the earlier sections of this chapter, the three examined cases showed considerable differences in the amount of boundary activity, as well as in the perceived level of readiness for change program implementation. Figure 13 summarizes the relative positions of the three cases in terms of the amount of boundary activity and the overall readiness for change program implementation.

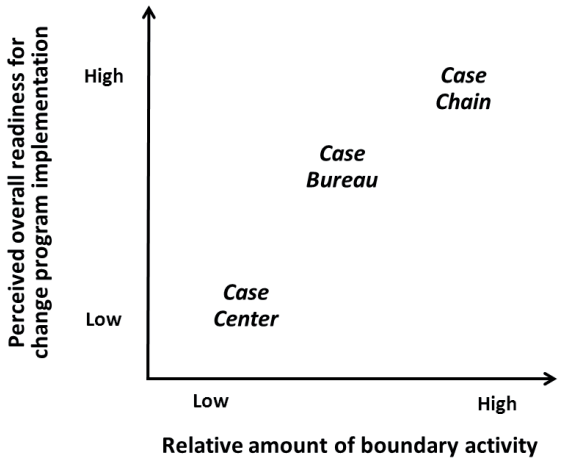


Figure 13 Association between the relative amount of boundary activity and the perceived overall readiness for change

As Figure 13 shows, in comparison to the two other cases, case Center demonstrated very little boundary activity and also the lowest level of readiness for change program implementation. As boundary activities were analyzed to contribute to this readiness in many ways, the lower amount of boundary activity in Center may be a central explanation for Center's low readiness for change. The instances of inactive or lacking boundary activity in case Center support the proposition that boundary activities are essential during the early stage of change programs. For example, the lack of legitimating and committing activities in case Center may explain why Center's change program was not perceived legitimate, and also why the top management did not seem to genuinely support the program.

In case Bureau and especially in case Chain, more active boundary management was detected, and also the readiness for change program implementation in these two cases was significantly higher. Case Chain demonstrated the most frequent boundary management, and also the highest level of readiness for change program implementation. These results, complemented with the identified associations between the different types of boundary activities and the various indicators of readiness for change, suggest that boundary activities have a central role in building readiness for change program implementation.

## 4.6 Identified contextual factors contributing to the differences across the cases

The differences in how the three case programs proceeded and how they had succeeded in program initiation may be examined through contextual differences. Some aspects of the programs' context appear as possible explanations to the identified differences. Before discussing these differences, the similarities of the cases are examined. A certain level of similarity was guaranteed from the beginning by the common criteria in case selection (see section 3.3). The analysis revealed a number of additional similarities across the three cases.

First of all, many of the characteristics of the change programs' parent organizations were similar. All three organizations can be described as traditional, hierarchical organizations dominated by strong functional units. In all three organizations, there was a long history of projects and at least some guidelines for project management, but either there were not any previous examples of programs, or the previous development efforts characterized as programs were not perceived as very successful. There were no defined processes or guidelines for program management in any of the organizations.

The characteristics of the three investigated programs were also similar to some extent. The decisions to initiate the programs were in all three cases triggered by multiple reasons, including both external and internal triggers. All case programs were significant both in terms of their potential effects on the parent organization and the scope of the program organization. All three case programs represented a novel challenge to the case organization. Also the duration of the initiation stage was somewhat similar, taking in each case a couple of years. In all three cases a majority of the program personnel performed program work in addition to other duties, and there were very few (if any) full-time resources committed to the programs.

Despite the many similarities across the cases, there were some visible differences. Although a large number of indications of possibly relevant contextual factors were identified that may have a role in explaining the differences, the main findings were summarized into four factors that systematically appeared in the three cases. Together these four factors seem to provide considerable explanatory power to illuminate the differences across the three cases. Next, each of these four factors is introduced.

### 4.6.1 Authority, ability and commitment of the program's central managers

The first contextual factor relates to the authority, ability, and commitment of the program's central managers. As mentioned above, boundary activities were analyzed to contribute to all other dimensions of readiness for change program implementation, except for the existence of skillful, committed and charismatic leaders. In this case, the causality rather seemed to run in the other direction: skillful, charismatic and committed leaders were those who actively performed boundary activities in order to achieve the required readiness.

In **case Center**, there appeared to be a lack of strong managers who would be in charge of leading the program. The original program owner had left Center fairly soon after the program launch, and the remaining top managers were unable to decide who should take the owner's position. In fact, none of the top managers seemed willing to take over the role. The expert who was appointed as the program manager did not possess significant authority in the organization, and he did not have a strong vision of what the program should encompass and how it should be organized and managed. Although the program manager engaged in fairly active efforts of presenting the early program ideas in various meetings and seminars across Center's organization, his primary purpose seemed to be to gather opinions and comments that could be used as a basis for goal setting and planning, instead of trying to make others convinced of the need for the program and

make them enthusiastic about it. One interviewee described the situation in the following way:

> Q82 (Center, expert involved in program initiation): "*If the program manager himself does not yet have a clear idea on what the program is about, then it is really hard to make others excited about the plans and committed to them.*"

Eventually, Center's program manager was visibly discouraged due to the lack of support from Center's top management and the poor progress of the program, and the interviews indicated how he had even considered leaving his position as a program manager. The lack of committed and authorized managers may partly explain the low number of boundary activities in Center's program and consequently the low readiness for change program implementation.

The situation was quite different in **case Bureau**, where the original program owner and the original program manager had been in a central role in initiating the program. Although they did not initially possess formal authority to drive such large-scale changes, they had a strong vision of the program and worked actively to get others committed to the proposed changes, engaging in active boundary management and in this way purposefully building readiness for change. The emerging program was widely associated with the program owner and the program manager. The following quote describes how the role of the program's key managers was acknowledged:

> Q83 (Bureau, project participant): "*I think a central enabler [of program initiation] was that there were charismatic leaders. Especially [the program owner] is very charismatic and widely valued in our organization*."

Even though Bureau's program originally had strong managers, there was a clear discontinuity in the program's leadership, as both the program owner and the program manager left the program organization for other duties. While new managers were appointed to lead the program, they were not seen as similarly strong program leaders. The interviewed program participants reported that there were not enough program-wide management efforts after the original leaders had left the program organization.

The change program in **Chain** seemed to have skilled and committed managers. While the original program owner (chairman of the program steering group) had been fairly active in guiding the program, he was replaced by another person due to a change in the organization structure, and the new program owner took even a more active and more powerful approach to leading the program. Also, the expert who was nominated as the program coordinator did not originally have significant formal

authority, but he gradually gained a lot of respect as his knowledge on the program's content increased and he demonstrated managerial capabilities. This increased authority was formally enforced when the new program owner officially appointed him as the program manager. The following quote provides an example of how the capabilities of the newly appointed program manager were described among the program participants:

> Q84 (Chain, expert involved in the program): "*If there are loose ends, [the program manager] spots them very quickly. Extremely good cooperation skills are his advantage, and his approach to issues is dedicated and positive. He is not a technocrat, he can be firm when needed, and he does not go into too much detail.*"

To sum up these observations, similarly as in Bureau, the key managers of Chain's program were highly dedicated to managing both the internal work of the program as well as the program's external relations. They engaged in active boundary management and visibly contributed to the readiness for change program implementation. The key managers of Bureau's and Chain's programs also encouraged others in the core program teams to perform boundary activities, leading the teams by their own example.

### 4.6.2 Scope and complexity of the program

The second contextual factors that may explain some of the identified differences across the cases is the scope and complexity of the change programs. Even though all of the three case programs aimed at significant change, the programs still differed in terms of their scope, referring both to the scope of the intended change and the scope of the program organization that was established to implement it. The complexity of the programs was reflected in the number of projects and tasks initiated or included in the program, with multiple linkages and interdependencies both with each other and with other organizational activities.

In **Center**, the scope of the desired change was probably the widest of the three cases. According to the original intent, Center's program was supposed to significantly alter a wide spectrum of services and their production processes regarding both Center and its member organizations. Still, the program organization did not reflect these ambitious plans. While Center's program was divided into three sub-programs, only few people could be named to be active participants in each sub-program. In all, just a handful of people were committed to actively participate in program initiation and planning. The perceived lack of commitment concerned both Center's top managers who should have taken more responsibility for the program, as well as Center's various experts who would have been able to

contribute to advancing the program plans. One manager blamed the enormous scope of the change:

> Q85 (Center, manager involved in program initiation): *"Maybe the reason for why it has remained unclear who'll take the responsibility for this program is that this is such a huge issue*."

Even though the change program was supposed to significantly affect Center's member organizations, their representatives were not actively involved in the initiation and planning activities. In all, resources and autonomy given to Center's program were clearly not in balance with the ambitious intent, which may provide an explanation for why the program team failed to transform the high-level goals into concrete objectives, plans and projects.

Compared to the other two programs, the original scope of **Bureau's** change program was the most clearly defined and probably the least complex. The program was originally limited to information technology (IT), although the scope was later on expanded to encompass also other aspects and the program was followed by a larger structural reform. Further limiting the challenge, Bureau's program was designed to consist of phases that each included the opportunity to review the results and to deliberate whether to continue or not. The program manager explained this approach:

> Q86 (Bureau, program manager): "*It was decided from early on to construct [the program] to consist of three phases, each of them with the possibility to make a stop. This is how it should be in my opinion: you need to proceed in steps but you also need to have a vision of the whole renewal, how it might be run from start to finish. For most parts the program has actually followed these plans, at least thus far*."

Bureau's program originally aimed at creating a new kind of an IT management solution for the organization, and the program manager was able to sketch the main solution in the early days of program initiation in a short amount of time, with some help from just a few experts. Ideas on how to renew IT management had been discussed for several years and the program launch was viewed as an opportunity to put these ideas into practice. Even though the program's key managers from early on had a good perception of the program's content, they still engaged a wide audience of people in program initiation and planning. Their primary purpose was not to gain input to program plans but to engage and commit people throughout the organization to the proposed change. The program structure that was established after the centralized planning phase was less complex than in the other two cases, as there were no sub-programs, but the program consisted of just four projects and four support teams.

Regarding the third case, the program in **Chain** aimed at extensive changes in many features of the organization. The program was supposed to transform the entire service process in Chain's largest business area, including the related services, infrastructure, logistics, and principles for organizing work. Reflecting the wide scope of the intended change, the program organization was complex, including tens of different projects organized into sub-programs and further into development areas, with numerous interdependencies and multiple linkages with Chain's other activities. The amount of external dependencies and connections presumably partly contributed to the large amount of reported boundary activity. To illustrate the complexity of Chain's program, a project manager described the early planning activities in the following manner:

> Q87 (Chain, project manager): "*Especially in the early days it was hard to make a distinction between these sub-programs, since there are a million cause-and-effect relationships among all these projects.*"

Due to the wide program scope and high complexity, it would have been virtually impossible to prepare the plans for Chain's program within a small group of people. A wide base of expertise was required and thus program planning was from early on decentralized, giving responsibility for planning to sub-programs and to project teams, each with their unique approach to planning and their individual methods for project management and for data gathering, coordination and communication across the project's boundaries. To ensure requisite coordination, the portfolio decision making process led by the program steering group was established. The interviewees described that due to the complexity of the program and the novelty of the challenge it had taken a few years to find the appropriate organization and governance structure for Chain's program. At the end of the initiation stage the program structure and the governance model were regarded as functional and purposeful.

### 4.6.3 Maturity of the parent organization in terms of large-scale change

The third contextual factor that may explain many of the differences across the cases is the overall maturity of the parent organizations in terms of large-scale change. This may also be interpreted as initial readiness for change. The analysis showed how this initial readiness to launch and implement a change program varied.

From the three organizations, **Center** was the least experienced in systematically conducting internal changes. In Center just the concept of a change program caused significant confusion and even suspicion. It seemed

that many key managers were stuck with rationalizing about the program concept. The following quote illustrates this observation:

> Q88 (Center, program core team member): "*I think it's very important that we have these discussions in our organization about what we mean by a program. I have perceived that some talk about this program as just a project, downplaying its importance. And some say that this topic just requires some minor coordination. With these presumptions the risks are very high, since this is so much more than just a project or just minor coordination.*"

Especially Center's unit managers, representing the line management, felt that the most important issue in program initiation was to clarify the role of programs in Center's overall management system. It seemed that a lot of energy was put into this sensemaking, instead of transforming the initial program goals into plans and activities and in this way advancing the case program. Some of Center's line managers actually seemed to drive their own agenda by protecting their personal status and opposing the program that might change the prevailing power relations. It was also clear that central managers in Center did not have a shared understanding of what it takes to implement large-scale change in a program form. The following quote shows how one active program participant concluded the situation:

> Q89 (Center, program core team member): "*I have reached the conclusion that we as an organization have not developed far enough to implement programs. We have been able to develop the way we run individual projects, but now the challenge is to move to the program level.*"

In **case Bureau**, there was a longer tradition of internal change projects, but not much experience from large-scale change efforts. Similarly as in Center, programs were viewed to require a novel approach. However, instead of arguing about the role of programs in the wider management system (as in Center), Bureau's key managers were committed to take the program further as rapidly as possible. There was still discussion about the special nature of programs and its implications for program management. As an example of these sensemaking efforts, the program manager presented the following analogy:

> Q90 (Bureau, program manager): "*The nature of programs is such that you select a path based on what seems to be the most promising to help you achieve your goals. The goals are not clear, but they are rather fuzzy. When you have selected your path, at each intersection you need to make a new choice. Little by little you define your target as you walk the path.*"

Bureau's organization was characterized as slow to change, and the managers of the program initiation had realized that to make change

happen in this challenging context, they needed to put emphasis on constructing a solid basis for the change program. One manager explained:

> Q91 (Bureau, manager of a central unit involved in the program): "*It is better to take small steps … In this way we will not have a rapid change, but we will have a change that may be considered rapid in proportion to our organization's ability to change*."

In Bureau, readiness for change program implementation was purposefully and skillfully built by the key managers' active efforts during the early program phases, and it seemed that those efforts had made the organization more receptive to change. There were still some doubts about the attitudes of those not involved in the program activities. Also, the progress of the program had relied significantly on the original program owner and original program manager. When they left the program and the responsibility was allocated to the project teams, some projects were unable to proceed as quickly as desired as they could not cope with the uncertainty involved in the program plans. In addition to these challenges, there was a larger structural reform going on and as a part of it, other change initiatives were being implemented. In addition to Bureau's personnel being overloaded with different projects, one specific change effort focused on restructuring organizational units and included staff reduction. This caused uncertainty and stress among the personnel, which was also reflected in the case program. These challenges were perceived to contribute to the long duration of the case program's initiation and planning stage.

From the three case organizations, **Chain** was probably the most mature in terms of project management, although there were no successful examples of large-scale change programs. Rather than spending time on rationalizing about the nature and usefulness of the program management approach, the key program actors concentrated on the actual program work. The program approach still caused some challenges, since several people felt discomfort with the lack of a "full picture" of the end state. In a way, the strong project management culture may have even hindered Chain, as the experts were used to working in projects with clear objectives and clearly defined tasks, and now they were involved with high levels of uncertainty. The program manager described how he had to spend a considerable amount of time explaining the nature of programs to others. Similarly as in Bureau, there seemed to be ongoing discussion about the special characteristics of the program management approach:

> Q92 (Chain, steering group member): "*It has been recognized that goal setting requires iteration. Since we aim at a change that must respond to the changes in the markets in five years of time, it is clear that the world will change in five*

*years. Although we have agreed on some targets now, they may have to be changed down the road.*"

Both in Bureau and in Chain the discussions about the program nature seemed to abate as the programs proceeded from initiation to more detailed planning and to early implementation. To illustrate this progress, the following quote from Chain shows how the program actors were able to overcome the early confusion and decrease uncertainty:

Q93 (Chain, project manager): "*In the beginning, we tried to go through these issues with people, discussing what was known and what wasn't. The approach wasn't very systematic, but it resembled iteration: we tried to increase our understanding until there was high pressure to write these things down and prepare a project plan. Things tend to get clearer when you write them down and this is what happened here as well: things started to get clear little by little.*"

#### 4.6.4 Origin of the program and progress of the initiation process

The fourth factor that seems to explain some of the differences across the cases is the origin of the programs. Here the origin refers both to the level in the organizational hierarchy where the program idea was initiated, and to the decision making process of how the program was formally launched.

The idea for **Center's** program had appeared during the yearly planning process in the discussion of an expert and a manager who both had expertise in organizational development and who were both somewhat familiar with and enthusiastic about the program management approach. Their ideas for several potential program topics were taken to Center's management group that chose two topics to be implemented as programs. The other chosen topic was more clearly defined and the development activities initiated in this area were soon embedded in the line organization's processes. The topic of the case program dealt with more challenging issues. Since the manager who had come up with the program idea refused to take over the program owner's or program manager's role due to busy schedules, one of the top managers was nominated as the program owner, and the search for a program manager began.

Those involved in initiating Center's program described how it was hard to find a program manager, as there were very few people with the required competence. This search took some time, but finally an expert was found who somewhat reluctantly accepted the task and was appointed as the program manager (although with a title indicating lower authority, see section 4.1.1). However, he was not given a clear mandate and he also felt that he did not receive enough guidelines and direction from the top managers. Some also seemed to doubt his skills and viewed him to be unsuitable for the position. Adding another challenge, soon after the

program launch the program owner resigned and left Center, and none of the remaining top managers wanted to take over the program owner's position. Thus, the starting point for Center's program was not very promising. The following quote illustrates how one program core team member described the reasons behind the program's slow progress:

> Q94 (Center, program core team member): "*This task has been too vaguely defined. It feels that people are waiting for something to happen on its own, that things would sort themselves out. A stronger management approach is required: the program should be led more firmly.*"

In **Bureau** the program idea was triggered by an external IT company's offer to take over Bureau's IT management. As a counteraction, the soon-to-be program manager was asked to come up with an alternative, Bureau-led plan for renewing IT management in the organization. His plan was approved and the top managers made the decision to launch the first stage of the program, the current state analysis. The program manager and the program owner dedicated the next few years to skillfully build the basis for the program. They first convinced top management about the need for change with the results of the current state analysis, and then committed a wider audience of people across the organization to the forthcoming changes by inviting them to participate in the program planning activities. Much of these activities can be interpreted as boundary activity, which clearly contributed to gaining acceptance, support and resources for the program. One top manager described:

> Q95 (Bureau, top manager involved in steering the program): "*One could say that this has been well marketed to the top management, starting from [Head of Bureau]. The top management is standing behind this, and this is why it's working well.*"

In **Chain**, the program was initiated by the top managers. While the program built on the need for replacement investments and on the results from some earlier pre-study projects, it was the management group of Domain (the main business division involved in the program) who came up with the plan to launch a larger change program. Due to this background, the program was from the beginning tightly linked to the line organization, and this was also reflected in the program's central management positions, since the main line managers of Domain were put in charge of the program activities as steering group members and development area directors. One program steering group member explained:

> Q96 (Chain, program steering group member): "*Since I'm a member in [Domain's central management groups], I myself have been involved in establishing all these structures and setting requirements for this work.*"

Chain's program manager (originally: program coordinator) was appointed based on his earlier expertise in planning and organizing development activities, and as soon as he started in his position he systematically organized discussions with the central managers to clarify his own role and to sketch the best possible structure for program governance. While some adjustments to the roles and responsibilities as well as some personnel changes took place during program initiation and planning, the program was constantly under the protection and control of Chain's top management. Although individual projects received significant autonomy in planning and organizing their internal work, major program related decisions were taken within the program steering group, providing coordination across the program activities.

### 4.6.5 Comparison of the contextual factors across the cases

Table 21 concludes the discussion on the contextual factors that may explain the differences across the cases, summarizing how each of the four factors appeared in the three cases.

Table 21 Comparison of the contextual factors across the cases

| Contextual factor | Case Center | Case Bureau | Case Chain |
|---|---|---|---|
| **Authority, ability and commitment of the program's central managers** | Shifted from moderate to low as the program progressed | Shifted from high to moderate as the program progressed | Shifted from moderate to high as the program progressed |
| **Scope and complexity of the change program** | Highly complex | Moderately complex | Highly complex |
| **Maturity of the parent organization in terms of large-scale change** | Low | Moderately low | Neither high nor low |
| **Origin of the change program and progress of the initiation process** | Middle-top-down process with significant discontinuities | Middle-top-down process with some discontinuity | Coherent top-down process |

As the table above shows, Center's change program seemed to have the most challenging context: the program was very complex, and the maturity of the parent organization in terms of implementing large-scale change was seemingly low. Center's program was lacking strong, committed and authorized managers, and program initiation was not firmly led but seemed to suffer from several discontinuities, which caused significant delays. The difficulties in finding a suitable program manager, the resignation of the original program owner, lack of top management involvement, and deterioration of motivation of the key program personnel contributed to the slow progress of the program.

The other two cases, Bureau and Chain, indicated somewhat less challenging contexts. Still, each of these cases involved particular context-related challenges. Bureau's program was less complex than the other two, but the parent organization's maturity was fairly low in terms of implementing large-scale change programs. Chain's program was highly complex, but the maturity of the parent organization in terms of change programs was the highest among the studied cases.

Cases Bureau and Chain also differed in terms of the key program managers and the origin of the programs. Bureau's program was started at the middle management level, and program initiation was guided by two strong managers who were able to sell the program idea first to the top management and then to the rest of the organization. However, these two skilled and charismatic managers left the program organization after initial planning and they were not replaced by similarly active leaders, which caused a discontinuity in the program's progress, as some projects were unable to proceed without close management support. Chain's program, in turn, was initiated by the top managers of the line organization who appointed a program coordinator and a steering group to oversee program planning. Although Chain's program was from the beginning fairly closely led by the organization's top management, the managerial grip on the program tightened as the original program owner was replaced with a more active owner and when the program coordinator was formally appointed program manager.

To conclude the discussion on the empirical findings, a final observation concerns the relations between the different aspects of the change program's context. The contextual factors discussed in this section seem related in many ways. A more mature organization in terms of program management is more likely to have skilled program managers for running the programs. To give another example, the more extensive and complex the program is, the more likely it is to require presence, mandate, and decisions from the top management of the organization, indicating the need for highly authorized program managers and active top management involvement during program initiation. Further analysis of the relationships between the identified contextual factors is, however, out of the scope of this dissertation.

# 5. Discussion

In this chapter, the key findings of the study are discussed. First, each of the five research questions set for the study are responded based on both empirical findings and existing theoretical understanding. After that, four key themes emerging from the findings are discussed, focusing on the main contributions of the current study to existing knowledge.

## 5.1 Responding to the research questions

The main research question of the study was: "*How are the boundary activities concerning the boundary between the program and the parent organization associated with the success of change program initiation*?". This main research question was divided into five more detailed sub-questions. In this section, answers are provided to those questions based on the empirical findings, and the findings are compared to the existing literature.

### Question 1: How is the boundary between a change program and its parent organization manifested?

The first research question addressed the change program's boundary with its parent organization. First of all, the empirical findings supported the assumption that such a boundary actually exists. While the vast majority of earlier studies on organizational boundary activities have not paid attention to the composition of the boundary, the present study provides research evidence on the different elements that form a change program's boundary. In line with the earlier (and mostly conceptual) literature on organizational boundaries (Hernes, 2004; Hirschhorn & Gilmore, 1992; Scott, 2003), the findings of the present study illustrate how a change program's boundary is built up of several aspects. Altogether, six different boundary types were identified. While there may not always be visible physical boundaries or significant spatial distance between the program participants and the other members of the parent organization, the results indicate that there can still be a perceivable boundary that is made up of the differences in the task at

hand, in time orientation, in authority relations, in social relations and perceptions of identity, and in knowledge. Together these aspects form a boundary that separates the change program from its parent organization.

The empirical findings further indicate that change programs differ in terms of the overall boundary strength. Although the analysis showed evidence of a boundary between the change program and its parent organization in all three investigated cases, the boundary appeared to be strong in case Center, medium-strong in case Bureau and fairly weak in case Chain. This finding will be discussed in more detail later in this section.

By shedding light on a temporary organization's boundaries and their formation, the results of the current study extend the research on organizational boundaries that has mainly focused on the boundaries of permanent organizations (e.g. Leifer & Delbecq, 1978; Thompson, 1967) or organizational units (e.g. Yan & Louis, 1999). Previous research has acknowledged how temporary organizations differ from permanent organizations in two distinct aspects: they have a clear beginning and an ending (e.g. Dobers & Söderholm, 2009). The current study shows that when a change program as a specific form of a temporary organization is established, the program's boundary also starts to emerge. The findings suggest that the boundary may be built both deliberately and unintentionally. The basic elements of the boundary are established as the decision to launch a program is made and the set-up of the program organization begins, as the program receives a task that sets it apart from the rest of the organization. The program management approach also brings some distinctive methods, structures and deadlines which distinguish the emerging program from its environment. After the first program participants have been appointed, the program team starts to build its own identity, further separating the team from the other members of the parent organization.

Whereas previous research has suggested that permanent organizations define the boundaries of a project or a program by determining its authority and responsibility (e.g. Andersen, 2006), the current study shows how the advocates of a change program may actively participate in defining its boundaries. The findings suggest that the definition of a program's boundaries is an ongoing process during program initiation, involving constant discussions and negotiations between the program's advocates and those representing the permanent organization. The study illustrates how the key program actors may deliberately build and shape the program's boundaries. Examples from case Bureau demonstrate how the program's managers may distinguish and isolate the program from the parent

organization by establishing work approaches and methods that differ from the prevailing organizational norms, and also by bypassing some organizational procedures that are viewed as disruptive for the program. The role of the key program managers in advancing and promoting emerging programs is discussed in more detail when responding to the research question 5.

In line with the earlier research (Andersen, 2006), the present study also reports ways in which the surrounding parent organization may contribute to setting a change program's boundaries. The top managers of the organization typically take part in the negotiations where the program's goals, scope and organization are defined and the limits for the program's authority are set. The top managers may also affect the emerging program's boundaries in more subtle ways. As an extreme example, Case Center demonstrates how the inactivity of the line managers who were formally appointed as program steering group members, but in practice did not devote time for guiding the program, contributed to the formation of a significant knowledge boundary between the change program and the parent organization. In case Center this strong knowledge boundary was analyzed to affect the program's premature termination.

In addition to demonstrating how a change program's boundaries are initially formed in the interplay between the emerging program organization and its parent organization, the findings indicate that a change program's boundaries evolve beyond the initial set up stage. This observation lends support to earlier studies (e.g. Hernes, 2004; Ratcheva, 2009) by suggesting that a program's boundaries are under constant change. The program organization expands as new members join the program team, and initial key actors may be replaced by new ones. Each new member brings along his or her existing contacts to the parent organization, which may contribute to shaping the program's boundaries.

Although the current study has mainly examined the parent organization of a change program as one entity, the findings imply that a program's boundary may appear differently to different groups within the organization. The boundary may be weaker (or "thinner") towards some stakeholder groups, such as certain expert groups or top managers, and higher (or "thicker") towards others, such as the employees who are not involved in planning the change but will eventually be affected by the program's results. The findings further indicate that the existence of a strong boundary towards a certain stakeholder group may not be intentional or purposeful. To give an example, in all three investigated cases the proponents of the programs expressed concerns about the program's distance from the eventual recipients of change.

To sum up the discussion, the findings of the current study lend support to earlier studies on organizational boundaries (e.g. Ashforth et al., 2000; Leifer & Delbecq, 1978; Thompson, 1967) by showing that a change program's boundary has a relevant function in limiting the emerging program, in providing borders for the program, and protecting it from external disturbances. The findings suggest that a boundary is required to separate the program from the daily work that has a different purpose, governance approach, and pace. On the other hand, the boundary may represent a barrier that needs to be overcome to enable communication and cooperation between the emerging program organization and its parent organization. The program is dependent on the knowledge, resources and authority of the parent organization, and thus the emergence of the program's boundary creates a need for boundary crossing activities. The different types of boundary activities are described in the next section.

**Question 2: How, through what kinds of activities, is the boundary between a change program and its parent organization managed during program initiation?**

The second research question asked how the boundary between a change program and its parent organization is managed during program initiation. The empirical study revealed an array of boundary activities through which the key actors of an emerging change program manage the interaction with the parent organization. Previous empirical studies have described versatile boundary activities at the boundaries of permanent organizations (e.g. Jemison, 1984) and permanent organizational units, functions or teams (e.g. Ancona & Caldwell, 1988, 1992a; Druskat & Wheeler, 2003). In the current study, a similarly rich selection of boundary activities was identified at the boundary of a temporary program organization.

The analysis disclosed ten types of boundary activities, clustered into four categories according to the direction of the activity. According to the analysis, the identified ten types of boundary activities each have their distinctive purpose. In the category of defining and shaping the program's boundaries, *positioning and negotiating activities* directly contribute to setting the change program's boundaries by defining what and who is included in the program. *Linking activities* establish connections and communication channels that are utilized to cross the boundary. *Task coordinating activities* are about managing the daily collaboration across the boundary. From the second category, i.e. crossing the program's boundary inwards, *information seeking activities* aim to provide input from the parent organization for program planning, whereas the purpose of *resource seeking activities* is to provide the program with requisite human

resources to mobilize the transformation. From the third category, crossing the program's boundary outwards, *informing activities* aim to inform others in the parent organization about the program's existence, the rationale behind it, the program's goals and activities, and its status. *Legitimating and committing activities* aim to make the program accepted and to get those in the parent organization to support the program, while *influencing activities* are about causing changes in the parent organization in other areas than those directly related to the change program's goals.

In addition to the above listed boundary crossing and shaping activities, also isolative boundary activities were identified, forming the fourth category of activities. *Guarding activities* are about blocking the inward flows to the program and this way protecting the program from external influences, whereas *enclosing activities* block outward communication from the program. These isolative boundary activities aim to shelter the emerging change endeavors and provide the program teams a peaceful work environment to advance the program plans.

The array of boundary activities revealed by the analysis is largely in line with earlier research findings concerning intra-organizational boundary activities at the unit, team or group level. Many boundary activity types identified in the current study have been reported in earlier research. For example, several previous studies have reported boundary activities related to information seeking, referred to as scouting (Ancona & Caldwell, 1988, 1992a; Druskat & Wheeler, 2003) or gathering intelligence (Balogun et al., 2005). Informing activities have been characterized earlier as displaying work across boundaries by making it visible and accessible to others in the organization (Kellogg et al., 2006). Negotiating activities have been reported by Levina and Vaast (2005) in the context of information system implementation projects, and negotiating has also been included in task coordinating activity reported by Ancona and Caldwell (1992a) in the context of product development teams. Related to the isolative boundary activities, the studies by Ancona and Caldwell (1988, 1992a) have also reported guarding activities and enclosing activities (referred to as sentry activities).

Further illustrating the similarities to previous research findings, legitimating and committing activities largely resemble ambassadorial activities, which Ancona and Caldwell (1988, 1992a) have suggested to be critical to the success of product development teams. The concept of ambassadorial activities, as described by Ancona and Caldwell, includes lobbying resources for the team, and thus encompasses resource seeking activities, which were included as a separate activity type in the current study. Furthermore, a boundary activity similar to legitimating, committing

and resource seeking has been identified in the context of self-managing work teams, referred to as persuading activities (Druskat & Wheeler, 2003). The findings of the current study also provide support for the findings of Balogun and her colleagues (Balogun et al., 2005) concerning the boundary activities of internal change agents in the attempt to enroll others to their change cause. The activities of aligning agendas, selling, managing up, and lobbying reported by Balogun et al. all fall under the category of legitimating and committing activities, as defined in the current study.

The differences between the present findings and previous research can be largely explained by the specific focus of the current study: the temporary nature of the program organization, the parent organization's role as the client or target of the change, and the focus on the initiation phase of the program. Firstly, the findings suggest that change programs as emerging organizations require boundary setting: when a change program is initiated, its position and boundaries need to be defined, explaining the occurrence of positioning activities. Similarly, Yan and Louis (1999) employ the term *bringing up boundaries* to refer to activities that lead to the emergence of a work unit's boundaries. Secondly, linking activities have not been reported as a separate boundary activity type in the previous studies. The occurrence of these activities can be explained by the novelty of the program organization, as linking activities contribute to defining the relationship between the program and its parent organization by describing dependencies and establishing communication and collaboration channels. Finally, influencing activities, as defined in the current study, have not come up in the previous studies. While the program is supposed to deliver a change in the parent organization as its end result, the recently established change program may already have effects on the parent organization and these effects may not necessarily be related to the program's main task and its eventual effects. This finding further supports the notion of the contextuality of temporary organizations (e.g. Engwall, 2003; Pellegrinelli et al., 2007) by demonstrating how change programs can have early and even unintentional effects.

As discussed in the Methodology and Results chapters (chapters 4 and 5), the division of boundary activities into distinct types is not an unambiguous task. The examples provided in section 3.5 show how the same actual action may be interpreted as a demonstration of different boundary activity types, depending on the context. Also, the analysis showed that an activity often includes more than one intention, indicating that an action may simultaneously represent more than one type of boundary activity. Instead of aiming to provide an absolute, unambiguous division of the boundary activity types at the program-parent organization boundary, the current

study demonstrates how the boundary activity of the key actors of emerging change programs is diverse and consists of a number of different types of activities, each with their distinct purpose in advancing the program.

The three studied cases all demonstrated versatile boundary activity in terms of the different boundary activity categories and types. Actually, the distribution of boundary activities into the four activity categories (based on the activity direction) was remarkably similar across the cases. Firstly, the findings suggest that a significant part (at least 40% in the three investigated cases) of an emerging change program's boundary activity is about crossing the program's boundary outwards in the form of informing, legitimating, committing, and influencing. This observation suggests that the key advocates of an emerging program are considerably active in making the program, its goals and actions known and accepted in the wider organization. Secondly, a significant part of the boundary activity (about one third) focuses on defining and shaping the boundary by the various negotiating, positioning, and linking activities. These findings provide support for the earlier observations regarding the emerging change program's need to establish its boundaries and gain an acknowledged position in the larger organizational context. Thirdly, according to the findings, boundary activities related to crossing the program's boundary inwards are somewhat less frequent (representing a bit more than 20% of all boundary activity). This observation indicates that while emerging programs require input from the parent organization, even a larger part of the early program activities is formed of representing the program and establishing a legitimate position for it in the management system of the parent organization. Finally, isolative boundary activities seem to be the rarest category of boundary activity (with less than a 10% share). The findings still provide a number of examples how such isolative activities may be crucial in protecting the emerging program and in ensuring favorable conditions for the early program activities.

Interestingly, even though the division of boundary activities into different categories was very similar across the cases, there were significant differences in the overall amount of boundary activity. In relative comparison to the other cases, the change program in Chain showed a high volume of boundary activity, whereas case Center indicated clearly less active boundary management. Case Bureau fell between these two, still with a relatively high volume of boundary activity. Building on this observation, whereas the studies by Ancona and Caldwell (Ancona, 1990; Ancona & Caldwell, 1992a) suggest that teams may demonstrate certain strategies for external activity by specializing on certain kinds of boundary activities, the present findings propose that change programs that are in the early stage

differ on the amount of boundary activity rather than on the nature of the activity.

Since the majority of all identified boundary activities were about crossing the boundary in either direction, the overall amount of boundary activity may be interpreted to reflect the permeability (Crawford & Pollack, 2004; Leifer & Delbecq, 1978) of the program's boundaries. According to this logic, active boundary activity is associated with a weak boundary, and correspondingly low boundary activity is associated with a strong boundary. The perceived boundary strength of the three cases is in line with this interpretation, as the case program in Chain with the weakest (and thus the most permeable) boundary was the one with the most active boundary activity, and the program in Center with the strongest (and the least permeable) boundary was the one with the least boundary activity. Even though the relationship between boundary activities and the perceived boundary strength was not explicitly examined in this study, the empirical findings provide indications that common boundary crossing activities such as linking, information seeking and informing can make the boundary lower, while inactive boundary management may strengthen the boundary and isolate the temporary organization from its parent organization. The findings of the present study do not fully reveal whether the association also applies in the opposite way, i.e. whether a low boundary enables boundary activities and whether a strong boundary inhibits them.

Although the three examined cases demonstrated a very similar division of boundary activity to the four categories, the different types of boundary activities within the categories did not show equally clear patterns across the cases, and some visible differences could be found. In case Center, boundary activities focused on informing activities as well as positioning and negotiating activities, and there were few visible efforts to make the program legitimate and to isolate it from the parent organization. Compared to the other cases, case Bureau indicated a more visible focus on legitimating and committing activities, whereas case Chain demonstrated a larger proportion of enclosing activities. The role and effects of different boundary activity types as well as the significance of the overall level of boundary activity are discussed in more detail further in this chapter when responding to the research question 4.

### Question 3: What are the indicators of successful change program initiation in terms of readiness for change program implementation?

In the current study, the success of the early program activities has been defined by the level of readiness for change program implementation. The

third research question asked what this readiness consists of. Building on the existing literature on organizational change and on the analysis of the three case programs, the results of the study suggest that readiness for implementing a change program includes three main dimensions: a shared intent for change, the resources required for mobilizing change, and a strong enough position for the change program within the organizational context. According to the analysis, each of these main dimensions consists of several elements, which together provide a list of factors that are suggested to form the basis for change program implementation.

The created definition of readiness for change program implementation combines the concept of readiness for change (e.g. Armenakis et al., 1993; Jones et al., 2005) with the lists of success factors of organizational change presented in previous literature (e.g. Covin & Kilmann, 1990; Cunningham & Kempling, 2009; Kotter, 1995). When comparing the concept of readiness for change program implementation with these previous studies on organizational change, some differences or, rather, additions can be identified, largely explained by the change program context of the current study. The biggest contribution of the empirical study to the list of success or readiness factors concerns the inclusion of the autonomy of the change program. A program requires an extensive organization with defined and authorized roles for guiding multiple projects and for coordinating the program entity to deliver the desired changes. The empirical study suggests that the program as a form of organizing change needs to be perceived legitimate, and also the particular program needs to possess both legitimacy and authority to use the resources and to realize the planned changes. The requirement for program autonomy will be discussed in more detail in section 5.2.3.

Some smaller adjustments or additions to the success or readiness factors for change described in earlier literature are also inspired by the present findings. As change programs are large endeavors, they involve structures and procedures whose planning and maintaining requires resources. Thus, the results highlight the need to explicitly commit resources for leading a change program at its different levels, including the program steering group, program owner, program manager, and project managers. The findings also accentuate that it is not enough to initially establish a shared intent for a change program, but the created momentum needs to be actively sustained for several years of time due to the long duration of a change program.

The empirical analysis showed how the three investigated cases differed significantly in the level of success of early program activities, assessed by the identified indicators of readiness for change program implementation.

Case Center demonstrated low readiness, case Bureau moderately high readiness and case Chain a high level of readiness for change program implementation. This perception was consistent with the fact that Center's change program was terminated prematurely, whereas Bureau's and Chain's change programs were able to proceed to the implementation phase.

The findings of the current study contribute to the ongoing discussion on the concept of readiness for change in several ways. Whereas a lot of the earlier research has focused on readiness for change as an individual level psychological state, measured by the employee attitudes and beliefs (e.g. Holt et al., 2007; Jones et al., 2005; Neves, 2009) or as the organization's general capacity for implementing any change (e.g. Judge & Douglas, 2009; Klarner et al., 2008), the current study demonstrates what organization-level readiness for change entails in the context of a particular, significant change effort. The findings suggest that this organization-level readiness consists of the organizational members' shared intent for change, the committed resources for guiding and implementing the change effort, and the existence of a legitimate and authorized temporary organization that is dedicated to delivering the change.

Weiner and his colleagues (2008) conducted an extensive literature review on readiness for change and gave several suggestions for further research on the concept. The present findings are consistent with most of these suggestions. Firstly, Weiner et al. suggested that readiness for change should include both willingness and ability to implement a change effort. The conception of readiness developed in the current study grasps both "technical" abilities and "social" abilities that are required for successful change implementation. The technical (and structural) abilities include the availability of sufficient plans, goals, methods, structures, labor, skills, time, and formal decisions, whereas the social abilities refer to the required commitment, shared understanding, momentum, support, and sense of urgency. Also political aspects are involved, as the forthcoming change, as well as the program as a vehicle to deliver it, needs to appear desirable and legitimate. These observations lend support to the change management authors who emphasize that the "instrumental" or "technical" management of change must be accompanied by change leadership to cope with the human and political side of change (Gill, 2003; Nadler & Tushman, 1990).

Further consistent with the suggestions by Weiner et al. (2008), the current study provides an example of assessing readiness for change as the preparedness to actually implement a particular change effort. Weiner et al. suggested that the most appropriate point of time to measure readiness for change is after the decision to adopt the change has been made, but before

the actual implementation has begun (ibid). The present study provides an example of assessing readiness for change at the end of the initiation and planning stage of a large-scale change program, when the change program is supposed to proceed to implementation.

Providing support for yet another proposition by Weiner et al. (2008), the current study shows how the organization's general capacity to change does not fully determine its success in implementing significant changes. Although the initial capacity or receptivity to change (e.g. Judge & Douglas, 2009) sets the initial conditions, the readiness for change can be, and should be, intentionally created in the early stage of a specific change effort. Indeed, the study suggests that the holistic aim of the early stage of a change program is to build readiness for change implementation in technical, structural, social, and political respects. The observations from case Bureau suggest that even if the organization's general capacity to change is considered fairly low, the organization may still be able to successfully launch large change efforts by paying careful attention to building readiness for change. Correspondingly, the findings propose that an organization with a high general capacity to change still needs to actively create readiness for a particular change effort, for example, by identifying and assigning key resources and by defining the change visions and plans for change implementation.

The findings of the study further contribute to the discussion on readiness for change by showing how readiness may be actively created through boundary activities. Next, the connection between boundary activities and readiness for change program implementation is discussed and the observations are compared to the existing literature.

### Question 4: How are the boundary activities associated with building readiness for change program implementation?

A central effort of this study has been the analysis of the associations between the early boundary activities and the success of the change program initiation, providing a response to the fourth research question. First and foremost, the findings of the study indicate a connection between the amount of boundary activity and the level of success in creating conditions for change implementation. The analysis of the three cases showed how the most successful case program in terms of the readiness for change program implementation (case Chain), was also the one with the most active boundary management. Respectively, the case program that only showed a limited amount of boundary activity (case Center) ultimately failed and was prematurely terminated without significant outcomes.

Previous empirical research has indicated a positive relationship between frequent boundary activity and team or unit success (Ancona, 1990; Ancona & Caldwell, 1992b). The current study proposes a similar association for early stage change programs. This proposition is supported by previous studies that suggest that frequent external activity may be especially important during the early stage of an organization (Ancona & Caldwell, 1990; Gladstein & Caldwell, 1985), since the emerging organization needs to collect external information and build relations to facilitate future interactions. The findings show how case programs are in active interaction with their context, providing support to Johansson et al. (2007), who proposed that the concept of "planned isolation" related to temporary organizations (Lundin & Söderholm, 1995) might not be suitable for change projects and programs.

The present findings further suggest that not only a large amount of boundary activity is required for giving a change program a proper start, but also a balanced set of different types of boundary activities is needed. According to the empirical analysis, the two successful cases in terms of bringing the change programs from initiation to implementation (cases Bureau and Chain) demonstrated a fuller and more informed use of different boundary activity types than the case (Center) that was characterized as a failure. The analysis indicated how the different boundary activity types contribute to readiness for change program implementation in several ways. Boundary activities are utilized, for instance, to create a sense of a shared direction for the program, to legitimize the change effort in the eyes of top management, to seek resources for administrating the program, and to make the parent organization more receptive to change by preparing the recipients to the coming changes. The large number of identified associations between the boundary activity types and the various aspects of readiness for change program implementation indicate that different types of boundary activities have different roles in building change readiness. Consistent with this proposition, Ancona and Caldwell (1992a) found that for product development teams a comprehensive strategy of external activity, including a wide variety of boundary activities, is the only one positively related with long-term performance. The current study suggests a similarly comprehensive set of boundary activities for the managers of change programs.

The study has proposed a great number of mechanisms how the array of boundary activities contributes to establishing and ensuring the managerial, infrastructural, cognitive, and psychological conditions for a significant transformation of an organization. In all, the results support the

view that readiness for change is something that the leaders of a change effort need to actively promote to create a solid ground for change implementation (e.g. Neves, 2009). The three cases demonstrate how program initiation and planning requires much more than just developing action plans. The change program must, for instance, be legitimized and its role in the organization must be clarified and communicated. The parent organization as a target and a client of the resulting change must be prepared for the changes and thus actively involved in change initiation and planning.

Furthermore, the current study demonstrates how the perspective of boundary activities provides a common framework for many different streams of inquiry in the existing literature on organizational change. Previous literature on mobilizing change has discussed mechanisms such as issue selling (Dutton & Duncan, 1987; Dutton et al., 2001), participatory approaches (Lines, 2004), momentum building (Jansen, 2004), change communication (Allen et al., 2007; Frahm & Brown, 2007; Rafferty & Restubog, 2010; Russ, 2008), decreasing resistance to change (Ford et al., 2002; Mealia, 1978) and gaining employee acceptance for change (Brunton & Matheny, 2009), all of which concern collaboration between the change advocates and the change targets. The concept of boundary management provides a common umbrella for these actions, and the outcome of these actions may be conceptualized as readiness for change implementation.

By highlighting the change program's external activity, the propositions discussed above do not aim to downplay the importance of a change program's internal operations. The processes and actions that occur within the team boundary have many purposes, such as forming and enforcing team norms and regulating decision making within the team (e.g. Choi, 2002). Previous research has suggested that the team's internal activities may contribute to the team's boundary: as the internal activities promote team cohesion, boundaries naturally emerge between the team and its environment (Drach-Zahavy & Somech, 2010; Yan & Louis, 1999). Previous research has also noted how the internal and external operations of a team are interconnected and sometimes even difficult to distinguish from each other (Choi, 2002; Drach-Zahavy & Somech, 2010). Well-working internal processes have been described as a requirement for effective external activity, as they provide a basis for interpreting, adapting and integrating the inputs from outside sources to support the team in its task (Ancona & Caldwell, 1990). It is apparent also in the current findings that a change program's internal activities are in a central role in promoting many of the dimensions of readiness for change program implementation. For example, the appointed key managers of a program typically are by their role

description responsible for further clarifying the program goals and preparing plans for how to reach them. Presumably, much of this important work takes place within the boundaries of the program core team, indicating that the program's internal activities create a basis and a framework for conducting the appropriate boundary activities.

Next, the discussion is turned to the contextual factors that may explain the identified differences among the three cases.

### Question 5: Which contextual factors may impact the use of boundary activities in building readiness for change program implementation?

The last research question addressed contextual factors that impact the use of boundary activities during the early program stage in creating readiness for change program implementation. Based on the analysis, four central factors were brought up, each of them potentially explaining some of the observed key differences between the three cases. Next, the findings related to each of these factors are discussed in light of the existing literature.

The first identified factor concerns *the key managers of the change programs*. This study has focused on boundary activities, while the actors behind those activities have not received as much attention. Still, the existence (or the lack) of skilled, committed, and authorized managers was identified as a central factor behind the differences between the three cases. In the successful cases Bureau and Chain, the key managers of the change programs actively performed boundary activities in order to achieve the required readiness to implement the changes. The key managers also guided and encouraged others in the program core teams to perform boundary activities, targeted at different stakeholder groups within the parent organizations. The third case, Center, differed significantly from the other two cases, as there appeared to be a lack of strong and committed managers who would actively lead the program. The analysis suggests this to be a central factor in explaining the low number of boundary activities and consequently the low readiness for change implementation in Center. In conclusion, the performed boundary activities (or the lack of them) seem to reflect the capabilities and aspirations of the programs' central managers. This observation is supported by Choi (2002), who proposes that in the early stage of team development, when the team does not yet have a clear structure and boundary, a determined leadership style increases boundary activity. Ancona and Caldwell (1988) also note that individual characteristics such as skills and experiences affect whether people actively take on boundary activities. These observations direct attention to the selection of the key managers for new programs.

Previous research has highlighted the need for skilled, charismatic, and enthusiastic change managers who must demonstrate both managerial and leadership capabilities (e.g. Fernandez & Rainey, 2006; Gill, 2003; Lok et al., 2005; Nadler & Tushman, 1990). The early theorists of temporary organizations (Lundin & Söderholm, 1995) have similarly emphasized the importance of an "entrepreneur" who initiates and provides an impetus for the emergence of a temporary organization. Regarding large-scale change programs, a single manager typically cannot initiate, plan, and guide the entire change effort, but several key managers are required, each with a specific role. Program management as an approach highlights the division of managerial responsibilities at the different levels of the program (Office of Government Commerce, 2007; Project Management Institute, 2006). The program owner, supported by the other program steering group members, promotes the change in the organization. The project managers manage their own projects as a part of the program entity, according to the objectives set at the program level. Although these roles are also found in traditional project organizations, the program management approach brings a new managerial level and the related role of the program manager, which includes many important responsibilities.

Although the internal coordination of the program is undeniably a program manager's central task, the current study suggests that the program manager also needs to actively coordinate and manage the program's external relations. The present findings provide support for Partington, Pellegrinelli and Young (2005) who suggest that program management competence is not just an extension of project management competence but requires a wide set of skills and attributes, including interpersonal and political skills, creativity, credibility, understanding of the organizational dynamics and context, inspirational leadership, and more. Partington et al. (ibid.) note that although these skills may also be needed in single projects, they are always relevant in leading programs, in which context they need to be greater, deeper, and subtler. Drawing on the present findings, an ideal program manager is simultaneously an ambassador, salesman, negotiator, coordinator, change leader, and motivator.

Previous research has highlighted the role of the team leader in performing the team's boundary activities (Ancona, 1990; Druskat & Wheeler, 2003). The current study indicates that although the key managers definitely have an important role in guiding and leading emerging programs, efforts of other core program team members are also needed. To give an example, in case Bureau the core program team was designed to consist of representatives of each main organizational division,

and these representatives served as important linkages between the program and their home units. The findings suggest that since change programs are significant endeavors that are in many ways connected with their environment, boundary activities cannot be left at the responsibility of just one or two key program managers, but all key individuals need to contribute. This proposition is supported by Marrone et al. (2007), who suggest that boundary spanning should be built into the responsibilities of all team members to maximize external activity and to mitigate the personal overload. Still, the present study proposes that the ability to initiate the right kinds of boundary activities and to coordinate these activities performed by the different team members remains as a competence requirement specifically concerning the managers of change programs.

*The scope and complexity of the change programs* was identified as another factor that may explain many of the differences across the three investigated cases. Although programs are often described as complex endeavors (Partington et al., 2005; Pellegrinelli, 1997; Thiry, 2002), the cases demonstrate how programs may differ in complexity, reflecting both the scope of the intended change and the composition of the program organization established to deliver the change. In case Center, the scope of the desired change was extremely wide, but the established program organization and the level of effort put into program initiation did not seem to be in balance with the challenge. The case program in Chain was similarly highly complex and aimed at major changes in many features of the organization. To match this complexity, the established program organization in Chain was the largest and the most complex of the three cases. Bureau's change program appeared as the most clearly limited and also the least complex.

Aaron Shenhar and Dov Dvir, together with their colleagues, have actively promoted a contingency approach for temporary organizations, arguing that the characteristics of a project or a program affect the choice of an appropriate management approach (Shenhar & Dvir, 1996; Shenhar, 2001; Shenhar et al., 2002). The scope and complexity of a temporary organization is among the most often discussed contingency factors. Following the ideas by Shenhar and Dvir, Dietrich (2007) studied the effects of program complexity, measured by the number of project teams included in the program, their geographic dispersion, interdependency, and the number of participating organizations. Dietrich found that the level of complexity affects the choice of a coordination strategy for managing the program work. The current study proposes that the complexity of the

program also has an effect on the program's external relations and on how they should be handled.

Choi (2002) proposes that teams that deal with complex tasks and involve external dependencies have a greater need for external activities. The current study provides support for these propositions, indicating that high program complexity increases the need for boundary activities. Complex large-scale programs that aim at wide changes in the parent organization and include a large number of projects to deliver those changes tend to have numerous linkages and interdependencies with the parent organization. The need to manage these relations with different intra-organizational stakeholders may contribute to the large amount of boundary activity that is needed to achieve the required level of readiness for change program implementation. This proposition is supported by the findings in case Chain where the case program was highly complex and aimed at large scale changes, and where both the most active boundary management and the highest readiness for change program implementation were observed. In Center's case, the highly complex change program showed fairly passive boundary management, and the program failed to demonstrate the required readiness to proceed to implementation. Bureau's change program appeared as less complex, which might indicate that even a somewhat smaller amount of boundary activities than in case Chain was enough to create the required readiness for change program implementation.

*The initial maturity of the parent organization in terms of initiating and implementing large-scale change* was recognized as the third relevant factor behind the findings. Previous research has suggested that some organizations are more receptive to change than others. The overall change capacity of an organization has been defined as its ability to develop and implement appropriate organizational changes, which consists of several aspects, such as the availability of human capabilities and the characteristics of organizational structure, processes, systems, and culture (Judge & Douglas, 2009; Klarner et al., 2008).

The current study has assessed readiness for change program implementation in three case organizations at the end of the program initiation and planning stage. The observations indicate that the starting level, in terms of the overall change capacity or the initial readiness for change, differed between the cases. Even though none of the three case organizations could be described as experienced or mature in terms of large change programs, there were still recognizable differences. In case Center, the organizational maturity in terms of change projects, let alone change programs, appeared poor and the conditions for initiating a change program seemed unfavorable, suggesting that maybe the challenge of

achieving the required level of readiness was simply too large. Regarding the other cases, Bureau may be characterized as a bureaucratic public sector organization with little experience on change programs, which may explain why so many legitimating and committing efforts and other boundary activities had to be performed to establish readiness for change program implementation. In comparison, case Chain showed a somewhat more mature context in terms of internal change projects and programs, suggesting that the initial readiness for change was also higher. This might also explain why there were not many legitimating and committing activities in Chain, but the majority of boundary activities had other intents.

To conclude the observations, the findings suggest that the initial maturity of the parent organization in terms of initiating and implementing change programs might affect the amount of overall boundary activity performed at the change program's boundaries, the pattern of boundary activity in terms of the emphasis of different activity types, and the level of challenge in reaching the required readiness for change program implementation. The observations provide support for Thiry (2004), who suggests that the program team needs to take into account the parent organization's responsiveness to change. The current study proposes that especially in contexts that lack previous experience from change programs or other significant change efforts, close attention needs to be paid to establishing a solid ground for the program through active boundary management.

The fourth central contextual factor that emerged during the analysis was *the origin of the programs*, referring both to the level in the organizational hierarchy where the program idea originated and the early decision making process of how the program activities were formally initiated. Previous literature describes how the impetus and momentum for change may follow a top-down or a bottom-up process, or a combination of the two (Hope-Hailey & Balogun, 2002). The three investigated cases appeared to differ in this aspect.

The change program in case Chain was initiated by the top managers and the related activities followed a top-down process. The program was from early on seen as a strategic priority, which was reflected in the composition of the program: key top managers were appointed in formal program management positions as development area directors and steering group members. Combined with Chain's experience and maturity in internal projects and their management, this may explain why in Chain's case there was no need for extensive legitimating and committing activities targeted at the top management. The gap between the organization's initial readiness for change and the required readiness for implementing the particular

change program might not have been that large, at least regarding some dimensions of readiness. For instance, at least initial top management support for change was ensured by the top-down initiation process.

The program initiation in the other two cases, Center and Bureau, seemed to follow a somewhat different process, originating at the middle management level. The findings of the present study lend support for the studies on the middle managers' role, showing how middle managers serve as important linkages between the strategic intents of the top management and the daily reality of the employees by interpreting and communicating change agendas (e.g. Balogun, 2003). The findings from Center and Bureau also demonstrate how middle managers may actually initiate large-scale change programs, based on the proposed scenarios of the organization's future and the pronounced strategies to address them.

The present findings provide support for the suggestion that the relative power of the initiator of change has an effect on the appropriate change style (Hope-Hailey & Balogun, 2002). The findings also confirm that top management acceptance for a change endeavor needs to be actively achieved (Stjernberg & Philips, 1993), especially if the change has been initiated at the lower organizational levels or by a single top manager without the collective commitment of the top management team. Since programs are extensive endeavors that require significant investments and aim at substantial organizational impact, top management approval and support for the change program either must exist or needs to be actively gained by the frequent boundary activities of the early promoters of the change program. This was demonstrated in case Bureau, where the early advocates of the program convinced the top management to support the initiative through active legitimating and committing efforts.

Case Center further shows how top management acceptance needs to be constantly maintained. In Center, top management had made the formal decision to approve program initiation, but they still were not convinced of the program's ability to deliver the desired changes. Some top managers consistently questioned the suitability of the program management approach, and many had doubts about the viability of that particular change program. The importance of gaining legitimacy and sufficient autonomy for a change program is discussed in more detail in section 5.2.3.

To conclude the discussion, the findings in the three cases support previous research on the contextuality of change (e.g. Pettigrew et al., 2001), showing how the conditions for the transformation may differ in terms of the characteristics of the parent organization, the change endeavor in question, and the people promoting the change initiative. In line with many recent project and program management studies (e.g. Artto et al.,

2009; Blomquist & Müller, 2006; Dietrich, 2007), the findings suggest that the contextual characteristics of a program have a significant effect on how it is and should be managed. More specifically, the findings provide support for the contingency approach to boundary activities (Ancona, 1990; Choi, 2002; Drach-Zahavy & Somech, 2010), indicating that the situation-specific features affect the type and amount of boundary activity that is needed for giving a change program a proper start.

## 5.2 Theoretical contribution

In this section, the theoretical contribution of the dissertation is discussed in terms of four themes that emerged from the findings. First, the nature of change programs as a specific form of temporary organizations is discussed, focusing on the program's boundary with its parent organization. After that, program management as an approach to implement organizational change is examined. Then, the program's search for autonomy is elaborated. Finally, a holistic view is taken on the findings and the process of program initiation is discussed in terms of virtuous and vacuous paths of the early program stage that may determine the course of the whole program.

### 5.2.1 Change programs as organizations within organizations

The current study makes a contribution to the growing stream of project management research that examines projects and programs as "organizations in organizations" (Shenhar & Dvir, 1996). The results of the study shed light on the special nature of change programs as a distinct form of temporary organizations, established within fairly permanent parent organizations. The study adds to the discussion on the open system nature (e.g. Hellström & Wikström, 2005; Morris, 1988) and contextuality of temporary organizations (e.g. Engwall, 2003; Jensen et al., 2006) by turning attention to the temporary organization's boundaries.

The findings of the study increase understanding of the logic of how boundaries of a temporary organization are formed and how they evolve. Several authors have suggested that internal change projects and programs have especially permeable boundaries and particularly active interaction with the surrounding organization (Atkinson et al., 2006; Crawford & Pollack, 2004; Ekstedt et al., 1999). The current study provides empirical evidence of this permeability and interaction by revealing several types of boundary activities that cross the change program's boundary and link the program to its parent organization. The findings suggest that the interaction between those in charge of the temporary organization and those representing the parent organization has an effect on where the boundary will lie and how permeable it will be. Furthermore, the study

demonstrates how change programs as temporary organizations may differ in terms of the level of boundary activity.

Further related to the contextual interplay, previous research has acknowledged how temporary organizations are both enabled and inhibited by their parent organizations (e.g. Jensen et al., 2006; Manning, 2008; Modig, 2007; Sydow et al., 2004). The present study provides evidence of these interactions in the context of change programs. The parent organization enables the birth of the change program by providing it with the initial task, resources, and authority. The study depicts how the representatives of the change program need to be active in further clarifying its task, gaining additional resources, and constantly legitimizing the program's existence. For this the change program requires input from the parent organization, but the program organization also needs to protect itself from the constraints and other potentially negative forces within the wider organization.

The present findings demonstrate how the parent organization may inhibit the emerging program. The case studies show how some groups or individuals within the organization may perceive the change program as a threat and thus aim to restrict its actions. The findings also indicate that the resource load involved in running the daily processes and other projects may inhibit or hold up the change program from receiving the resources that it needs for making the desired progress. Lending support to Løvendahl (1995), who argued that a temporary organization's embeddedness in its parent organization can have significant effects on its managerial challenges, the current study maintains how these interactions should be actively guided by those in charge of the temporary organization. To provide an example, the advocates of emerging change programs must be active in negotiating about the resources. Similarly, the program's advocates need to establish and maintain communication channels to the relevant decision-making forums of the parent organization. In all, the findings of the study suggest that active and careful boundary management is critical to the success of a temporary organization.

The findings also add to the discussion on the dilemma of integration vs. isolation (or attachment vs. detachment) of temporary organizations (e.g. Johansson et al., 2007; Sydow et al., 2004). Previous research has suggested that a project or a program is decoupled from its environment during its initiation and recoupled in the end to disseminate and integrate its results (Johansson et al., 2007; Lundin & Söderholm, 1995). The present findings describe mechanisms that can be utilized to build and strengthen the program's boundaries and to isolate it from its environment. Instead of simply decoupling the program from the parent organization during

program initiation and recoupling it at the end of the program, the findings suggest that integration and isolation coexist. The study proposes that there is a constant search for balance between integration – adapting to the structures, norms, and rules of the parent organization – and isolation – decoupling the program from its environment to protect its progress. It appears that the optimal level of balance may change as the program makes progress. This suggests that it is a central challenge (and correspondingly a critical capability) for the program's managers to find and maintain the optimal level of integration (vs. isolation) towards the program's environment in the changing situations.

### 5.2.2 Program management in organizing and leading large-scale change

Previous literature on organizational change has not clearly recognized the role of temporary organizations in delivering the change. Although seldom discussed within the field of organizational change, project management provides a systematic methodology for dividing complex change efforts into distinct phases and manageable components, organizing the efforts, and formally committing top management in the roles of the project owners and steering group members. The emergence of the program management approach and the related literature has brought the project management discipline closer to the disciplines of organizational change and strategic management. The current study has made an effort to combine the view of the project management discipline and the literature on organizational change to shed light on how complex organizational changes can be delivered by a specific form of temporary organizations, change programs.

While programs have great potential to deliver large-scale organizational change (Pellegrinelli, 1997; Vereecke et al., 2003), the successful launch and delivery of a program requires considerable effort. Programs have a number of characteristics that set them apart from projects, and program management extends beyond the scope of traditional project management. The standards for program management (Office of Government Commerce, 2007; Project Management Institute, 2006) suggest certain management processes or themes to be emphasized in programs, including program governance, stakeholder management, and benefits management. These processes or themes are relevant already during the early stage of a program and they may be linked to the findings of the study.

Firstly, related to program governance, complex multi-project programs require more structure and administration than single projects. Coming up with an appropriate program structure and establishing the related governance framework requires considerable effort. The three investigated cases showed how program governance may not be planned just among the

key program actors, but the identification of the appropriate roles, resources and management practices requires collaboration with the parent organization's management. Secondly, related to stakeholder management, change programs by nature seek significant change in their organizational environment and thus concern a wide audience of stakeholders whose input and participation is required in the early program activities. The external activities of the key program actors that have been reported in the current study as boundary activities may be interpreted as early stakeholder management actions.

Thirdly, related to benefits management, one of the key tasks in program initiation is to translate the program's initial high-level vision into more concrete objectives and tasks. The present findings confirm how program initiation requires capability to persuade the wider organization to participate in elaborating the vision and turning it into implementable actions. Some uncertainty typically remains after the early planning efforts, as the environment of a program is expected to evolve during program implementation. Thus, plans may need to be kept open-ended and refined upon need. The present findings suggest that this inherent feature of programs may prove challenging for experienced project managers, as they may be accustomed to working with clearly defined objectives and project scopes. This proposes that great project managers may not necessarily make great program managers, but program management requires a somewhat different set of capabilities (cf. Partington et al., 2005).

The above discussed program management themes or processes of program governance, stakeholder management, and benefits management have not been sufficiently covered in the traditional project management literature, which has mostly focused on a single project's internal management and on delivering the project's pre-defined results within the given scope, budget, and schedule. To date, there have been a limited number of published accounts of the empirical experiences related to programs. The current study has provided much needed research evidence on change programs and their management, especially illuminating the interplay between an emerging program and its parent organization. The various boundary activities revealed by the study provide concrete examples of how change is being prepared, illustrating how the program organization is constructed, how stakeholders are engaged in early program activities, and how the desired benefits are defined in collaboration with the various intra-organizational stakeholders. The findings also illuminate different paths that program initiation may follow, depending on the context-specific conditions.

### 5.2.3 Program autonomy as a central enabler of change

One of the key findings of the study relates to the requirement for program autonomy. During the empirical analysis, the concept of program autonomy emerged from the research data and was included as one of three main dimensions of readiness for change program implementation. This autonomy was analyzed to consist of two aspects: the program's legitimate position in the organization, and the program actors' authority to use the resources and realize the planned changes.

During the past decade, the autonomy of projects and other temporary organizations has attracted growing attention among the scholars of the field. Previous research has described project autonomy (or a project team's autonomy) as its freedom to evolve without constant intervention by the parent organization (Lampel & Jha, 2004), and as the project's authority to set its own goals, define its own identity and boundaries, its resources to complement its task and its freedom to organize the behavior of its members (Gemünden et al., 2005). Project autonomy has also been depicted as a contextual factor that must be taken into account in defining a project's strategy (Artto, Kujala et al., 2008; Artto, Martinsuo et al., 2008).

Recent studies on project autonomy by Martinsuo and her colleagues suggest that project autonomy appears in constant interplay with the surrounding stakeholder environment, showing how the parent organization enables and constrains project autonomy (Martinsuo & Lehtonen, 2009) and how the project manager may have an active role in shaping the project's autonomy by regulating external integration (Martinsuo, Aaltonen, & Lehtonen, 2010). Consistent with this view, the current study proposes that the key managers of an emerging program must actively promote program autonomy in cooperation with the parent organization's representatives.

While previous studies on project autonomy have provided inconclusive evidence of the role of project autonomy in project success (Gemünden et al., 2005; Hoegl & Parboteeah, 2006), the current study proposes autonomy to be critical for the success of change programs in terms of creating readiness for program implementation. This proposition is supported by recent research that has suggested autonomy to be especially relevant in innovative, novel, and complex projects (cf. Martinsuo & Lehtonen, 2009). The present study suggests that program autonomy does not readily exist but it must be actively produced, and the findings provide empirical evidence of mechanisms for promoting autonomy during change program initiation.

Based on the present findings, sufficient program autonomy means that the program has the required authority to act, to use resources, and to

realize the planned changes. As another element of autonomy, the program needs to appear legitimate. *Legitimacy* may be defined as the perception or assumption that the actions of an organization are desirable, proper, or appropriate in the given social system (Suchman, 1995). Although the change as such may aim at sustaining or improving the parent organization's legitimacy (e.g. DiMaggio & Powell, 1983; Erakovic & Powell, 2006), the program that is established to achieve the change also needs to be legitimated within the parent organization. Both the change itself and the program as a vehicle to deliver it should appear desirable and justified.

Whereas Lundin and Söderholm (1995) proposed that the task legitimates the temporary organization, the current findings indicate that active efforts are required on the part of the key actors to make the temporary organization legitimate during its emergence, at least in the case of change programs that aim at organizational transformation. Further complicating the issue, the change program's task may not be perceived as legitimate by all the members of the organization. Change programs typically aim at increasing organizational efficiency and regularly involve staff reduction, as well as restructuring or relocating work processes. Thus, active legitimating efforts may be required to justify the need for change.

The authority that comes with the decision to establish a program may help legitimize the change effort. The program management approach provides a systematic methodology for organizing change, and makes the effort formal and visible. However, the findings of the study show how the concept of programs may be unfamiliar and unclear to the organizational members, especially in organizations with low maturity in terms of organizational change. For top managers it may be difficult to commit resources for a program whose goals and contents are not yet totally clear, and for the people appointed in the program it may be difficult to start the work if the vision of the future state of the organization is not fully clear. The current study proposes that if a program is established in such an environment, the concepts of programs and program management and also the related work approaches need to be clarified and legitimated through active communicating and selling efforts.

The findings of the current study demonstrate how the key advocates of an emerging change program may engage in different kinds of legitimating and committing activities to make the change appear acceptable and desirable and to commit the stakeholders to the effort. Literature on change management traditionally highlights how the need for change must be communicated and how the need should be accompanied with a sense of urgency. To justify the change, environmental threats that endanger the survival of the organization may be described and the evolving environment

may even be portrayed as more frightening and hostile than it really is, to have a common "enemy outside" (Diefenbach, 2007). Consistent with previous studies (Ginsberg & Abrahamson, 1991; Kaarst-Brown, 1999; Saxton, 1995), the present findings also include examples of how the authority of external consultants may be utilized in creating legitimacy for a change effort.

The current study complements the findings of previous literature by showing how organizational members need to be convinced of the program as the right approach to deliver the desired change. The three investigated cases indicate that this may require considerable sensemaking efforts. These efforts should be guided by the key program managers who must simultaneously assure others of their personal abilities in leading the change program. Consistent with this proposition, Tornikoski and Newbert (2007) showed how entrepreneurs of emerging firms strategically manipulate their environment to believe that they are credible and trustworthy, with the aim to gain access to resources. The present findings indicate that similar efforts are required in establishing temporary organizations within permanent organizations. The findings specifically suggest that if a program has originated at the lower levels of the organization, the early legitimating efforts should be targeted at top managers, after which the gained top management approval may be utilized in enrolling others to the change cause.

Since programs tend to be long in duration and the initiation and planning stage alone may take several years, it is not enough to initially establish legitimacy, but it needs to be actively maintained (Suchman, 1995). The findings from the three cases show how quick wins (Gill, 2003; Kotter, 1995; Marks, 2007) were introduced, pilot implementations (Spencer & Sofer, 1964; Turner, 2005) were arranged and temporal milestones (Gersick, 1991; Stoddard & Jarvenpaa, 1995) were utilized in the two successful case programs. The related intermediary outcomes of the program were frequently utilized in boundary activities that communicated the advances throughout the organization. This contributed to sustaining the momentum and maintaining the legitimacy of the change program.

Regarding the identified boundary activity types, it is not just the legitimating and committing activities that contribute to the change program's autonomy. Several other boundary activity types add to the authority of the program which is the other key element in program autonomy. Previous research has highlighted how the guiding team of organizational change must be powerful enough (e.g. Kotter, 1995). The three examined cases showed how the authority of the program may be constructed in different ways. Various kinds of positioning and negotiating

activities can be utilized in defining the program's position and authority in relation to the line organization. Resources for program work may be negotiated with the parent organization's representatives through resource seeking activities. The program may also be connected to the authority structure of the parent organization through linking activities. A change program may readily possess authority via its managers' high-ranking positions in the line organization (i.e. position power, cf. Lines, 2007), or the managers may acquire authority by demonstrating charismatic leadership and expertise in their activities (i.e. expert power, cf. Lines 2007). Isolative activities may be utilized to protect the emerging program from restrictive external influences, maintaining program autonomy.

The variety of activities related to promoting autonomy for a change program provide support for previous research that highlights the political nature of projects and programs, and suggests that their managers must skillfully utilize the organizational politics for the project's or program's benefit (e.g. Pinto, 2000). By emphasizing the change program's pursuit of autonomy, the current study provides support for the studies that underline the political nature of organizational change (e.g. Buchanan et al., 2005; Kaarst-Brown, 1999; Lines, 2007) and the inherently political nature of boundary management (Ancona & Caldwell, 1990; Balogun et al., 2005; Perry & Angle, 1979).

The discussion above indicates that while program autonomy is identified as a separate dimension of readiness for change program implementation, it appears to be in many ways connected to the other two dimensions of readiness, namely the shared intent for change and the required resources for change implementation. The program's autonomy may be strengthened by the existence of powerful program leaders, credible plans, and receptive environment. To conclude the discussion, the findings of the current study propose that program autonomy needs to be actively enabled and maintained during the early stage of a change program. The autonomy of a change program does not mean that the program is fully independent of its environment and exists in isolation, but rather it means that the program has a legitimate position in the parent organization and that the program is powerful enough to change the prevailing order of things. As described in this section, various types of boundary activities appear to have a central role in promoting program autonomy.

### 5.2.4 Virtuous and vacuous paths in change program initiation

The study suggests that the early program activities may be regarded as building readiness for change program implementation through active boundary management. In this section, an attempt is made to summarize the findings by adopting the concepts of virtuous and vacuous paths

presented by Ericksen and Dyer (2004) in the context of early project team development. Ericksen and Dyer examined early events in project teams and their effects on team development and performance. They found that the mobilization and launch activities of high performing teams lead the teams into a virtuous path, contributing positively to team performance. They further showed how low performing teams may end up on a vacuous path where the lack of competencies and resources lead to frustration and failure. In this section, the idea of vacuous and virtuous paths is applied to change program initiation. The ideas presented by Ericksen and Dyer are complemented with the findings of the current study concerning boundary activities and readiness for change program implementation.

The program initiation in case Center provides an example of a vacuous path. The findings show how program initiation in Center was characterized by discontinuity, slow progress, and lack of momentum. The first discontinuity took place at the very beginning of the program, as it proved difficult to find a program manager for the program. Although program initiation was formally approved by Center's top management, top managers did not seem fully convinced of the need for the program. They were expecting the appointed program personnel to assure them of the viability of the program, by coming up with tangible objectives and credible plans for achieving them. The appointed program core team did not feel equipped with a clear enough task nor requisite resources. They were waiting for the input from the top managers to get the program fully started.

The fairly inactive boundary activity in case Center focused mainly on the joint sensemaking of what the program was about and how it should be linked to the existing organizational structures. There were very few legitimating and committing efforts that would persuade the top management or other organizational members to engage in the program. As time passed, the key members of the program organization got frustrated due to the continuous lack of feedback and support, which discouraged them and further decreased their motivation for promoting the program.

Due to the lack of boundary crossing activities, Center's program and its modest progress remained largely invisible to the peripheral program participants, many of whom even wondered whether the program was still active. Simultaneously, top managers and other representatives of the parent organization received proof for their initial suspicion towards the program's capability of delivering change, adding to their reluctance to commit to the program activities.

Center's program seemed paralyzed in front of the challenges and never obtained a strong enough position to serve as a viable vehicle for large scale

change. The program appeared to be driven on a vacuous path of accumulating confusion and inactivity (Ericksen & Dyer, 2004). Due to the lack of committed managers and other resources, the continued lack of a shared vision and the program's inability to establish a strong enough position in the organization, Center's program was prematurely terminated and largely considered a failure.

In line with Ericksen and Dyer (2004), who proposed that a team may be led to a vacuous path due to the lack of initial key resources in terms of a clear task, ample time and adequate skills, unfavorable contextual conditions may provide an explanation why Center's program could not establish a solid base for change. Following the idea of a vicious circle, the lack of boundary activity in Center's case can be interpreted as both a cause and a symptom of the poor progress of program initiation. The findings provide support for previous research on team development (Ancona & Caldwell, 1992a; Ericksen & Dyer, 2004) by showing that during the early program stage, it is not enough for the program's key managers to concentrate on problem solving and planning. The managers also need to build a solid base for the program by involving different stakeholders through a skillful use of boundary activities. Awareness of the program must be built and the program must be legitimized, which builds shared commitment to implement the program. Similarly, visible support from top management and other central stakeholder groups must be ensured.

The other two cases, Bureau and Chain, provide examples of successful program initiation and illustrate the related virtuous path (Ericksen & Dyer, 2004). Lending support for the proposition by Choi (2002), on the virtuous path the internal and external activities of the program support each other and play complementary roles in taking the program closer to its goals. The two cases show how successful program initiation may originate at the top management level, which instantly provides initial legitimacy, or alternatively at the lower organizational levels, in which case the program needs committed advocates whose early boundary activities engage the top managers in the program.

In successful program initiation, the early mobilization of the program focuses on establishing initial legitimacy for the program, creating a shared intent, and ensuring the resources required for taking program planning further. Informing activities are also needed to communicate the program launch decision across the parent organization. Legitimating and committing activities continue to engage the central stakeholder groups in the program. Additionally, linking activities create purposeful connections with the parent organization. When the program has established or ensured

a legitimate position, a shared intent regarding the goals, and initial resources, more detailed planning may begin.

In successful change program initiation, after the initial basis has been established and program planning begins, information seeking activities are conducted to gather the required input for planning. Informing activities and task coordinating activities are simultaneously performed to communicate the program's status to the stakeholders and to coordinate the daily work across the program's boundaries. Also, isolative activities of guarding and enclosing are performed upon need to skillfully protect the emerging program from the harmful external influences, thus establishing autonomy for the program. As the program proceeds, early achievements such as results from pilot implementations and other quick wins are communicated to the stakeholders. They further legitimate the change effort and sustain the momentum and pace of the program.

On the above described virtuous path of program initiation, the initial resources of an emerging program are utilized in performing boundary activities, which support the further establishment of readiness for change program implementation. In line with previous research (Akkermans & van Helden, 2002), along the virtuous path the different elements of readiness for change start to reinforce each other. The current study proposes that with the help of skilled and balanced boundary activity, early program activities result in a shared intent for the change program's goals, content and structure, committed resources across the organization to implement the program, and a requisite autonomy for the program to deliver the changes.

## 5.3 Evaluation of the study

This section provides an assessment of the study in terms of validity and reliability. The generalizability of the findings is discussed and the limitations of the study are examined.

Research needs to demonstrate rigor in order to have value and utility (Morse, Barrett, Mayan, Olson, & Spiers, 2002). The evaluation of qualitative research is not a straightforward task. There has been active debate about whether the criteria traditionally used in quantitatively-oriented research, those of validity and reliability, are appropriate for evaluating qualitative research (Miles & Huberman, 1994; Morse et al., 2002; Seale, 1999), and alternative criteria specifically designed for assessing the trustworthiness of qualitative research have been suggested (e.g. Lincoln & Guba, 1985). On the other hand, the prevailing criteria of reliability and validity have been described to remain appropriate and relevant also within the qualitative paradigm (Morse et al., 2002; Yin,

1994), as long as the nature of qualitative research is acknowledged in applying the criteria and in designing the research methods. Following this proposition, the criteria of validity and reliability are utilized to evaluate the trustworthiness and utility of the current study. The efforts taken to improve the validity and reliability are also discussed.

The validity of the study is examined in terms of construct validity, internal validity, and external validity. Firstly, *construct validity* refers to the quality of the operationalization of the investigated concepts, addressing the evidence that the theoretical paradigm corresponds to observation. To strengthen construct validity, the author of the study has aimed to establish a clear chain of evidence from the initial research questions to the conclusions (Yin, 1994). Furthermore, construct validity has been strengthened by the triangulation of data sources (Eisenhardt, 1989; Yin, 1994) in terms of multiple interviewees and the complementary research material (see section 3.4). Following Meyer (2001), construct validity has also been addressed by including multiple cases in examination and studying them (when feasible) with a longitudinal approach. The longitudinal multiple-case approach has allowed the author to the test the construct measures over time and in different contexts, which is assumed to have produced more precise definitions of the central constructs (ibid.).

*Internal validity* refers to the "truthfulness" of the qualitative research findings in terms of whether they provide a credible interpretation of the data. Internal validity specifically addresses the logical reasoning of research. To strengthen internal validity, emphasis has been put into making the research process transparent to the readers. The methods of data gathering and analysis have been defined in detail in chapter 3, and throughout the thesis systematic and in-depth approaches have been used in describing the author's reasoning. The frequent use of direct quotes from the interviews aims to provide the readers with additional opportunities to evaluate the reasoning. Moreover, additional data has been attached in the Appendices to provide further evidence on how the empirical observations have been linked with the conclusions.

Following the suggestions by previous literature (e.g. Lincoln & Guba, 1985), "member checks" have also been employed, referring to the informants' review of the case study reports. The contact persons of the case organizations were provided with the opportunity to review the case descriptions included in section 4.1, and minor modifications were made based on their comments. The preliminary findings have also been presented and discussed in several workshops and seminars with the representatives of the case organizations and other program management practitioners. Despite these efforts, the study involves potential concerns of

internal validity, especially regarding the proposed associations between the constructs of boundary activities and readiness for change program implementation, as well as the proposed effects of the identified contextual factors. While the longitudinal approach has supported the identification of cause and effect (Meyer, 2001), further research is required to validate the proposed associations.

*External validity* refers to the degree the findings and conclusions of the study can be transferred or have applicability in other contexts. In qualitative research, the method of such generalization is analytical or theoretical instead of statistical (Dubois & Gadde, 2002; Yin, 1994). Although the basic assumption behind the current study is that change programs are highly contextual, the results are still believed to have relevance in other contexts. In the present study, the use of three cases instead of just a single case study is assumed to strengthen external validity (Eisenhardt, 1989; Yin, 1994). The main findings of the study are expected to apply to other similar organizations facing similar challenges to mobilize change programs. The extent to which similar observations apply to organizations that are more mature in terms of mobilizing change programs requires more investigation.

The abductive case study approach, where existing, previously reported concepts have been adopted and accommodated in the study, and where support for the empirical findings has been actively sought from previous studies, may improve the generalizability of the results. To support the assessment of generalizability, considerable emphasis has been put to describing the sampling criteria, each selected case and its context in detail throughout the research process, within the limits set by the anonymity of the cases. Still, in line with Meyer (2001), it is largely left to the reader to judge the applicability of the research in other contexts.

*Reliability* means that if the study was replicated in the same (or similar) context, its findings would be repeated. To improve reliability in the present study, the research approach, including case selection, data collection, and analysis methodology, has been made transparent to the reader by detailed description (Yin, 1994). Although the anonymity of the studied cases may limit the reader's ability to assess the findings, the confidential nature of the research has enabled the informants to engage in more open discussion of the challenges related to change initiation, presumably improving the reliability of the findings. The abductive approach of the current study may pose challenges for its replicability, since the research framework has evolved during the research process in the interplay between empirical findings and existing theories. Although all the intermediary results and conclusions are not presented to the reader, the interview outlines utilized

in different rounds of data collection included in Appendix 1 as well as the coding framework in Appendix 2 characterize this development.

Finally, *limitations* of the study are examined. The key limitations concerning the research methodology were already discussed in chapter 3. Despite the described efforts to address them, potential challenges still remain regarding the chosen methodology. First of all, the analysis is mainly based on interview data. The ability of such data to fully reveal the nature of daily boundary activities may be questioned. The additional challenges concerning the retrospective nature of most of the interview data were also described in section 3.4. Indeed, it has been suggested that boundary activities would be studied best by observing the day-to-day behavior of the boundary spanners (Aldrich & Herker, 1977). Following this suggestion, some earlier studies on boundary activities have complemented interview data by direct observation or by asking the actors to keep logs of their daily behavior (e.g. Ancona & Caldwell, 1992a; Druskat & Wheeler, 2003). The recent practice turn in management studies also tends to favor observation-based methods in studying organizational activities (e.g. Jarzabkowski, 2003; Johnson et al., 2003). In the current study, the reliance on interview data may be considered a limitation. Still, the use of multiple informants, longitudinal data gathering in two of the cases, and a detailed analysis approach are assumed to provide depth to the findings and improve their credibility.

Another potential issue relates to the informants of the empirical study. While the informants in each of the three cases represented both sides of the program-parent organization boundary, all the interviewees were (or at least were thought to be) in a central role in program initiation and planning activities. The perspective of those who would represent the recipients or targets of change and have a more peripheral role in program initiation is not directly and fully represented in the data. The findings represent the key program actors' perspective to the early boundary activities, whereas the more peripheral organizational members might provide a different view to program initiation.

The difficulties related to detecting cause and effect have been mentioned earlier in this section and described in section 3.5. The results of the study imply that there is a relationship between the amount of early boundary activity and the level of success in change program initiation. Although this connection appears to be strongly supported by the qualitative evidence from the case programs, more research is obviously required to validate the proposition. Despite all the described challenges and limitations, the selected research approach is considered appropriate (and the research data adequate) to explore the research topic and to draw the conclusions.

# 6. Conclusion

In this chapter, the key contributions of the study are summarized and the managerial implications are discussed. Finally, potential avenues for further research are presented.

## 6.1 Summary of what has been accomplished and assessment of contribution

This dissertation has taken a unique perspective to studying large-scale organizational change by examining the activities at the boundary of an emerging change program. By focusing attention towards this emerging boundary, novel insight has been gained both from the perspectives of program management and temporary organizations, and the management of large-scale organizational change.

Previous literature on organizational change has often neglected a project or a program as a way to organize the change endeavor, and simultaneously overlooked the challenges and opportunities related to temporary organizing. The adoption of the temporary organization perspective permits a novel approach to analyzing change. Examining the emerging change program as a temporary organization that is being established within a permanent organization directs attention to the boundary between these two organizations. The concept of a change program's boundary helps us to better understand and analyze the challenges of large scale organizational change by illustrating the interplay between the advocates and the targets of change.

Within the project management discipline, the study has provided novel insight by adopting an outward-directed perspective. By highlighting the contextuality and the open systems nature of temporary organizations, the study has increased understanding of the evolvement and interaction of temporary organizations in a wider organizational context. The study adds to the development of the theory of temporary organizations by shedding light on the logic of how the temporary organizations emerge within permanent organizations, and how they are distinguished and detached as well as connected to the more permanent organizational structures. The

study also reveals the complex nature of the boundary between a temporary organization and a permanent organization by illustrating how this boundary is built up of different aspects, including the task-based, temporal, physical and spatial, authority related, social and identity-based as well as knowledge boundaries. The study illuminates the dynamic nature of the boundary already during the early phases of a change program.

In the present study, a unique approach to change initiation has been taken by highlighting the boundary between the key individuals and the others in the organization. The practice of change initiation has been approached by identifying the different types of boundary activities that define, reinforce, maintain, and cross that boundary. The study has shown how the boundary between an emerging change program and its parent organization is both an enabler and a barrier to the successful implementation of the change program. On the one hand, the boundary limits the interaction and sets the emerging change program apart from the surrounding organization. This creates a need for various kinds of boundary crossing activities. On the other hand, the boundary has a role in protecting the emerging program. To achieve this protection, the boundary may be purposefully strengthened and blocked. The current study has illustrated this complex interplay that takes place at the change program's boundary, showing how the boundary is constantly being drawn, reinforced and guarded, and also actively crossed from both directions.

The study has also broadened the understanding of the concept of readiness for change. The findings suggest how readiness for change may be analyzed at the organization level to consist of the shared intent for change, the resources required for mobilizing change and the sufficient autonomy of the change program. Through detailed descriptions of each of these three dimensions, the current study proposes an approach for analyzing the conditions of successful change implementation already during the early program stage.

The concept of boundary management provides a means for illustrating how readiness for change may be increased and the potential resistance to change may be overcome. The study proposes that the interaction taking place at the boundary is in a significant role in determining the course of the change program. The described interplay at the program's boundaries increases understanding of the micro-level dynamics of how the success factors can be enacted in practice. In this sense, the present study serves as a bridge between the normative success-factor oriented research on organizational change and the contemporary research streams that appreciate the actual practice of the organizational actors.

Finally, in line with recent studies in the field of project and program management, the findings suggest that researchers of temporary organizations need to pay attention to the context of projects and programs. The study has described a number of contextual factors that potentially have a central role in determining the success of an emerging change program, related to the characteristics of the program, its parent organization, and the individuals involved.

## 6.2 Managerial implications

For managers facing the challenge of implementing significant change in the program form, the current study offers a number of lessons. First of all, the study has several implications to program management practitioners. The findings may benefit the growing number of organizations adopting program management in the hope of providing structure for change efforts that are necessary to achieve the defined strategic goals. In terms of guiding the early program phase, traditional project management has not had that much to offer. Project management tools such as Gantt charts and Work Breakdown Structures may not be of much use for the managers in charge of initiating large change programs. The present study has illustrated various activities that are required for building a sustainable basis for program implementation. Whereas practitioner-oriented project management standards, tools, and literature have traditionally emphasized the internal life of projects, the present study draws attention to managing the boundaries of temporary organizations. The study suggests that when establishing large organizational change programs, it is essential to manage the program's connections with its organizational context to ensure a sufficient connection between the leaders and the recipients of change.

The results of the study equip managers with a more thorough understanding of the dynamics related to initiating large-scale organizational change. By digging into the concept of readiness for change the study offers a list of factors that should be present when the implementation of a large-scale change program begins. Most of the commonly described success factors of organizational change are closely related to the interaction at the program-parent organization boundary. The described boundary activities portray the practical means that managers of change programs may use in their pursuit of a solid base for change program implementation.

Applying the norms and procedures of the parent organization may provide legitimacy and sustainability for the change program. Yet, at times the program may need to be consciously guarded from the environmental influences. The program requires autonomy, independence and its own

identity, especially in the case of a non-supportive, immature organizational context where values, norms, and ways of working diverge from those of the program. The findings of the study suggest that the leaders of change programs should actively search for a balance between integrating the program with its parent organization and isolating it to establish a sufficient level of autonomy. The findings further suggest how this need for a balance, and the wide repertoire of external activities needed in achieving it, should be taken into consideration in recruiting managers and key members for change programs. For instance, in choosing members for a core program team, the individuals' opportunities, skills, and aspirations to engage in boundary management activities should be valued.

Finally, the study draws attention to the contextual nature of change. The study suggests that the contextual conditions need to be taken into account when assessing the probability of making a successful transformation and when selecting the appropriate approach to change. Furthermore, the study emphasizes context awareness in applying the repertoire of proposed boundary activities. Awareness of the organizational context is critical in coping with the constraints and utilizing the enablers of the organizational context to successfully initiate significant change. The results of the study challenge program management practitioners to analyze their programs and program environments to better understand the challenges of change initiation. The study has portrayed a variety of ways how the complex relations of projects or programs with their organizational context can be managed to support successful implementation of change, depending on the situation-specific features.

## 6.3 Avenues for further research

The study opens up a number of interesting opportunities for further research in different areas. First and foremost, the findings indicate that the focus on external activities is a fruitful direction for project management research, as it may enhance our understanding of temporary organizations. The present study has provided initial evidence of the contribution of boundary activities to the success of change program initiation. Further research is required to verify these findings. Due to the limitations of the qualitative case study approach, the developed propositions could be complemented with further qualitative studies and tested with hypothetic-deductive studies.

The nature of the program-parent organization boundary has been examined in the present study by analyzing the different aspects of which the boundary consists of. The analysis revealed a number of aspects, or boundary types, that each contributed to the overall boundary. The analysis

provided indications of connections between the boundary types, further suggesting that different boundary types might be related to different boundary activities. Future research is encouraged to examine the boundary between a temporary organization and its parent organization in more detail, shedding light on these topics.

The current study has examined a temporary change program's interplay with its permanent parent organization mainly by approaching the parent organization as a "black box", without a systematic attempt to distinguish between the different intra-organizational stakeholder groups of a program. The findings of the current study suggest that there may be significant differences among the stakeholder groups in how the program's boundary is manifested and how it is managed. Future research might explicitly examine these differences from the perspectives of the stakeholder groups such as top executives, superiors of the line organization, shop-floor level employees, or key managers of other ongoing programs and projects. While research on boundary spanning does not typically distinguish between different stakeholder groups, the adoption of a stakeholder theory perspective would allow for a more in-depth analysis of the stakeholders' varying interests and actions regarding the change program.

One limitation of the current study was caused by the retrospective data gathering approach that relied mainly on interview accounts. Future research could seek a deeper insight by participatory methods, such as observation. The current study has focused on the early stage of change programs, examining the programs from the emergence of the program idea to the beginning of change implementation. As change programs (similarly as projects) consist of a number of distinct phases, a longitudinal study on the dynamics of boundary activities during the program's lifecycle is encouraged. Future research might extend the analysis of the current themes to the whole lifecycle of a change program. Especially, the evolvement of the change program's boundary and the development of the boundary activities across the program's lifecycle could be examined by further studies. Yet another issue worthy of further study is the logics of how temporary organizations are terminated, e.g. at the end of a change program.

Since the investigated case programs did not reach completion during the course of this study and the eventual effects of the programs had not yet been realized, the ultimate success of the programs could not be assessed. This study focused on analyzing the associations of the early boundary activities with the success of the early program stage, interpreted as readiness for change program implementation. The impact of the program initiation activities on the eventual success of the program was not

evaluated within the scope of this study. This relationship between program initiation activities and consequent program success could be worth further studies, and future research might find ways to evaluate the impact of the early activities on the success of the entire change program.

To shed further light on the topic of initiating large-scale organizational change in the program form, the internal activities of program organizations could be studied in more detail. While the role of the program's internal activities in advancing the plans and creating readiness for change was excluded from the scope of the current study, such analysis would complement the insight into how readiness for change is constructed in the interplay between the program's internal activities and externally oriented boundary activities. The program team's internal activities related to bringing up the program boundary could be examined in more detail to complement the view of boundary dynamics.

The current study has examined boundary activity at the program team level. Previous research has suggested how team members may differ in their ability and willingness to engage in boundary activity. Researchers interested in individual competence and managerial characteristics should pay attention to the individual program or project managers' and team members' boundary management activities, as well as their individual and organizational antecedents.

Finally, the results of the study suggest that the contextual characteristics of a change program may have a significant effect on how the program is, and should be, managed. Within the scope of the present study, only a limited number of contextual factors have been discussed. Future research might extend this analysis by focusing on certain aspects of the change programs' organizational or institutional context, providing new perspectives to the researched themes. The study could also be replicated in other similar as well as different settings to analyze the context-specific features of the boundary activities. The nature and role of boundary activities could be studied in organizations that represent more mature environments in terms of program management. As the examined cases in the current study centered on intra-organizational change programs, future research could also examine program-parent integration in other types of program-parent interactions, such as emerging entrepreneurial firms, technology transfer, and acquisitions.

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# Appendices

## Appendix 1: Interview outlines

### Interview outline: case Center round 1

**Background information**

- Could you tell briefly about your professional background?
- What is your position and what are your main tasks in the line organization?

**Programs in the organization**

- What is the role of projects and programs in your organization? How are you involved in them?
- How would you define a program? In your opinion, how does a program differ from a project?

**Introduction to the case program and the interviewee's role**

- When and how did you become involved in the case program?
- In your own words, what is the purpose of the program?
- How would you describe the significance of the program to your organization?
- When and how did you hear about the program for the first time?
- How would you describe your own role in this program?
- What is the current status of the program?

**Program initiation and planning**

- How was the program initiated? What is the background of the program?
- What were the main events that led to program initiation? Who were the key actors and what did they do? What kinds of decisions were involved?
- Could you describe the program planning activities?
- How were you involved in program initiation and planning?
- How were the program goals set? How have you been involved in goal setting?

**Program organization and management**

- Could you describe the program structure and organization?
- What is the role of the program manager?
- What is the role of the program steering group?
- Could you describe the management practices of the program? How is the program entity being coordinated (decision making, reporting, meetings, tools)?
- Are there any formal instructions or procedures that should be followed?
- How is program-related cooperation and communication handled?
- How is coordination handled with other programs and activities?

**Success of the program thus far and conclusion**

- How would you describe the program's achievements thus far?
- What is program success, in your opinion? What would success mean in this program?
- Could you describe the challenges encountered in program work?
- Are there any development needs related to program management practices and competence?
- Is there anything else you would like to bring up?

## Interview outline: case Center round 2

**Background information** (*asked only from new interviewees*)

- Could you tell briefly about your professional background and your experience in projects and programs?
- What is your position and what are your main tasks in the line organization?

**Introduction to the case program and the interviewee's role**

*Option A: for new interviewees:*

- When and how did you become involved in the case program?
- In your own words, what is the purpose of the program?
- What are the main goals of the program? How were they set?
- How would you describe the significance of the program to your organization?
- In your opinion, how does a program differ from a project?
- How would you describe your own role in this program? What do you bring into the program work?
- How much of your work time do you spend on the program?
- What is the current status of the program?

*Option B: for those also interviewed in the first round:*

- Could you describe your current position, main tasks and responsibilities in the program? Has your role changed since the previous interview?
- How much of your work time do you spend on the program?
- What are the current goals of the program? Have they developed or changed since the first interview?
- What is the current situation of the program? What has happened since the first interview? Have there been any significant changes?

**Program initiation** (*asked only from new interviewees*)

- How was the program initiated? What is the background of the program?
- What were the main events that led to program initiation? Who were the key actors and what did they do? What kinds of decisions were involved?
- When and how did you hear about the program for the first time?
- How were you involved in program initiation?

**Program planning activities, program organization and management**

- Could you describe the program planning activities? What has been planned? Who have been involved and how?
- Could you describe the current program structure and organization?
- What is the role of the program manager?
- What is the role of the program steering group?
- Could you describe the management practices of the program? How is the program entity being coordinated (decision making, reporting, meetings, tools)?
- Are there any formal instructions or procedures that should be followed?
- How is program-related cooperation and communication handled?
- How is coordination handled with other programs and activities?
- Could you describe the challenges encountered in program work?

**Success of the program thus far and conclusion**

- How would you evaluate the progress of the program and the success thus far?
- How would you describe the achievements and impacts of the program thus far? What should have already been achieved?
- Is there anything else you would like to bring up?

## Interview outline: case Bureau

### Background information

- Could you tell briefly about your professional background and your experience in projects and programs?
- What is your position and what are your main tasks in the line organization?

### Introduction to the case program and the interviewee's role

- In your own words, what is the purpose of the program?
- What are the goals of the program?
- How would you describe the significance of the program to your organization?
- What is the current status of the program?
- When and how did you become involved in the case program? When and how did you hear about the program for the first time and what was your reaction?
- How would you describe your own activities in this program?
- Do you or does your organization have experience in similar programs or similar changes?

### Program structure

- Could you describe the program organization and structure?
- Who are the key actors, decision-makers and stakeholders, and how are they involved?

### Program initiation

- How and when was the program initiated? What is the background of the program?
- What were the main events that led to program initiation? Who were the key actors and what did they do? What kinds of decisions were involved?
- What was your own role in the early activities? With whom did you discuss or cooperate?
- What other stakeholders or instances were involved in the early activities, affecting program initiation? What was their role? How does their impact show in the program?
- In your opinion, how did the early program initiation activities succeed?

### Program planning activities, program organization and management

- Could you describe the program planning activities? What has been planned?
- Who have been the key actors in program planning?
- What kinds of methods or tools have been used in planning?
- How were the program goals set? What kinds of discussions or negotiations were involved? How have you been involved in goal setting?
- How have you been involved in program planning? Who have you discussed or cooperated with?
- How was the program structure created?
- How was the program organization established? When and how were the members (program manager, program owner, steering group, sub-program managers, project managers) selected?
- Did any of the projects exist before the program was launched? How and why were they included in the program?
- Could you describe the coordination of the program's projects? How independent are they?
- Which people have had the biggest impact on the program content and management methods, and how?
- Have any problems or conflicts occurred during initiation and planning? How have they been handled?
- In your opinion, how did the planning activities succeed?

- What kinds of factors have supported or enabled program initiation and planning activities?
- How could program initiation and planning have succeeded even better?

**Program implementation**

- Has the early program stage provided a solid ground for the program implementation? Why and how?
- How have the program implementation activities been started? What is your role in implementation?
- Looking back, do you think that something should have been done differently?

**Success of the program thus far and conclusion**

- In your opinion, how successful has the program been thus far? What has succeeded and what has not?
- What have been the main achievements thus far?
- How has program management succeeded?
- What kinds of challenges or problems have been encountered? How have they been handled?
- What grade would you currently give to your entity (sub-program or project) and to the overall program?
- How do you think that the program will succeed in the future?
- Is there anything else you would like to bring up?

## Interview outline: case Chain round 1

### Background information

- Could you tell briefly about your professional background and your experience in projects and programs?
- What is your position and what are your main tasks in the line organization?

### Introduction to the case program and the interviewee's role

- Could you describe your position, main tasks and responsibilities in the case program?
- In your own words, what is the purpose of the program?
- What are the main goals of the program?
- How would you describe the significance of the program to your organization?
- Do you or does your organization have experience in similar programs or similar changes?
- What is the current situation of the program?

### Program origin and early initiation activities

- What is the origin and background of the program?
- What were the main events that led to program initiation? Who were the key actors and what did they do? What kinds of decisions were involved?
- When and how did you become involved in the program?
- What was your own role in the early activities? With whom did you discuss or cooperate?
- What other stakeholders or instances were involved in the early activities, affecting program initiation? What was their role? How does their impact show in the program?
- In your opinion, how did the early program initiation activities succeed? How could program initiation have succeeded even better?

### Program planning activities, program organization and management

- Could you describe the program planning activities? What has been planned?
- Who have been the key actors in program planning? Whose input has been required in planning? What kinds of discussions or negotiations have been involved?
- What kinds of methods or tools have been used in planning?
- How have you been involved in program planning? Who have you discussed or cooperated with? How have you communicated about the program?
- How were the program goals set?
- How was the program structure created?
- How was the program organization established? When and how were the members (program manager, program owner, steering group, sub-program managers, project managers) selected?
- Did any of the projects exist before the program was launched? How and why were they included in the program?
- Could you describe the coordination of the program's projects? How independent are they?
- Which people have had the biggest impact on the program content and management methods, and why?
- Have any problems or conflicts occurred during initiation and planning? How have they been handled?

### Success of the program thus far and conclusion

- In your opinion, how successful has the program been thus far?
- What have been the main achievements thus far?
- What kinds of factors have supported or enabled program initiation activities?

- What kinds of challenges or problems have been encountered? How have they been handled?
- What grade would you currently give to your entity (sub-program or project) and to the overall program?
- How do you think that the program will succeed in the future?
- Is there anything else you would like to bring up?

## Interview outline: case Chain round 2

**Background information** (*asked only from new interviewees*)

- Could you tell briefly about your professional background and your experience in projects and programs?
- What is your position and what are your main tasks in the line organization?

**Introduction to the case program and the interviewee's role**

*Option A: for new interviewees:*

- Could you describe your position, main tasks and responsibilities in the case program?
- In your own words, what is the purpose of the program?
- What are the main goals of the program?
- How would you describe the significance of the program to your organization?
- Do you or does your organization have experience in similar programs or similar changes?
- What is the current situation of the program?

*Option B: for those also interviewed in the first round:*

- What is your current position, main tasks and responsibilities in the case program? Has your role changed since the first interview?
- What is the current situation of the program? What has happened since the first interview? Have there been any significant changes?

**Program origin, initiation and planning activities** *(asked only from new interviewees)*

- What is the origin and background of the program?
- What were the main events that led to program initiation? Who were the key actors and what did they do? What kinds of decisions were involved?
- When and how did you become involved in the case program?
- What was your own role in the early activities? With whom did you discuss or cooperate?
- What other stakeholders or instances were involved in the early activities, affecting program initiation? What was their role? How does their impact show in the program?
- In your opinion, how did the early program initiation activities succeed? How could program initiation have succeeded even better?
- Could you describe the program planning activities?
- Who have been the key actors in program planning, and why? What has been planned?
- What was your own role in program planning? With whom did you discuss or cooperate?

**Program organization and program management**

*Option A: for new interviewees:*

- Could you describe the role and activities of the program manager?
- Could you describe the role and activities of the program owner and program steering group?
- How is the program being managed (structures, processes, tools, reporting, meetings)?
- How is your entity being managed (structures, forums, processes, tools, reporting, meetings)? *(if applicable)*

*Option B: for those also interviewed in the first round:*

- Could you describe the current role and activities of the program manager? Have there been any changes since the first interview?

- Could you describe the current role and activities of the program owner and program steering group? Have there been any changes since the previous interview?
- Are there any new practices in program management (structures, forums, processes, tools, reporting, meetings)?

**Interviewee's own entity (program / sub-program / project, depending on the role) in the change program**

- What is the current situation of your own entity?
- What is the role of your entity in the program?
- What are the goals of your entity?
- What is the organization structure of your entity?
- How has your entity been planned? How independent have you been in planning? Who has been involved?
- Could you describe your activities in your entity?
- How do you monitor the activities in your own entity? To whom do you report and how? What kinds of routines have been established (meetings, tools, practices)?
- How do you monitor and keep contact with the other entities?
- What will be the next main activities in your entity?
- What are the main stakeholders of your entity? How are they involved? How do you keep contact with them?
- What do you communicate about your entity and to whom? Have you restricted the communication in any way, towards some stakeholders?
- How has the cooperation with the stakeholders succeeded?

**Success of the program thus far and conclusion**

- In your opinion, how successful has the program been thus far?
- What have been the main achievements thus far?
- What kinds of factors have supported or enabled program activities?
- What kinds of challenges or problems have been encountered? How have they been handled?
- What grade would you currently give to your entity (sub-program or project) and to the overall program?
- How do you think that the program will succeed in the future?
- Is there anything else you would like to bring up?

# Appendix 2: Code framework used in the analysis

*Italic* means that the code was created during the analysis

**Indicators of program boundary**
- *Task boundaries*
- *Authority boundaries*
- *Physical or spatial boundaries*
- *Temporal boundaries*
- *Social and identity boundaries*
- *Knowledge boundaries*
- Other/general boundaries

**Readiness for change program implementation: intent**
- Visible need and pressure for change and sustained momentum
- Clear and shared vision, a sense of direction and commonly accepted goal
- Purposeful plan for the change content, process and program structure
- Intent: other/general

**Readiness for change program implementation: resources**
- Skillful and charismatic leaders
- Dedicated program teams
- Visible senior management support and involvement
- Receptive environment and prepared recipients of change
- Resources: other/general

***Readiness for change program implementation: autonomy***
- *Legitimate position in the organization*
- *Authority and autonomy to realize change*
- *Autonomy: other/general*

**Readiness for change program implementation: other**
- Other indicators of readiness for change
- General readiness for change

**Boundary activities**
- *Positioning and negotiating*
- *Linking activities*
- *Task coordinating activities*
- *Information seeking activities*
- *Resource seeking activities*
- *Informing activities*
- *Legitimating and committing activities*
- *Influencing activities*
- *Guarding activities*
- *Enclosing activities*
- Other/general boundary activities
- *Desired or planned boundary activities*

**Contextual factors**
- Contextual factors related to the parent organization
- Contextual factors related to the program
- Contextual factors related to the key program actors
- Other contextual factors

## Appendix 3: Illustrations of the different aspects of the program-parent organization boundary in the three cases

### CASE CENTER

| Boundary type | Overall view in case Center | Indicators in case Center | Illustrative quotes |
|---|---|---|---|
| Task | A fairly low task boundary in terms of the content and goals of the program, but a high task boundary in terms of the process and practices in program work, compared to Center's traditional way of working. | The program's topic was very close to many people's daily work. For some, this resulted in inability to distinguish the program work from other activities. | Steering group member: "*This has provided us a title, under which we have now gathered a lot of things, but I do not see this as a very separate effort, this is just work as usual for us.*" |
| | | The program management approach was viewed as a novel way of working, different from "normal" work and from traditional projects. | Peripheral program participant: *"This is a program, this is not a project but a program, so it is a novel approach … It might be just me, but it does make one wonder what on earth this is about. Who has come up with this, and do [the top managers] on the top floor even themselves know what they are thinking about?"* |
| | | Development activities were generally viewed as separate from Center's core tasks and less valuable. | Steering group member: "*Very often our programs and projects are disconnected [from other work] … they are forgotten after the final report has been written.*" |
| Authority | A clear authority boundary caused by the program's lack of authority in comparison to Center's strong units. | The program manager did not have much authority in the organization and was not granted a clear authority as the program manager. | Steering group member: *"In my view, program manager is an operational position; he is the one running the process. … we cannot give this [significant program] on a single expert's responsibility, even though we may nominate him as a program manager."* |
| | | The units' internal work was prioritized over the cross-functional program work. | Top manager involved in the program: *"Sometimes, conflicts may be observed between our [functional operations] that claim to have too little resources … and the resource needs of this program."* |
| Physical and spatial | Some indicators of physical and spatial boundaries mainly due to Center's distinct and separated units. | Center's units were traditionally separate and there was little cross-unit collaboration. | Top manager involved in the program: *"I think that [adopting the program management approach] requires a matrix approach, since one cannot manage these programs unless one is able to genuinely cross the business sector and unit borders. We have not been able to do this sufficiently and this is a great challenge for us."* |
| | | Many Center's experts spent much of their work time in the geographically dispersed member organizations, and thus it was difficult to schedule meetings so that all people could participate. | Peripheral program participant: *"Communication is always a problem in this kind of an organization where everyone is travelling two or three days a week."* |

| Boundary type | Overall view in case Center | Indicators in case Center | Illustrative quotes |
|---|---|---|---|
| Temporal | A clear temporal boundary caused mainly by the busy schedules of Center's managers and experts and the lack of deadlines and devoted resources in the program work. | Center's managers and experts claimed to be too busy with their daily work to become truly engaged in the program. | Peripheral program participant: *"The marching order naturally is that my own sector comes first, and after that come our unit's common tasks. After I have taken care of these, I have to see whether I have resources left for [organizational development efforts]."* |
| | | The program work had not included clear deadlines, and thus it had not been prioritized. | Sub-program manager: *"[Time spent on program work] has been very scarce… There are probably two reasons: no significant pressure has been put by a higher level, and then there are so many other tasks… Only recently have they defined some kind of a deadline for this."* |
| | | It was difficult to find time for program-related meetings, as Center's personnel were engaged in various forums and positions of trust, travelling across the country. | Steering group member: *"I admit that this should be number one priority. But it has happened a couple of times that since I have this [forum in a stakeholder organization] and I need to be there as well, I have had to leave early [from program meetings]."* |
| Social and identity | Clear social and identity boundaries, as people identified more with their units and their daily work than with the program, and connected the program with secondary development work or with special interests of the R&D unit | Many saw their own role as an outsider, either as a supporter or an observer instead of an active participant. | Top manager: *"I'm currently an observer. I observe [the program] from aside … I'm still doubtful about what this program can offer us."* |
| | | Some Center's experts received most of their salary from external parties. They did not identify with Center and were unwilling to devote time on what they viewed as Center's internal development. | Peripheral program participant: *"It has not been number one in my priorities, since most of my tangible resources, i.e. the money, come from external sources, and thus I have always regarded these external relations more important."* |
| | | The program was identified with Center's R&D unit instead of the whole organization. | Steering group member: *"I have expressed my worries, and even criticism that this cannot just be a separate business of the R&D unit"* |
| | | Development work was traditionally valued less than the daily work of supervising the interests of Center's member organizations. | Key program actor: *"[In Center] this kind of development is not valued as much as it should be. It is not valued and that shows in our culture.* |
| | | Some people were skeptic about program management as an approach and did not identify with the related management philosophy. | Peripheral program participant: *"There is a lot of doubt related to how [program management] can be positioned in our managerial framework."* |
| Knowledge | The boundary was reflected as a lack of knowledge about the program and its status. | Many peripheral program participants and top managers were unaware of the program's goals, scope and status. | Steering group member: *"I don't even know how this process is currently doing… It's not a very visible process; nothing has been heard from it for a long time."* |
| | | | Peripheral program participant: *"If we ask people, I think that half of them would say they are familiar with this, but another half hasn't even heard of this. … The unit managers are aware of this, but at the expert level it depends on whether one has a general interest in these things."* |

**CASE BUREAU**

| Boundary type | Overall view in case Bureau | Indicators in case Bureau | Illustrative quotes |
|---|---|---|---|
| Task | A fairly low task boundary in terms of the content of the program, but a higher task boundary in terms of the work processes, compared to Bureau's traditional way of working. | Program work was very near to many people's daily work. Some people were unable to distinguish program work from other activities. | Project participant: *"Of course, when the same people do similar tasks in the line organization and in the project, it is very difficult to identify whether it is project work or line work.""* |
| | | The program scope had expanded and the division between the program and other work had become more blurred. | Support team manager: *"Let's say that this program was started as a project, but now we don't talk about a project anymore, it has become a kind a of "program cloud" which is pretty much equal to our IT management."* |
| | | The program involved a mode of working that was distinct from the traditional mode of the organization. | Middle manager of a central unit involved in the program: *"One noticeable difference in the work methods is that in [the program] we have clearly sought for partnerships and partner companies and we have outsourced larger entities than before."* |
| Authority | Some indicators of the authority boundary caused by the clear division of authority in Bureau and traditionally separate organizational units. | Bureau's units were traditionally separate and it was sometimes hard to cooperate across the unit boundaries. | Unit manager involved in the program: "*In our case, naturally the whole [Bureau], all [units] participate. The different [units] have formerly been highly autonomous… So the implementation of this change is an extremely challenging task."* |
| | | There were clearly defined responsibilities in the line organization that regulated who could participate in the program work. | Unit manager involved in the program: *"During the planning phase I was engaged with a different task, so I didn't have the opportunity to participate in planning."* |
| | | During the detailed planning phase, the project managers' authority was dictated by their authority in the line organization. | Support team manager: *"The implementation of a large program is a huge challenge in a functional, hierarchical organization such as ours. In principle, the program or project manager's resources and authority are precisely as high as his or her position in the line organization."* |
| Physical and spatial | Some indicators of physical and spatial boundaries mainly due to Bureau's geographically fragmented units. | Due to the geographically fragmented organization, it was hard to gather people to face-to-face meetings. | Top manager involved in the program: *"If we have a one-day meeting, we sometimes have it as a teleconference or videoconference… People participate from different parts of the country."* |
| | | Many experts spent a considerable amount of their work time outside their home unit, which made it hard to schedule meetings where all people could participate. | Unit manager involved in the program: "*These key players can be found in two departments, and there is just one floor between them … There are also a few key persons in [a nearby city]. It has proven surprisingly difficult to gather everyone around the same table even though we are so close to each other, since our people are travelling across the country and it's hard to find a common time slot to sit down and have a status update. We haven't had enough time for these meetings."* |

| Boundary type | Overall view in case Bureau | Indicators in case Bureau | Illustrative quotes |
|---|---|---|---|
| Temporal | Some indicators of temporal boundaries. The program required a certain work pace, and some stated that it was hard to find time to participate in the program. Most people were clearly assigned to program work and did not report related problems. | The program required a different pace of work than normal line work. | Program manager: *"[Besides external consultants] our own people also have to fully commit to the goal and to the work method. As I said to the people in the core team, if a problem appears, we'll stay at work until midnight, whether or not this suits the office culture."* |
| | | Some interviewees stated that it was hard to find time to participate in program planning due to other duties. | Unit manager involved in the program: "*The problem is that we have simultaneously so much other work that is unrelated to [the program] ... These mandatory changes are ongoing, and they have been eating up the resources. When thinking of the amount of work that these people have been doing besides their own duties, I may just wonder how they have managed that."* |
| Social and identity | No clear social and identity boundaries between the program and the parent organization. Only a few indicators of unwillingness to participate in the program. | Program work motivated some people as it was seen interesting and beneficial for own work in the future. | Project participant: *"I think that people have had the opportunity to do something that they relate to, something that they are motivated to do and that will benefit them in their own work in the future."* |
| | | Some experts were unwilling to participate in the program due to various reasons. | Project participant: *"So the situation was that we had these key people, these experts whose competence would have been needed, but they did not want to participate in this entire effort."* |
| | | The program was perceived as mainly technical, and as something that did not concern all people. | Program manager: *"This [program] was regarded as a very technical endeavor ...Since I was in charge of developing IT as well as IT management ... people said to me that "You know, this is your cup of tea, we won't interfere. You just take care of that [program]."* |
| Knowledge | Some indicators of knowledge boundaries between the insiders and outsiders. Several people were also worried about the distance between the projects and top management during detailed planning and implementation. | Those who had not participated in program activities were not fully aware of the program and its status. Also, during the detailed planning and implementation phase, some project managers reported a long distance between the projects and top management, and complained about lack of guidance. | Support team manager: *"I would say that people have different attitudes towards this, based on their background. There are those, especially those working in [the program], who believe in what they are doing and that this is what has to be done. It is probably those who are outside this program who are wondering what the eventual output will be. Especially when it comes to people in other domains, they might not be aware of this, since this is not very visible to them."* |
| | | | Project participant: *"In general, one might say that there has been too large a distance between the top management and [the program's key actors]. The top managers' view of the end state and the direction is not transmitted to those implementing the program."* |

**CASE CHAIN**

| Boundary aspect | Overall view in case Chain | Indicators | Illustrative quotes |
|---|---|---|---|
| Task | The task boundary was somewhat clear in a sense that program work was clearly differentiated from but for most people still closely related to the daily tasks in the line organization. Many were accustomed to project work and viewed program work as similar but still somewhat different due to the lack of a clear plan and an overall picture of the end state. | Many program participants worked with the same or similar topics in their daily work as in the program. | Sub-program manager: *"[A part of the program] is naturally on the responsibility of the person who is generally responsible for [the corresponding area]. … This is on [N.N.'s] responsibility, as he is the one who generally takes care of these issues."* |
| | | Program work was seen somewhat different from daily work that involved routine tasks. | Sub-program manager and steering group member: *"Since this is a huge change, it is very different from our daily work, which is about setting prices, contacting customers and so on."* |
| | | Although Chain's experts were accustomed to projects, they were not used to large change programs and to the program mode of working. | Development area director and steering group member: "*I have never been involved with such a massive effort, we have never had programs of this size before."* |
| Authority | Although program-related decisions were largely made in the line organization's decision-making forums, the program was led by the line organization's top managers and in that sense there were no visible authority boundaries. Authority stemmed largely from the managers' formal positions in the line organization. The program's decision-making forums and processes were considered to work well, although sometimes there was confusion about the decision-making responsibilities. | Top line managers were also responsible for the corresponding areas of the change program, providing a close linkage between the program and the parent organization. | Sub-program manager and steering group member: *"In my own [development area], I also genuinely have the business responsibility for this entity, so one could say that I have a deeper interest to take care of all these entities and to make sure that each reach their results."* |
| | | Program-related decisions were made by the line organization's decision makers. Some complained that line management was slow to make decisions, which was claimed to delay the program. | Steering group member: *"If the business would make bolder decisions …, we would make faster progress with [these projects]. Sometimes [the top management] seems to have a strong mindset, but sometimes something else is going on, and the struggle with this is slowing us down."* |
| | | There was some confusion about the decision-making responsibilities between the program and the line organization. When the program proceeded, the program's decision-making processes were recognized as working well and there appeared a tendency to bring issues outside the program's scope to the program steering group for decisions. | Program coordinator (future program manager): *"I myself [as program coordinator] have to sometimes quite strongly remind [the steering group] that we cannot mix line management … with the management of this program, they are two different things. Although the same people sit in this steering group, this is not the right forum for such business decisions."* |
| | | The program coordinator did not initially possess much authority, but as the program progressed he gained authority by proving his capabilities and was officially nominated as the program manager. | Support team manager and steering group member: "*[The program manager] has carried his role very well, he coordinates things and spots issues, is a member in many steering groups and involved in many other things … He has a strong coordinating role, and to call him a coordinator is actually an underrating, he rather is … a program manager."* |
| Physical and spatial | Physical and spatial boundaries were visible, as early program activities took place mainly at Chain's headquarters, whereas the program was supposed to significantly affect the personnel in local units. | While a majority of the early program activities took place at the headquarters, there was significant distance between the local unit personnel and the program, especially concerning the most remote locations in Chain's network. | Communications expert: *"This is, as I said, a challenge, as we live here in the ivory tower [in the headquarters], and we cannot see the [daily operations at the periphery]."* |

| Boundary aspect | Overall view in case Chain | Indicators | Illustrative quotes |
|---|---|---|---|
| Temporal | Most program participants spent a significant amount of their work time with the program, typically at least 50%. Some worked full time in the program. Time was clearly allocated to the program, and program work was often prioritized over other tasks. Very few complained about the lack of time resources. | Most people worked part-time in the program, besides duties in the line organization. Still, very few complained about the lack of time to devote to the program work. | Development area director and steering group member: *"My own schedule is so busy that I'm from time to time ashamed of how I don't make myself familiar with issues until in the meeting, by simultaneously reading about them on my laptop."* |
| Social and identity | There were very few indicators of social or identity boundaries between the program participants and other experts in Chain's headquarters. However, many mentioned the distance between the headquarters' personnel and the personnel in local units. | The personnel in local units were described to associate the program with the headquarters, as they were not actively involved in the early program activities during initiation and little was communicated to them about the forthcoming changes. | Core development area coordinator: "*I think we have to carefully think about how to bring the message to [local units], since the change is so radical ... it means that the daily operations will be in immediate chaos, since this will touch upon a massive amount of people. The plans are on a very high level, and if we communicate them as such, it might cause unnecessary fears. So we have not yet communicated anything about the [central changes].*" |
| Knowledge | Some expressed worries about the distance between the program and other parts of Chain, describing how not everyone is aware of the program yet. | Some claimed that the program was distant from operations and from local units. Lack of active involvement of the Human Relations unit was also seen as a problem. | Support team manager and steering group member: *"In my [sub-unit], I'm sure that my colleagues there would say that they don't know anything about this program. ... Despite the amount of communication, and the comprehensive intranet site, it may still be that this remains distant for some reason."* |

## Appendix 4: Illustrations of boundary activities in the three cases

### CASE CENTER

| Categories and types of boundary activities | Description of the activity in the case | Examples of quotes | Frequency (total: 140 quotes) | % of activities |
|---|---|---|---|---|
| **Category I: Defining and shaping the boundary** | | | **43** | **31%** |
| Positioning and negotiating | Early program activities focused largely on negotiations between the key program actors and the line managers. The program was discussed in Center's management group and in unit manager meetings. Top managers of Center and its subsidiaries also gathered into special meetings to discuss the program. | Unit manager and coordination group member: "*In the beginning, a meeting was organized among the unit managers and subsidiary managers. I have to say that the discussion drifted from one direction to another… It was probably good that everyone was able to express their thoughts, but it felt like we all had different views of what we are after."* | 25 | 18% |
| Linking | Program-related activities were performed in different parts of Center's organization as experts' daily work, and the key program actors tried to identify these activities and link them to the program. Also, meetings were organized with the managers of the projects in Center's R&D portfolio to create connections. | Program manager: *"We have this R&D portfolio and we have categorized its projects under the sub-program titles, we have held meetings to discuss these connections."* | 11 | 8% |
| Task coordinating | There were some attempts to coordinate program activities and other work in Center. Most of these were performed by a few active program participants who saw their role as coordinators between the program and the related activities in their own unit. | Unit manager actively involved in the program: *"We have this line organization and then we have this [program organization]. I'd say that I'm at the border of these two. … I have been going back and forth between these two."* | 7 | 5% |
| **Category II: Crossing the boundary inwards** | | | **32** | **23%** |
| Information seeking | Information was acquired by inviting people to program-related meetings and by ad hoc discussions. For example, a survey was sent to Center's experts and a series of early coordination group meetings where organized where managers of all involved units discussed the goals and scope of the program. | Peripheral program participant:*" "I remember a phase when each expert replied to a survey of potential legal barriers [in the program's area] in their area of expertise. I also replied and concluded that we have two issues in the legislation that prevent us from doing these things in a rational way and that should definitely be changed."* | 27 | 19% |
| Resource seeking | There were some efforts to seek resources for the program. The key program actors tried to identify people who could contribute to the program either as key participants or as support resources. | Unit manager actively involved in the program: *"We are trying to get a communications expert involved in the program office, since we have realized that communication is a central way to advance these issues."* | 5 | 4% |

| Categories and types of boundary activities | Description of the activity in the case | Examples of quotes | Frequency (total: 140 quotes) | % of activities |
|---|---|---|---|---|
| **Category III: Crossing the boundary outwards** | | | **58** | **42%** |
| Informing | Informing was the most common type of boundary activity in Center. Key program actors had discussed the program with various experts in the organization, and the program had been on the agenda in Center's management group meetings, where top managers were informed about the program's existence and goals. The program manager had also given presentations about the program in Center's personnel meetings. | Subsidiary manager and coordination group member: *"Last spring we had two of these strategy meetings or seminars for the whole personnel. [The program manager] participated in one of these two, and there were quite good discussions."* | 50 | 36% |
| Legitimating and committing | Just a few legitimating and committing activities were found. Some mentioned the program management workshops organized by the university research team as a way to legitimate the program management approach. The unit manager meetings where the program had been discussed were also mentioned not only as a way to gain insight from unit managers but also as a means to commit the unit managers to the program. | Unit manager actively involved in the program: "*The discussion in the meeting was quite versatile: some saw very ambitious goals and some wondered whether the objective is to come up with a publication. But it was good that we had those discussions, and we also gained some commitment from the unit managers who are involved in this."* | 6 | 4% |
| Influencing | Only two identified activities related to influencing. As a rare example, an expert involved in initiation explained how the program work also contributed to her other work tasks. | Peripheral program participant: "*Since one gets all kinds of invitations, one has to seriously consider whether to participate or not, but if it benefits me in my [line] tasks, and if it relates to my [area of expertise], then I always try to participate as much as possible. There is often something to gain and if you also can contribute, then there is mutual [benefit]."* | 2 | 1% |
| **Category IV: Blocking the boundary** | | | **6** | **4%** |
| Guarding | Just a few guarding activities were found, related to how some people, central experts, had not been included in the early program work, and how one of Center's units was practically scoped out of the program. | Subsidiary manager and steering group member: *"A representative of our unit has not been invited to these meetings, even though this person is probably one of the leading experts [in this area] in Finland."* | 6 | 4% |
| Enclosing | No intentional enclosing activities were found in Center. | N/A | 0 | 0% |

**CASE BUREAU**

| Categories and types of boundary activities | Description of the activity in the case | Examples of quotes | Frequency (total: 187 quotes) | % of activities |
|---|---|---|---|---|
| **Category I: Defining and shaping the boundary** | | | **51** | **27%** |
| Positioning and negotiating | Some positioning and negotiating activities were found, mainly related to seeking top management acceptance to ideas and discussing the program in the organization's various management forums. | Unit manager actively involved in the program: *"I have tried to gather as good and as wide a representation as possible in these steering groups … Although I was already given the mandate to implement this during the early decision making, if we want this to work in practice also in the future, we need to gain acceptance from all the parties involved. So in these steering groups we seek common views."* | 10 | 5% |
| Linking | There were quite active linking efforts, mainly related to integrating the program into the existing management system and inviting decision makers from different units in the program's management forums. | Manager overseeing the program implementation: "*We linked this to the line organization and gave this [project] to [a certain unit's] responsibility. … There are many skilled people there, but the problem of [this unit] is that they have their own interests at play, which may also be reflected in the project."* | 30 | 16% |
| Task coordinating | Some task coordinating activities were found, mostly related to discussing the program in the parent organization's management forums and coordinating resources between the program work and other work. | Unit manager actively involved in the program: "*We have our unit's management group meeting once every two weeks, and [the representatives of two central projects of the program] also participate in these meetings. They tell others about their projects' situation and needs, and we have discussions on where to find the required resources."* | 11 | 6% |
| **Category II: Crossing the boundary inwards** | | | **46** | **25%** |
| Information seeking | Wide-scale efforts of seeking information took place e.g. by gathering representatives from different parts of Bureau to ideation and planning workshops, seminars and meetings, and by contacting people personally and through surveys. | Project participant: "*There were different kinds of instructions and forms for data gathering that we filled out [in different units] and then we gathered up to analyze them."* | 40 | 21% |
| Resource seeking | Just a few resource seeking activities were found, related to seeking for key project personnel and utilizing the support services of the line organization. | Program manager: *"We have utilized the secretary services of the line organization, as well as other support services".* | 6 | 3% |

| Categories and types of boundary activities | Description of the activity in the case | Examples of quotes | Frequency (total: 187 quotes) | % of activities |
|---|---|---|---|---|
| **Category III: Crossing the boundary outwards** | | | **80** | **43%** |
| Informing | Informing activities focused on reporting the program's progress according to the management system of the organization, and communicating about the forthcoming changes to the personnel. | Middle manager of a central unit involved in the program: "*This has been communicated quite much also to the top management of [a business division], so they are quite well on board about how this goes.*" | 39 | 21% |
| Legitimating and committing | There were active legitimating and committing efforts, which related firstly to lobbying the program idea to top management and after that to getting a wider support for the program by participating people throughout Bureau in the current state analysis and program planning activities. | Program manager: *"[The original program owner] took care of the external relations, meaning that he sold this program to [Bureau's] top management and acquired the mandate to do this… and he also built awareness of this program."* | 34 | 18% |
| Influencing | There were some influencing activities, related to paving the way for other change efforts in the organization and developing the organization's IT policies beyond the scope of the program. | Support team manager: *"This [support project] has also supported operations management and its development in whole [Bureau]… It has contributed to the development of the IT support of these processes and the processes themselves."* | 7 | 4% |
| **Category IV: Blocking the boundary** | | | **10** | **5%** |
| Guarding | Some guarding activities were found, mainly related to isolating the program by deciding not to apply certain organizational control procedures in the program. | Project participant: *"There is this [project audit procedure] that should in principle be applied to all IT programs, projects and systems … But this is like the shoemaker's son going barefoot: the projects in [the program] have not followed [the policy]."* | 7 | 4% |
| Enclosing | Just a few enclosing activities were found, mainly related to one of the projects that had been very autonomous and had not reported to anyone. | Project manager: *"From the beginning we realized that if we do [this project] with a low profile, we will get fewer comments from others. Thus we started to do this very independently, keeping a low profile, and we don't really report to anyone either. … It provides us with freedom and enables fast operation."* | 3 | 2% |

**CASE CHAIN**

| Categories and types of boundary activities | Description of the activity in the case | Examples of quotes | Frequency (total: 531 quotes) | % of activities |
|---|---|---|---|---|
| **Category I: Defining and shaping the boundary** | | | **161** | **30%** |
| Positioning and negotiating | Positioning and negotiating activities included discussions about the program-related decisions in Chain's various management forums, negotiations with representatives of other business units and negotiations with a personnel union. | Sub-program manager*: "The stakeholder relations within the organization were characterized by the fact that we needed to find a direction that the business can support. This gave a certain flavor to [the planning]."* | 55 | 10% |
| Linking | There were many linking efforts, such as linking the program with Chain's various management forums and coordination groups. Additionally, each project had its own mechanisms for linking with the central stakeholder groups. | Sub-program manager: *"The same managers were responsible for the development activities and for running the operations, so we naturally had a certain amount of contact with "the real life", with the people who have spent time thinking about these issues ... This discussion was constantly active in the background."* | 95 | 18% |
| Task coordinating | Just a few task coordinating activities were found, mainly related to project-specific needs. For example, IT-based projects were coordinated with Chain's overall IT development roadmaps. | Sub-program manager: *"And we have all these forums besides our own steering group: there is, for example, this IT coordination group that views [Chain's]IT projects as an entity, ensures that they don't overlap, and comments on the architecture and other issues."* | 11 | 2% |
| **Category II: Crossing the boundary inwards** | | | **115** | **22%** |
| Information seeking | Information seeking efforts were project-specific, but project planning typically included workshops, meetings, and interviews with various experts. Some projects had specific information requirements that encouraged project managers to gather information on a wider basis. Much of the information scouting took place within the program and thus did not represent boundary activity. | Sub-program manager: *"The managers and superiors of local units have been involved in the planning phase of these projects… We need their local expertise, so even though they are not official members of the project groups, we have different kinds of workshops with them."* | 83 | 16% |
| Resource seeking | Some resource seeking activities were found, mainly related to seeking competent in-house project managers and utilizing support resources in program-related communications. | Communications expert: *"We realized that this will require a lot of resources from the Communications department. We concluded that a full-time PR specialist is required and I was able to convince one person to take over this task."* | 32 | 6% |

| Categories and types of boundary activities | Description of the activity in the case | Examples of quotes | Frequency (total: 531 quotes) | % of activities |
|---|---|---|---|---|
| **Category III: Crossing the boundary outwards** | | | **80** | **40%** |
| Informing | There were various methods for communication both at the program level and project level, including seminars, personnel meetings, and utilizing the personnel magazine and the intranet in communication. | Sub-program manager: *"In the beginning, we informed people about the existence and participants of this [project], we had discussions, we prepared some material for communications and we also held a briefing session."* | 151 | 28% |
| Legitimating and committing | Some legitimating and committing activities were found, mainly related to legitimating some distinct changes in the eyes of Chain's personnel. | Program owner: *"During the past year, I have probably spent 60–70% of my work time with this program ... we made this one-time effort to spread this model to the field and to launch it by demonstrating top management commitment by going through the local units."* | 53 | 10% |
| Influencing | Just a few influencing activities were found. As an example, the program started to have unforeseen effects to Chain's product portfolio. The program's steering group also became an attractive forum for other than program-related issues that were waiting for a decision. | Program manager: *"Sometimes I have even had to remind the program steering group that this about a change program and we make project-related decisions here ... Since this steering group works so well, there has appeared a tendency to bring issues there for discussion that actually are not at all related to this."* | 7 | 1% |
| **Category IV: Blocking the boundary** | | | **44** | **8%** |
| Guarding | Just a few guarding efforts were found, mainly related to scoping certain aspects out of the program or purposefully restricting the size of the project groups to ensure efficient operation. | Support team manager: "*I have been a bit surprised that the Sales department is not included in this program, but it's not up to me to decide this."* | 10 | 2% |
| Enclosing | Enclosing efforts focused on keeping confidential scenarios about the forthcoming changes within a small group of people. Communication required careful measures, since the program aimed at cost cuts by reducing the number of personnel and cutting down some local operations. These scenarios could not be shared with the personnel during the early program phases. | Development area director and original program owner: *"I think we have [communicated the plans] quite openly, except that naturally we have not told the specific figures of how many people will be affected or how much we have to decrease personnel."* | 34 | 6% |

## Appendix 5: Illustrations of readiness for change program implementation in the three cases

### CASE CENTER

| Indicators of readiness for change | Descriptions | Illustrative quotes<br>(To illustrate the program's situation at the end of the initiation stage, the quotes are from the second round of interviews, unless noted otherwise) |
|---|---|---|
| **Intent** | | |
| Visible need and pressure for change and sustained momentum | There was a visible need for change and clear external pressure. All agreed that the program's topic was important, but many thought that this kind of work was already being done and did not see the need for a separate program. Some were excited about the new program approach, but were unsure of what it entailed. | Peripheral program participant: *"In my opinion this is the number one effort in [Center's field], due to its topic. Although I don't know whether it will be this particular program that will be [the solution]. But this topic is unbelievably important."* |
| | | Sub-program manager: *"Let's say that if this program was about a less important topic, then there might appear these thoughts like "do I have the time, do I have to do this, can't we just keep doing what we've always done"." But since this is such an enormous issue and nobody has a solution yet ... It is very good that we aim to structure it with this program."* |
| Clear and shared vision, sense of direction, and commonly accepted goal | Despite the many efforts of defining the program goals, there was a lack of clear goals and confusion about the program's scope and content. The goals were viewed as too general, failing to provide the desired guidance. A shared view about the program's role in realizing the required changes was lacking. | Peripheral program participant: *"The level of concreteness is not yet very high regarding the other goals; I guess they remain to be elaborated."* |
| | | Peripheral program participant: *"I don't even know if [the goals] are challenging, they are just unclear and vaguely expressed. They may still be on a too general level."* |
| Purposeful plan for change content, process, and program structure | There was a lack of concrete plans for the program. Planning had mainly focused on clarifying the goals, and little effort had been put to planning the way how the goals could be reached. The main structure of the program organization had been sketched, but program management practices were lacking. | Peripheral program participant: *"According to my understanding, there is a [written plan]... or at least I've seen same slide sets. But one part is missing, namely what this will mean [to Center's member organizations]. It still lacks the "beef"."* |
| | | Sub-program manager: *"As said, there are so many other things to do ... I've had the plan for [the sub-program] as an initial draft version for a long time, but not until now have they set a deadline for that."* |
| **Resources** | | |
| Skillful and charismatic leaders, incl. the program owner and the program manager | The program core team trusted in the abilities of the program manager and spoke highly of him. Some others viewed him merely as a coordinator, not as a genuine leader of the program. Many peripheral participants called for more visible leadership in the program, and more active involvement of higher-ranking managers. | Sub-program manager: *"[Program manager] has provided good support, he has kept this going by underlining the importance of our task all the time."* |
| | | Peripheral program participant: *"I don't know if [the program manager] as a person has what is needed ... Change management requires a certain personality. ... I'm not familiar with the history of [the program manager], whether he has leadership experience, since this is about leadership."* |

| Indicators of readiness for change | Descriptions | Illustrative quotes<br>(To illustrate the program's situation at the end of the initiation stage, the quotes are from the second round of interviews, unless noted otherwise) |
|---|---|---|
| **Resources (continued from the previous page)** | | |
| Dedicated program team(s) with explicitly committed, motivated members | Many complained that there were too few committed resources for the program work. There were no full-time program participants (program manager allocated 70% and program coordinator about 20% of work time to the program). | Sub-program manager: *"Doing this in addition to other duties, many other tasks, is a problem in our organization ... That's why these initiation activities have taken so long. Not until our latest meeting did we agree on finalizing the sub-program plan. Obviously these things could have been done much faster."* |
| | | Peripheral program participant: "*I think the program has taken a step backwards. It was first launched, but then challenges appeared. It proved difficult to organize it so that all people or even all units that were invited or persuaded to take part would contribute."* |
| Visible senior management support and involvement | The initial program owner had left the organization, and the other top managers were unable to decide who should take the responsibility for the program. The program participants complained about the top management's lack of commitment. | Peripheral program participant: *"Our top managers have of course been [committed] to this when they established this, but I suspect that they may not currently be actively involved."* |
| | | Peripheral program participant: *"[Top management] should secure a certain position for this program. Coordination should stem from the management group level... Top managers should be aware of the program contents, but currently their motivation is not at its best."* |
| Receptive environment and prepared recipients of change | The environment was described as immature in terms of program management and large-scale internal change efforts. The organizational culture promoted individual expertise and high unit boundaries, and did not support cross-functional collaboration. | Program core team member in round 1: *"A stronger management approach is required: the program should be led more firmly ... The problem is in our culture: the program management approach has not been internalized. ...I fear that this will remain a modest effort of a handful of people, and the strategic dimension and top management support will remain absent."* |
| | | Peripheral program participant: *"Regarding this program management, I have sensed that we have many people ... who doubt whether there really is room or a need for program management in our management system."* |
| **Autonomy** | | |
| Legitimate position in the organization | The program lacked a clear position in the organization, and it was not perceived as a legitimate actor but rather as a threat towards the existing order. | Program manager: "*There have been political interests or fears that this kind of a larger program would aim at altering the power relations among the top managers. It is quite a mess."* |
| | | Peripheral program participant: "*Could it be that the program managers feel their position is not clear enough, in relation to the management group and the board."* |
| Authority and autonomy to realize change | The program manager and his team felt that they lacked authority to engage resources in the program and to proactively plan and realize changes. The steering group members felt that they had sufficiently authorized the program team and they were waiting for the program to demonstrate progress." | Program manager: *"I wish my mandate was confirmed. We should agree on that and on my authority... In my view, top management should confirm my position and support me in it."* |
| | | Top manager in round 1: *"I'm wondering whether [the program's managers] have what is needed for this kind of a program ... The position of [a program manager] is very contradictory, and most often the mistakes that are made in program management in [the public sector] relate to granting a formal position but not providing the required instruments."* |
| **Overall readiness** | The overall readiness for change was poor, and the program seemed paralyzed. | Peripheral program participant: *"I wonder whether [the program] is at a halt. ... I think it should be activated, it is not visible enough."* |

**CASE BUREAU**

| Indicators of readiness for change | Descriptions | Illustrative quotes |
|---|---|---|
| **Intent** | | |
| Visible need and pressure for change and sustained momentum | Early initiation activities aimed at providing rationale for the change through a current state analysis. This phase was largely considered successful, resulting in a shared understanding of the need for change. | Manager of a central unit involved in the program: "*In my opinion [program initiation] has been conducted quite thoroughly … It was good that the starting point was a necessity of change. … It is very hard to justify something merely with cost savings.*" |
| | | Project participant: *"I think the number one [enabler] is the fact that we have needed this change … People have understood that we cannot continue like this for long."* |
| Clear and shared vision, sense of direction, and commonly accepted goal | The participative approach of program initiation had resulted in a high-level vision for the program, which was shared at least by those involved in planning. People seemed to have a similar view of the purpose and main goals of the program. | Program manager: *"We were able to set goals that were commonly accepted and at least then a sufficient number of people in the organization were committed to them. The goals were acceptable politically, and from IT and business process perspectives. Furthermore, the goals did not seek a compromise … but were quite ambitious; they would lead us to good results."* |
| | | Manager of a central unit involved in the program: *"There are still some issues, even major ones to solve, but the program's main principles, goals and plans have been generally accepted."* |
| Purposeful plan for the change content, process, and program structure | During the general planning phase, an overall plan for the program was created, but after that further planning was left to project teams. Actors of different projects had varying views about whether the level of detail in planning had been sufficient. | Key actor in a project that was considered successful: *"After [the general planning phase] the guidelines were extremely detailed and clear. Of course things have been refined and developed, but these guidelines were expressed very clearly, as were the related technologies and the implementation schedule and other things, at least to some extent."* |
| | | Key actor in a project that had suffered from delays: *"[The general planning phase] provided the basis for the projects, but [from our project's] perspective its outcomes were on a too general level. We had to take several steps backwards to clarify the background; we didn't have the prerequisites… They should have defined the focus and the technologies in more detail."* |
| **Resources** | | |
| Skillful and charismatic leaders, incl. program owner and program manager | The program originally had two charismatic leaders, who were recognized as the driving force of the program. After the general planning phase they left the program, and although new managers were appointed for the program, it seemed to lack a strong leader. | Project participant: *"I believe [the original program owner] has been in a central role, as well as [the original program manager]. There has to be someone with the vision … It has required these people who see the importance of it, who have an idea of what it will be and who take it forward."* |
| | | Manager of a central unit involved in the program: *"I think that [the program owner] has been the primus motor during [initiation]."* |
| Dedicated program team(s) with explicitly committed, motivated members | Although program participants seemed motivated and committed, some complained about the lack of resources, particularly concerning technical experts. | Program manager: *" Although the [program] structure was appropriate, it was not properly resourced, neither in terms of the headcount nor the expertise. … The people were all first-timers, they didn't have a clue about this... On the whole this has been underresourced in terms of both competence and the number of personnel, in terms of both money and authority."* |
| | | Project manager: *"I must be grateful that the motivation [of the experts working in the project] hasn't dropped and there hasn't occurred significant absence. We cannot really replace the resources, since this concerns complex issues and requires a lot of expertise."* |

| Indicators of readiness for change | Descriptions | Illustrative quotes |
|---|---|---|
| **Resources (continued from the previous page)** | | |
| Visible senior management support and involvement | There was a general agreement about senior management support to the program. This support had been acquired with the help of a thorough current state analysis and especially by the program owner's active efforts during program initiation. | Project participant: *"I believe that [the original program owner] has been in a central role, as well as [the original program manager]. There has to be someone with the vision … It has required these people who see the importance of it, who have an idea of what it will be and who take it forward."* |
| | | Project participant: *"We have received top management support, from the very highest level, at least in the sense that they know what we are doing and they have accepted the idea. This has also set expectations for us to achieve something."* |
| Receptive environment and prepared recipients of change | Although Bureau was viewed as slow to change, the efforts during the early program phase had made the environment more receptive to change. There were still some doubts about the attitudes of those recipients of the changes who were not actively involved in the program. | Program manager: *"To get the [organization committed] was a constantly improving process that started from the negative side and ended up with "I guess we just have to do this"."* |
| | | Project manager: *"Of course there are discussions and doubts, and sometimes even criticism. But it has mainly been a question of marketing, and getting as many as possible involved in this from the local units, and also getting enough people in the planning team."* |
| **Autonomy** | | |
| Legitimate position in the organization | The program had achieved a legitimate position, and its scope had also been expanded from a pure IT program to a wider change program. However, the program's position in relation to other projects and to the line organization was not fully clear. | Support team manager: *"Let's say that this was started as a project, but we don't talk about a project anymore, it has become a kind a of "program cloud" which pretty much equals our IT management."* |
| | | Project manager: *"Also the relationship of [the program] with our other development programs and the cross-functional collaboration in this matrix organization still require much development… So that we'll learn to operate in this matrix organization."* |
| Authority and autonomy to realize change | The original managers had utilized their formal position and charisma to gain ground for the program. After they left the program, the responsibility was given to project teams who received high autonomy. The teams differed in how they reacted: some appreciated the granted authority, whereas others complained about a lack of guidance. | Project manager of a project that was considered successful: "*From the beginning we realized that if we do [this project] with a low profile, we will get fewer comments from others. Thus we started to do this very independently, keeping a low profile, and we don't really report to anyone either. … It provides us with freedom and enables fast operation."* |
| | | Key actor in a project that had suffered from delays: *"The initial conditions for the project were very poor… Especially when the tasks had been allocated to us and we started the iteration, and then some of the related tasks were allocated to the line organization. At that point, leadership, concerning both this line activity and the project work, was in my opinion quite vague."* |
| **Overall readiness** | Readiness was purposefully and skillfully built during the early phase and was at a quite high level, although some problems had been encountered and delays caused when the responsibility was given to project teams. | Middle manager of a central unit involved in the program: *"[The program] is still making progress and we haven't encountered any major problems. And we haven't encountered unforeseen, major resistance either now that the program is ongoing, indicating that people have now accepted that a change is taking place. It won't be stopped anymore."* |

**CASE CHAIN**

| Indicators of readiness for change | Descriptions | Illustrative quotes<br>(To illustrate the program's situation at the end of the initiation stage, the quotes are from the second round of interviews, unless noted otherwise) |
|---|---|---|
| **Intent** | | |
| Visible need and pressure for change and sustained momentum | Program activities were started by preparing for mandatory replacement investments, providing a clear need for change. As the business environment was drastically changing, there was visible pressure for development. | Program coordinator in round 1: "*It must be an ideal starting point that we have to make these replacement investments, the fact that we must do something.*" |
| | | Project manager in round 1: *"All the trends point to the same direction: if we don't do something like this, the company will be in big trouble within just a few years.... We are forced to do this, or if not this then something else, something very dramatic."* |
| Clear and shared vision, a sense of direction, and a commonly accepted goal | The overall goal was set by the top management by defining a figure for the desired cost savings. Most agreed that there was a sense of direction, but some complained about the lack of an overall picture of the end state. | Program owner: *"Of course we have a vision of the end state in a sense that we have prepared a business case and so on, but the discussion is still ongoing: it's not set in stone that we would know that "this is what we'll be doing until the year 2015"."* |
| | | Sub-program manager*: "I guess the right direction will be found little by little, as we gain more understanding … I'd say that we're still looking for the direction.*" |
| Purposeful plan for the change content, the change process, and the program structure | The program structure and main management principles had been stabilized after some reorganizing. Major decisions on the program's projects were made by the program steering group, but otherwise projects were very autonomous. Plans were created within projects as seen appropriate and each project could decide on how to organize its internal work. A development area that had initially struggled was also finally seen to be on the right track. | Program owner: "*We also had an external consultant to perform an audit of the program, who gave an evaluation of whether we are on the right track with this. It supported our perception that everything related to the project management dimension is in a pretty good condition."* |
| | | Sub-program manager: "*That [another sub-program that had suffered from delays] has made significant progress. During [the first round of interviews] it was very vague and unclear. In my opinion it has shown very positive progress in the last 1.5 years: now every project has a dedicated staff and a schedule."* |
| **Resources** | | |
| Skillful and charismatic leaders, incl. program owner and program manager | At the end of the initiation stage, the program had strong and committed managers. The program coordinator's extended mandate was confirmed by his nomination as the program manager. The original program owner was also replaced by a more active, highly committed owner. | Sub-program manager: *"The program manager has gained a deep understanding of these matters, he understands many things even surprisingly well ... I genuinely appreciate him. He has grown and developed remarkably.* |
| | | Sub-program manager: *"I think that one central success factor is the chairman of the steering group [i.e. the program owner], because of his abilities and his touch in that task. That is a crucial factor contributing to why this is working so well."* |
| Dedicated program team(s) with committed, motivated members | Program work was conducted by fairly autonomous project teams that in general had the access to the required resources. Some projects reported a lack of skilled resources due to Chain's lack of experts in those areas. | Sub-program manager: "*Our people are very committed to this task and they do high quality work. Thus, we have succeeded in selecting the right people for this."* |
| | | Sub-program manager: *"We haven't had enough experts … We should have taken in new people a few years ago to grow, to learn the job … Now we have to do this with just 2–3 key persons who are totally overloaded … They are irreplaceable."* |

| Indicators of readiness for change | Descriptions | Illustrative quotes<br>(To illustrate the program's situation at the end of the initiation stage, the quotes are from the second round of interviews, unless noted otherwise) |
|---|---|---|
| **Resources (continued from the previous page)** | | |
| Visible senior management support and involvement | Top management support was ensured from the beginning by making the central line managers also responsible for the program. | Program manager in round 1: *"It is a bit of a cliché, but top management commitment really is the most significant enabler. That top managers are this committed, and that the right people are there to make the decisions, those are the most central factors."* |
| | | Steering group member: "*One of the major factors is that this entire effort has been under the protection of the top management of the business."* |
| Receptive environment and prepared recipients of change | Early implementations had demonstrated some results, which was seen to create and sustain momentum. Some fears related to the changes were reported, especially concerning the local unit personnel. Although some individual projects had involved local unit personnel in planning, the program was not very visible towards the change recipients In local units. | Program owner: "*It has been very important for us to show results, since 1.5 years ago there were many doubts of what we'll gain with this. ... It has been vital to show that benefits are already being realized from this [early implementation]; it has contributed to the positive atmosphere surrounding this program."* |
| | | Sub-program manager: "*There are two kinds of attitudes: some are excited about [the new equipment] ... and this challenge. And others are afraid: they know there will be staff reductions and they are unaware if those will concern them."* |
| **Autonomy** | | |
| Legitimate position in the organization | In Chain's headquarters, nobody seemed to question the program's legitimacy, and the program had gained a high status and a powerful position. | Project manager in round 1: *"The program has such a high status that if someone introduces oneself and says that: "I'm N.N. from this program and I'm conducting an investigation on this topic"... one is able to get the required information."* |
| | | Sub-program manager*: "We won't have a future without this. The early results show that we are able to stop the expenses from rising. ... We need this to continue."* |
| Authority and autonomy to realize change | The program was not autonomous as such (as major program-related were made by the line organization's decision makers), but it had authority due to its well-working management system. Domain's key managers were involved in the program steering group, where main decisions related to the program's projects were made. The program also had authority via its central managers' high-ranking positions. Although the program coordinator did not originally possess much authority, he had gradually gained a more powerful position and his mandate had increased when he was appointed as the program manager. | Program manager: *"The prerequisite for me to accept this position was to have a well-functioning project portfolio management process for making decisions about the projects. That process may not be bypassed; the program simply cannot take any of that. So if the CEO asks some project to do something, we need to all agree that no one will act until we have discussed that in the program steering group, considered the effects and made a formal decision ... If the CEO asked to put a project on hold, it would of course be put on hold. But not just by his request, but only after it had been decided in the steering group. ... Everyone gets the idea, and I'm very satisfied with how this works."* |
| | | Communications expert: *"Because [the program manager] has also shown to understand so much about the program content, his position has now been confirmed by giving him the mandate to also intervene instead of just coordinating things. "* |
| **Overall readiness** | Overall, readiness for program implementation was high. Some fears were still expressed concerning the insufficient involvement of the local unit personnel, and related to the slow progress of some individual projects. | Program owner: *"Everyone here understands the status of the program, that doesn't require any further discussion. People understand that these changes are necessary ... There is also shared commitment to all our actions ... But we still have a challenge as there still are those who could be better involved in."* |

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