

# Adapting Managerial Practices for Strategic Change

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## Abstract

Realizing IT strategy processes in the public sector is a demanding task for top managers. Public managers often initiate strategy processes in a directive manner due to presumed higher effectiveness, better oversight, and for coordination reasons. However, as the strategy process continues, they often realize that they have to adapt their management behavior and underlying practices by integrating participative manners. Until now, research has paid far too little attention to how the adaptation of managerial practices evolves, even though it is crucial for the success of strategic change.

The research objective of this study is to explore how and why top-down-oriented management behaviors change during strategy processes in the public sector. Therefore, I conducted an embedded longitudinal case study of an IT strategy process in a Swiss canton. By referring to work published by the new strategy-as-practice community and applying a sensemaking lens for the case study analysis, I identified three bundles of practices, identity-building, interpretive, and coping practices, and environmental factors. The bundles of practices are central for constructing ambiguity existing within the process environment in a manageable way and encouraging top managers to allow for the participation of organizational members. The resulting process model illustrates the interplay of the three bundles of practices and their interaction with ambiguity.

Identity is a driving force of organizational legitimacy and is needed for the construction of new managerial practices and the adaptation of management behavior toward participation. Substantial ambiguity might constrain interactions and especially individual initiatives. If ambiguity is manageable, it could facilitate fruitful improvisation and creativity. While this study concentrates on a single case study in the public sector, the results shed light on the important issue of the adaptation of managerial practices toward participative behavior and open up the black box of microscopic change within strategy processes.

# Zusammenfassung

Aufgrund von erwünschten Effektivitäts-, Planungs- und Koordinationsüberlegungen initiieren Public Manager IT-Strategieprozesse häufig auf der Basis von Top-Down-Prinzipien. Im Verlauf des Strategieprozesses stellen Public Manager allerdings oft fest, dass sie ihr gewähltes Vorgehen und ihr Managementverhalten sowie die darunter liegenden Praktiken in Richtung partizipativer Verhaltensweisen anpassen müssen, um ihr Ziel eines strategischen Wandels der Organisation zu erreichen.

Die zentrale Forschungsfrage dieser Arbeit ist dementsprechend, warum und wie sich Top-Down-orientiertes Managementverhalten während Strategieprozessen verändert. Für die Analyse der Fragestellung wurde eine Einzelfall-Langzeit-Fallstudie eines IT-Strategieprozesses in einem Schweizer Kanton durchgeführt. Für die Durchführung und Analyse der Fallstudie wurden Untersuchungen der neuen Strategy-as-Practice Forschungsgemeinschaft einbezogen und eine Sensemaking-Perspektive angewandt. Drei Praktikenbündel, Praktiken der Identitätsbildung (*identity-building practices*), Interpretative Praktiken (*interpretive practices*) und Praktiken des Bewältigens (*coping practices*) sowie umgebende externe Faktoren wurden als relevant für die Adaptierung von Managementpraktiken identifiziert. Die Praktikenbündel sind zentral, um die innerhalb der Prozessumwelt existierende Ambiguität für Public Manager handhabbar zu gestalten und die Integration partizipativer Verhaltensweisen zu ermöglichen. Das aus der Datenanalyse resultierende Prozessmodell stellt das dynamische Zusammenspiel der drei Praktikenbündel und ihr Wechselspiel mit externen Faktoren und Ambiguität dar.

Identität ist grundlegend für die Gestaltung neuer Managementpraktiken und die Adaptierung von Verhaltensweisen. Ist Ambiguität für Public Manager handhabbar, kann sie für die Herausbildung von Identität wichtige Elemente begünstigen (z.B. Improvisation). Die Ergebnisse beruhen zwar auf einer Einzelfall-Langzeit-Fallstudie im öffentlichen Sektor, dennoch ermöglichen sie einen wichtigen Einblick in die Adaptierung von Managementpraktiken und öffnen die Black-box mikroskopischen Wandels im Rahmen von Strategieprozessen.

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## List of Abbreviations

CH1	Synonym for the case study (canton)
DC	Department of Construction
DE	Department of Education
DF	Department of Finance
DH	Department of Health
DI	Department of the Interior
e.g.	for example ( <i>exempli gratia</i> )
et al.	and others ( <i>et alii</i> )
ff.	following pages
ibid	in the same place ( <i>ibidem</i> )
IT	Information Technology
IT board	Interdepartmental body of top managers for strategic IT tasks
ITC	IT Conference
ITO	Coordination office of the IT board
NPM	New Public Management
OCI	Operative cantonal IT
PIT	Perfect IT
SC	State Chancellery
SIO	Strategic IT Office





# **1 Introduction**

In the introduction, I start with a description of my research motivation for conducting this study in chapter 1.1. Chapter 1.2. illustrates the objective and relevance of this study. In chapter 1.3., I define key concepts used in this study. In chapter 1.4., I introduce relevant research assumptions underlying this study. The last chapter of the introduction explains the structure of the thesis.

## **1.1 Research Motivation**

My interest in conducting this study using a Swiss case study is based on findings that acknowledge the complexity of IT strategy processes and the great challenge of managing IT-related strategic change in the public sector. Today, most public managers still regard IT-related changes as a task that can be controlled and planned in detail. IT is mainly seen as a tool to save costs, improve service provision processes, and enhance service quality. However, as soon as IT affects organizational processes, it influences the entire organization including different organizational members and key knowledge bearers on the operational level. The IT and project managers on the operational level who are in charge of the implementation of IT projects often have access to different information than the top management. Therefore, they might have different opinions about how the IT project should be implemented which could stand in opposition to the strategic decision made by the top management.

A comparable situation exists in most Swiss cantonal administrations. The heterogeneity and incompatibility of systems are problematic. Most synergetic effects are obtained only if IT can be used beyond organizational borders and if it is possible to integrate and share systems and databases (Müller, 2005). Top managers who are facing the-

se challenges are also confronted with strong organizational subcultures and fragmented power structures. Most public managers react with top-down-directed actions, employing planning and control mechanisms in ambiguous situations.

Previous research work that I conducted supports these findings on IT-related strategic change in the public sector. First, IT strategy processes in the public sector do not proceed in a linear fashion. Top-down requirements and bottom-up dynamics form IT strategy processes and thus they emerge incrementally, including setbacks and loops (Collm and Schedler, 2007). Second, many IT strategy processes have failed in terms of objectives, resources and/or time schedules. This has mainly been due to necessary adjustments of strategies, plans and behavioral practices the top managers have had to conduct (Collm and Schedler, 2008). The change in management behavior represents the objective of this thesis. In chapter 1.2., I illustrate the objective and the relevance of this study.

## **1.2 Objective and Relevance**

Many scholars have written to date about managing strategic change. However, the existing academic literature has generally been silent on how and why managerial behavior and its underlying practices change within strategy processes. Managerial behavior, or also called management behavior, is central to the way the process of change is managed. It is seen as "something that has to change in order to enable the other changes that are desired" (Mohrman and Lawler III, 1988, p.46). Thus, since management behavior is considered the basis for later interventions, it should be made the target variable in any organizational change process.

Since little is known about how and why managerial behavior and its underlying practices change, the primary research objective of this dissertation is of an exploratory nature (Yin, 1994). Based on a longitudinal case study of this phenomenon, I seek to describe the elements

of this process and the core practices through which managerial style change unfolds. The secondary objective is to develop a context-sensitive process model illustrating the change of managerial practices. The process model of this study aims at a better understanding of how managerial practices change over time and which factors influence change from a sensemaking perspective.

With this study, I contribute to the following three fields of research. I position the study within *public management research*, the field of *sensemaking*, and the growing body of *strategy-as-practice* literature.

Regarding public management studies, several authors state that management behavior should fit the needs and the situation. Coram and Burnes (2001) observe that a top-down, planned strategy process which may be well suited to a certain situation could be inappropriate or even disadvantageous for another. Especially when it comes to generating commitment for the implementation of strategic change, a bottom-up managed strategy process emphasizing the participation and involvement of all employees may be more effective according to Sminia and Van Nistelrooij (2006).

The combination of elements of lower-level participation and direction from top management is regarded as promising (Thompson and Sanders, 1997). However, even though scholars have argued that management behavior needs to be adapted over time (Coram and Burnes, 2001, Koppenjan and Klijn, 2004), very little is known about how and why management behavior and its underlying practices change in the public sector. In this thesis, I seek to add to the *public management literature* and answer the question of how and why managerial practices change during IT strategy processes in the public sector.

The analysis of factors influencing changes in management behavior and its underlying practices is carried out using a sensemaking lens, which helps to examine what triggers the interpretation of new behavior or information. Most sensemaking studies have focused either on analyzing sensegiving activities at the top management level (Baez and Abolafia, 2002) or the change recipient role of middle managers

(Thomas and Dunkerley, 1999). More recently, studies have analyzed the interplay of the sensemaking processes of middle managers and sensegiving processes of top managers. Some of these studies assume that interaction between top managers and middle managers is the basis for creating an understanding of strategic change (Balogun and Johnson, 2005, Balogun and Johnson, 2004, Gioia and Chittipeddi, 1991).

Few attempts have been made to include the sensemaking processes of top managers based on a dialectical process considering both sensemaking and sensegiving (Denis et al., 2009, Hoon, 2007). Instead of solely analyzing sensegiving processes on the top management level, this study also considers sensemaking processes. Thus, this approach contributes to the *sensemaking literature*.

In order to explore the strategy process, I concentrate on the activities and interactions of top managers within a team as well as their interactions with other organizational members. Using this approach, I follow a call from the strategy-as-practice community for a practice turn in analyzing strategy processes (Chia, 2004, Johnson et al., 2007, Whittington, 2003, Pablo et al., 2007). The focus on interactions and activities also explores the link between praxis, practices, and practitioners (Whittington et al., 2006, Jarzabkowski et al., 2007).

The body of literature from the strategy-as-practice community is very dynamic and continuously growing. While early research work emphasized that research should have a narrow focus on the nitty gritty work of daily strategizing (Whittington, 1996), more recent studies place the analysis of praxis and practices in a broader context of strategy process (Jarzabkowski and Balogun, 2009). Therefore, my contribution to the *strategy-as-practice* research stream is a process model that illustrates the dynamics of interdependent practices of top managers over time. The model emphasizes the role of context and the interrelations between top managers and other organizational members.

The example of an IT strategy process in the public sector is an appropriate case for studying strategy processes and the way in which

managerial practices change. The reason for this lies in the complex nature of the process: diverse actors from different organizational levels, conflicting IT environments and solutions, as well as bottom-up developed structures and quasi-autonomous IT divisions. These conditions make it a challenge for public managers to introduce and realize change. The success of command and control mechanisms for achieving short-term gains is challenged.

To sum up, this study is a contribution to the literature in the public management field and adds to sensemaking theory as well as to the strategy-as-practice approach. However, practitioners also benefit from this study. Public managers often feel powerless when they realize that the management behavior they are pursuing has no or even contradictory effects. Thus, for practitioners it is crucial to know what might demand, facilitate or constrain the adaptation of their management behaviors.

### **1.3 Definitions of Key Concepts**

This chapter of the thesis introduces a clear description of key concepts of the study. It defines and explains central terms: strategic change, strategy process, practitioners, practice, praxis, episodes, and events. These terms have been used in various ways in the literature; therefore, there is a need to define terms especially in order to develop a coherent design and semantic structure for the research.

#### **1.3.1 Strategic Change**

The expression *strategic* is used to express the influence strategy, structure, technology, capabilities, culture, resources or control systems have on major subsystems (Balogun et al., 2008, Ferlie et al., 1996). Hence, actions, events or developments can be regarded as strategic when the whole organization, its nature and direction within its context are influenced (Bryson, 1988).

The term *strategic change* is often used interchangeably with episodic, transformational, or revolutionary change (Balogun and Hailey, 2008, Nutt and Backoff, 1993, Nutt and Backoff, 1997, Rajagopalan and Rasheed, 1995, Weick and Quinn, 1999). In this study, strategic change is understood as change that has an impact on the overall organization and affects major subsystems. It is seen as a "context-dependent, unpredictable, non-linear process" (Balogun and Johnson, 2005, p.1573) rather than a linear, planned process.

### **1.3.2 Strategy Process**

A large and growing body of literature has shown that strategic management does not follow the ideal of rational decision making (Cyert and March, 1963, Mintzberg et al., 1976, Nutt, 1984, Quinn, 1980). Strategies do not form according to previous plans but develop as complex and meandering processes. Mintzberg (1978) coined the term *strategy formation*, with which he expressed the idea that strategy is formed by a complex interactive process of intertwined formulation and implementation activities which are influenced by politics, values, organizational culture, and management behavior (Mintzberg and Quinn, 1996). Thus, strategy process, including all activities of individuals and organizations from formulation to implementation, should be seen as a process of change (Chia, 1994, Hendry, 2000, Langley, 1995, Laroche, 1995, Sminia, 2009). Hence, the concept of strategy process which I use in this study describes a context-sensitive developmental event sequence in which actors promote actions that lead to strategic change in an organization (Denis et al., 2001b, Langley, 1999, Poole et al., 2000, Van de Ven, 1992).

### **1.3.3 Practitioners, Practice, and Praxis**

The strategy-as-practice approach highlights three dimensions for analyzing the work through which strategy is actually formulated and implemented (Johnson et al., 2003): *practitioners*, "strategy's actors,

who do the work of making, shaping and executing strategies" (Whittington, 2006, p.619), *practices*, "shared routines of behavior, including traditions, norms and procedures for thinking, acting and using 'things'" (ibid, p.619), and *praxis*, "the intra-organizational work required for making strategy and getting it executed" (ibid, p.619). To be more specific, in this study, practices are micro level processes and modes of acting which all members of the team as well as the organization accept.

### 1.3.4 Episodes and Events

Several authors from the strategy-as-practice community have described episodes as a decision, meeting or workshop (e.g. Jarzabkowski et al., 2009) which is a sequence of communications with a beginning and an ending (Hendry and Seidl, 2003). Other strategy-as-practice researchers have identified meetings and workshops as episodic practices (Hodgkinson et al., 2006). In this study, episodes are the *unit of analysis* consisting of *events*, which are actions and interactions. The *beginning* of an episode is marked by a *turning point* in the strategy process while continuity exists within the episodes (Langley, 1999). Therefore, an episode is a "network of events [...] within a limited period" (Barzelay et al., 2003, p.23).

## 1.4 Relevant Research Assumptions

The study is committed to expanding knowledge about actions and interactions that foster a shift in directive managerial practices toward participative managerial behavior within strategy processes. In this chapter, I address the ontological and the epistemological question of the study.

First, I designed the study according to characteristics of qualitative research. Second, following a process approach of strategic change, I analyze the evolution of actions and activities over time. Third, in or-

der to identify mechanisms leading to a more participative management behavior, actions and activities are the focus of my research work. Therefore, the study is linked to the research agenda of the new strategy-as-practice approach.

### **1.4.1 Qualitative Research**

As an overarching category, qualitative research covers a wide range of approaches and methods and is surrounded by many terms and concepts (Strauss and Corbin, 1990, Denzin and Lincoln, 2000, Snape and Spencer, 2003). Concepts that are often linked to qualitative research are constructivistic (Schwandt, 1994), naturalistic (Lincoln and Guba, 1985), interpretative (Taylor, 1979), post-positivistic or post-modern (Smith, 1983).

In general, qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive activities but neither has a theory or paradigm nor a distinct set of methods that is entirely its own (Denzin and Lincoln, 2000). This is why scholars often argue that research aiming at explaining or understanding social phenomena should follow a qualitative research approach; otherwise, the complexity of the phenomenon and the development over time might not be grasped (Snape and Spencer, 2003).

Rossmann and Rallis (2003, p.8) identify five characteristics of qualitative research which most scholars agree upon. According to the authors, qualitative research

- takes place in the natural world.
- uses multiple methods.
- focuses on context.
- is emergent rather than tightly prefigured.
- is fundamentally interpretive.

These common characteristics of qualitative research lead to assumptions about the role of the researcher. The qualitative researcher has a



holistic view of the context under study, uses personal insights, employs complex reasoning shaped by a cyclic process of deduction and induction, and remains sensitive to personal experience and her own role in the social world (Snape and Spencer, 2003, Marshall and Rossman, 2006, Rossman and Rallis, 2003, Miles and Huberman, 1994).

Therefore, doing qualitative research often appears to be like detective work: Mysteries are solved and phenomena are explained based on detailed data, experience from similar situations, and knowledge of general causalities (Marshall and Rossman, 2006, Mahoney and Goertz, 2006). In this sense, qualitative data is not only used to describe but also to explain a social situation. This means that influencing factors and causal relationships have to be analyzed as well (Brower et al., 2000, Hoffmeyer-Zlotnik, 1992).

Denzin and Lincoln (2000) see qualitative researchers as guided by abstract principles. These principles are ontology (what there is to know about the world), epistemology (what the relationship between the inquirer and the world is like), and methodology (how knowledge about the world can be gained) (Denzin and Lincoln, 2005, Snape and Spencer, 2003). In the following sections, I explain the ontology and the epistemology of this study, referring to both the remaining premises of a process and a practice perspective.

#### **1.4.2 A Process Model of Change**

Research seeking to examine and explain change over time requires a framework which can explain the unfolding temporal processes of change. In general, studies of strategic change that follow a process perspective range from highly interpretive to quantitative studies (Van de Ven and Poole, 2005). Van de Ven and Huber (1990: 213) note that "process studies are fundamental to gaining an appreciation of dynamic organizational life, and to developing and testing theories of organizational adoption, change, innovation, and redesign" (Van de Ven and Huber, 1990, Markus and Robey, 1988).

From a process perspective, change can be expressed as a narrative describing a temporal sequence of events in an institutional arrangement (Poole et al., 2000). This explanation, based on a story or historical narrative, is often associated with *process theory*, which seeks to construe the temporal order and sequence in which change events occur (Abbott, 1988, Pentland, 1999, Poole et al., 2000, Tsoukas, 2005).

According to Van de Ven and Poole (2005, p.1385), process explanations may include "an account of how one event leads to and influences subsequent events [...] an explication of the overall pattern that generates the series [...] or both". In this study, the latter approach is taken into account: I analyze the reciprocal relations between actions and interactions on the micro level and the influence of environmental factors.

From a process perspective organizations are social processes (Tsoukas, 2005). Hence, organizations consist of both quasi-stable structures and sites of human action in which organization emerges (Tsoukas and Chia, 2002). Thus, scholars following a process approach even suggest talking about organizing instead of organization (Weick, 1979).

Process theories seek to explain how a sequence of events unfolds over time. In contrast, variance theories are based upon different ontological and epistemological assumptions (Van de Ven and Engleman, 2004). The variance approach considers organizations as fixed entities and change in them is driven by deterministic causation (Van de Ven and Poole, 2005). Hence, from an epistemological viewpoint the variance method explains change in terms of relationships among independent variables and dependent variables (Poole et al., 2000).

The two different approaches offer different conceptualizations of change. Van de Ven and Poole (2005) link the opposing views according to the different ontological and epistemological assumptions with four different approaches to studying strategic change which are illustrated in the following Table 1-1. Based on this typology, I position the research approach of this study with the characteristics of two types of change.

Table 1-1: A typology of approaches for studying organizational change

		Ontology	
		An organization is represented as being:	
		A noun, a social actor, a real entity ('thing')	A verb, a process of organizing, emergent flux
Epistemology (Method for studying change)	Variance method	Approach I  Variance studies of change in organizational entities by causal analysis of independent variables that explain change in entity (dependent variable)	Approach IV  Variance studies of organizing by dynamic modeling of agent-based models of chaotic complex adaptive systems
	Process narratives	Approach II  Process studies of change in organizational entities narrating sequence of events, stages or cycles of change in the development of an entity	Approach III  Process studies of organizing by narrating emergent actions and activities by which collective endeavors unfold

Source: According to Van de Ven and Poole (2005, p.1387)

The ontological perspectives in approaches I and II are on the analysis of change in an organizational entity that is viewed as a real social actor with an enduring identity. In contrast, approaches III and IV analyze the processes of organizing.

Whereas approach I explains change in an organizational entity as a function of independent variables, the second approach examines how change unfolds in organizational entities over time. Change is regarded as a sequence of events, stages, cycles, or states in the development of an organization.

Studies referring, e.g., to the structurational theory approach are subsumed under approach III, which assumes that the world is composed of processes, and applies process research. This approach is also in line with the ontological perspective of the social constructivist paradigm. The fourth approach investigates processes based on a process ontology while using quantitative analyses at the same time.

The four approaches are not exclusive but complementary. In addition, they all consider time as fundamental for understanding organizational change. Since each approach has a special perspective on change, they add in different ways to the whole picture and a better understanding of organizational change. Referring to the four different approaches, Van de Ven and Poole (2005) add that a strict division can be misleading because there is no right way in doing research. In contrast, the authors emphasize that it is more important to find a way to combine elements of the four approaches in one analysis.

This study follows a combination of approaches II and III. Whereas the focus remains on emergent actions and activities, as illustrated in approach III, they take place within the overall development of the organizational entity, as described in approach II. Thus, the study is in line with the ontological and epistemological perspective of the social constructivist paradigm. Since the study focuses on actions and interactions, it also complies with the strategy-as-practice approach, which is described in section 1.4.3.

### 1.4.3 A Practice Perspective of Strategy

With its focus on actions and activities, this study concretizes the ontological perspective toward a practice-based approach. A practice-based perspective considers "strategies and strategizing as human action, as doing, and [...] places human interaction at the centre" (Johnson et al., 2007, p.7). Thus, with the centrality of human action and interaction, a different ontological premise underlies a practice-based perspective compared to mainstream strategy research.

Practice-oriented scholars (e.g. Jarzabkowski and Balogun, 2009, Jarzabkowski, 2004, Johnson et al., 2003, Johnson et al., 2007, Whittington, 2006) have illustrated that without looking at how people go about the process of making strategy and focusing on activities, the doing and the process cannot be understood. As Mintzberg and Westley (1992, p.57) stated, "as researchers and readers of organizational change, we should be spending less of our time trying to interpret its vague traces and more of our time trying to understand its rich practice".

Table 1-2: Basic perspectives on studying strategy

		Levels	
		Organizations	Managers
Issue	Where	Policy	Planning
	How	Process	Practice

Source: According to Whittington (1996)

Referring to the work of these scholars, investigating strategy process has to be based on its building blocks: the interactions and negotiations between different actors (Jarzabkowski and Balogun, 2009, Jarzabkowski, 2004, Johnson et al., 2003, Johnson et al., 2007, Whittington, 2006). Following this approach, Whittington was one of the first to integrate a practice stance and develop four basic perspectives on how to study strategy (Table 1-2). Even though the practice approach draws on many of the insights of the process school, it returns to the managerial level (Whittington, 1996).

Chia and MacKay (2007, p.229) characterize the study of strategy from a strategy-as-practice perspective as an approach which: “1) places ontological primacy on practices rather than actors; 2) philosophically privileges practice-complexes rather than actors and things as the locus of analysis; and 3) makes the locus of explanation the field of practices rather than the intentions of individuals and organizations”.

Summarizing the underlying research assumptions, this study complies with the five characteristics of qualitative research and analyzes actions and interactions over time, corresponding to process theory and the new strategy-as-practice approach. The underlying approaches have consequences for choosing the literature and the right methods for the study.

## 1.5 Structure of the Thesis

This thesis consists of five chapters.

This *first chapter* has introduced the study. Starting with a description of the motivation for undertaking this research, I have continued by describing its objective and relevance. For a better understanding, I have given a short explanation of the central terms of this study. In the last part of the first chapter, I have described the relevant research assumptions which are important for the theoretical background and the methodology of the study.

*Chapter 2* gives an overview of the necessary theoretical background. In the *first part*, I review the literature on strategic change. Following a description of the main types of strategic change, I outline the different change management behaviors in the public sector discussed in the literature. Lastly, I describe the relevance of participation during change and the need for participative managerial practices. The *second part* of the chapter introduces the characteristics of IT-related strategic change and the specific challenges of managing it. The *third part* of the chapter focuses on the literature on managerial practices for strategic change and participative behavior. The *third part* of the chapter draws upon sensemaking theory and describes its importance for strategic change and different dimensions of sensemaking. In the synopsis of the literature review, I introduce the research questions of the thesis.

*Chapter 3* outlines the research design and the methods used. In the first part, I describe the case study design and the method of data collection. The second chapter includes a short description of the analyzed case study and illustrates the approach to data analysis.

*Chapter 4* comprises the results of this study. It *begins* with a historical account of the case and an outline of the overall change process observed, including important internal and external context factors. I subsequently present identified turning points. Furthermore, I integrate narrative vignettes to show the interdependent actions, interactions and environmental factors. The *second part* presents the conceptualization of the results found. First, I describe the process context and design factors. I then specify different practices and combine them into bundles of practices. The *third part* demonstrates the theorization of the results. I begin with a theoretical discussion of the three bundles of practices. I then explain the dynamics and interdependencies combining the identified sets of practices with process context and design factors using a process model. The role of ambiguity is highlighted within these interrelations. Lastly, I emphasize the role of public entrepreneurship, the interdependent dynamics of sensemaking, and the complexity of microscopic change as evolving principles of adapting managerial practices during strategy processes.

Finally, the *fifth chapter* presents the conclusions drawn from the results of the research project and suggests implications for theory and practice and future research directions.



## **2 Literature Review**

In this section, I review the literature that constitutes the theoretical background for the study. In order to explain the change in managerial behavior, I chose to consider the following literature. First, I turn to the public sector context and review different approaches that explain strategic change, its management, and the relevance of participation for strategic change in the public sector. In chapter 2.2., I present literature on the characteristics of IT-related strategic change and the challenges to manage it. In chapter 2.3., I illustrate strategic change and participative behavior from a strategy-as-practice stance. In the last subchapter, I reveal strategic change from a sense-making perspective.

### **2.1 Strategic Change in the Public Sector**

Chapter 2.1.1 sheds light on different types of strategic change, whereas 2.1.2 illustrates important context factors in the public sector. Chapter 2.1.3 demonstrates the importance of participation during strategic change in the public sector.

#### **2.1.1 Types of Strategic Change**

Many researchers have described strategic change from different process viewpoints. Two distinct rationales underlie most types of change: the episodic and the ongoing change process (Weick and Quinn, 1999). The episodic type of change tends to be dramatic and entails a break with past basic assumptions or frameworks (Van de Ven and Poole, 1995). As an interruption or divergence from equilibrium, it is often related to uncertainties and ambiguity which are particularly challenging to manage (Poole and Van de Ven, 2004). Episo-

dic change requires both equilibrium breaking and transitioning to a newly created equilibrium. This type of change is also called second-order change (Watzlawick et al., 1974) or a constructive mode of change (Van de Ven and Poole, 1995) and is associated with planned, intentional change (Ford and Ford, 1995).

Similarly to the episodic change type, Lewin's (1951) model of change describes a process constituted by three stages: unfreeze, change, and refreeze. The model remains a generic recipe for organizational development. Lewin found that change is inertial, linear, progressive, goal seeking, and motivated by disequilibrium.

In contrast to episodic change, continuous change has "small continuous adjustments, created simultaneously across units" that can accumulate and create substantial change (Weick and Quinn, 1999, p.375). Continuous change has similar characteristics to the incremental type of change (Balogun and Hailey, 2008) and is also called first-order change (Porras and Robertson, 1992).

Newer studies differentiate more types of change than only episodic or continuous change. With regard to Lewin's model, Schein (1996) criticized that unfreezing is much more difficult to accomplish than was described. Most people who reach the action stage hesitate and return to previous habits several times before adopting the changes. Weick and Quinn assume (1999) that change is not a linear process but a spiral pattern of contemplation, action, and relapse and then successive returns to contemplation, action, and relapse before entering the maintenance and then termination stages. Thus, change has also been described as occurring in a cyclical manner (Denis et al., 2001b, George and Jones, 2001, Hargrave and Van de Ven, 2006). Overall, changing an organization always implies changing people, their activities and behaviors (Balogun and Hailey, 2008, Ferlie et al., 1996, Koppenjan and Klijn, 2004, Weick and Quinn, 1999).

Balogun and Hailey (2004, p.20-23) identified four types of strategic change according to two categories: the result and the nature of change. They recognized transformation and realignment as results of change. Regarding its nature, change can be implemented according

to an incremental or a big bang approach, which the authors also describe as a type of episodic change.

The authors combined the result of change types, transformation and realignment, and the two types of change nature, incremental and episodic. As a result, Balogun and Hailey (2008) identified the following four types of strategic change: evolution, adaptation, revolution, and reconstruction. The authors emphasized that change usually starts according to one of the four types of change; however, during the change process, adjustments are necessary and thus, the type of change may shift over time. In order to emphasize the process nature of change, the authors prefer to use the expression paths of change rather than monomorphic types of change.

From a similar point of view, Poole and Van de Ven (2004) stated that a complex strategy process generally involves more than just one type of change. The authors also developed four theoretic categories of change: life cycle, teleology, dialectics, and evolutionary. Life cycle and evolutionary theories operate in a prescribed modality, while teleological and dialectical theories operate in a constructive modality. The constructive mode is, in turn, related to episodic change and generates unprecedented, novel organizational forms that, in retrospect, are often discontinuous and unpredictable departures from the past. The four theoretic categories represent ideal types for explaining strategic change (Van de Ven and Poole, 1995).

In the end, the different forms of strategic change can be seen as two sides of a coin, that is, episodic and incremental (or constructive and prescribed) are not mutually exclusive. Weick and Quinn (1999, p.362) argue that "the contrast between episodic and continuous change reflects differences in the perspective of the observer". From a macro level, strategic change in practices and routines might appear as discontinuous; however, applying a micro-level analysis reveals that strategic change emerges through ongoing adaptation and adjustment (Weick and Quinn, 1999).

Since this study focuses on actions and interactions over time, strategic change is ongoing and taking place on the micro level. However, I

take into account the macro level as interacting with micro level processes. Therefore, the perspective on the discontinuous strategic change process complements the micro level focus on the strategy process and practices.

### **2.1.2 Managing Change in the Public Sector Context**

Public sector organizations have often been linked to the idea of stability instead of change or have even been characterized as resistant to change (Cohen and Brand, 1993, Nutt and Backoff, 1993, Vann, 2004). As there is "little depth of investigation into the reasons for revisiting change" (Osborne and Brown, 2005, p.233), scholars have different views on the role of top managers and modes of managing strategic change. The majority of researchers regard top managers as being in the leading position for realizing change as they encourage and reward innovation, support change, and express visions (Balogun and Hailey, 2008, Cummings and Worley, 2008, Fernandez and Rainey, 2006, Nadler and Tushman, 1994, Thompson and Sanders, 1997, Weick and Quinn, 1999).

Other scholars have emphasized the organization's internal and external context factors as important enablers of or threats to managing strategic change (Balogun and Hailey, 2008, March, 1981, Nutt, 1983). Thus, they acknowledge strategic change and organizations as highly complex and erratic. Jarzabkowski (2008) shows that, due to contextual factors, top managers find it hard to alter or shape related activity once they have embedded the strategy. Similarly, Hope Hailey and Balogun (2002) illustrate that contextual constraints and enablers have to be understood in order to implement strategy and realize strategic change. Without such knowledge, it would be difficult for top managers to make choices about the starting point of change and the management behavior.

Balogun and Hailey (2008) identify eight contextual features influencing change: capability, time, scope, preservation, power, diversity, readiness, and capacity. These eight features can be found on the ex-

ternal, organizational, team, and/or the individual level of activity. The capability to implement change exists on the organizational, team, and individual level. Time and scope are characteristics that overarch all levels and illustrate how quickly change needs to be achieved and what degree of change is needed. Preservation concerns practices and assets which need to be maintained on the organizational level during strategic change. Powerful leaders, groups, and divisions can be found throughout the organization, in teams as well as outside the organization. Diversity describes the homogeneity or heterogeneity of staff, groups, and divisions within the organization and in teams. The readiness for change mainly focuses on individuals and groups of people. The last feature, capacity, involves the necessary resources and exists on different levels of activity (Balogun and Hailey, 2008).

The different contextual features time, scope, preservation, diversity, capability, capacity, readiness, and power are rather general; however, their specification on the organizational, team, and individual level might be different in the public sector. A number of authors stress that strategic change differs in public organizations due to several distinctive characteristics (Brown, 2003, Fernandez and Rainey, 2006, Stewart and Walsh, 1992). As a result, public sector organizations have been described as professional bureaucracies (Mintzberg, 1979), loosely coupled systems (Weick, 1976), or organized anarchies (Cohen and March, 1986).

In comparison to private organizations, public sector organizations contemplating change face constraints placed on them by their political leaders (Balogun and Hailey, 2008). Thus, public managers need to work effectively with different authorities and handle the influence of legislation and the political field (Sminia and Van Nistelrooij, 2006). In addition, public managers operate under greater public scrutiny and are confronted with higher public expectations concerning values such as fairness, honesty, and openness.

In the following, I describe distinctive characteristics of public management and public organizations according to the classification and

the levels of activity (external, organizational, team and individual) introduced above. The most distinct external factors are the "absence of economic markets and outputs" as well as the "external control by politically constituted authority", and the "presence of more intensive external political influences" (Rainey and Chun, 2005, p.93ff, Rainey, 2009, p.83ff). As a result, all of these external factors play an important role in terms of time, scope, and power during strategic change.

Sminia and Van Nistelrooij (2006) identify greater goal ambiguity on the organizational level than in the private sector due to controversial and conflicting goals. In addition, structures can be subject to more red tape and it is more likely that external authorities will interrupt or codetermine processes. These findings are supported by the widely acknowledged meta-analysis by Boyne (2002), who finds that public organizations are indeed more bureaucratic, showing less flexible and more risk-averse structures, due to external requirements.

Team-related factors are determined by the fact that public managers have to balance external political relations with internal management functions. Again, the contextual features power and capability become important. In comparison to the private sector, public managers have a more political, expository role, which involves more meetings with interest groups and political authorities. Regarding their administrative authority, public managers have less decision-making autonomy and weaker control over subordinates and lower levels. Authority is seldom delegated by politically appointed public managers, but at the same time they are subject to more frequent turnover (Fernandez and Rainey, 2006). This could explain the weaker organizational commitment of public managers, which Boyne (2002) found in his meta-analysis of several studies, and the stronger engagement of career civil servants (Holzer and Callahan, 1998).

Since extrinsic incentives seldom exist in the public sector, managers and employees show a lower valuation of monetary rewards. In contrast to the private sector, public managers have stronger altruistic motives and express a sense of involvement and influence on decisions. (Boyne, 2002, Perry and Hondeghem, 2008). These factors on

the individual level might be important for the features readiness for change and capability.

Even though the constrains for managing strategic change seem to be higher than in the private sector, the role of public managers is critical for bringing about strategic change (Fernandez and Rainey, 2006). Lynn Jr. and Stein Jr. (2003) describe the actions of public managers who successfully manage strategic change as entrepreneurial. The concept of the public entrepreneur is still in its initial stages and different approaches exist. However, consensus exists that entrepreneurial action is shaped by intuition (Bryson, 2004, Stupak, 1996), improvisation (Paarlberg and Bielefeld, 2009), and creativity (Klein et al., 2010). These characteristics make it possible for the public entrepreneur to deal with different challenges such as ambiguous goals.

Denis et al. (2001a) add that strategic change in the public sector is a succession of episodes in which top management team members may promote change through their actions. However, their actions, in turn, alter the image of the team within the organization, the self-conception of the top management team, and the individual perception of each top manager regarding objectives, management behavior, and tasks. Thus, top managers' actions might also affect the viability and legitimacy of the team itself.

### **2.1.3 The Importance of Participation during Change**

The starting point of strategic change involves the locus of control and influence, i.e., it is where change is initiated and developed. There are many different approaches to starting change (Bourgeois and David, 1984). The two main directions of change are top-down and bottom-up change approaches. The former is driven by executives but does not necessarily mean that participation or collaboration is neglected. This type of change is the most popular because it holds the promise of breaking inertia and achieving quick results in an elegant way. Winning the hearts of others in order to ensure the realization of change and enable continuous improvement depends on the next

step, which includes the empowerment and the involvement of people (Mintzberg et al., 2005).

In contrast, bottom-up change implies that not only the initiative but also the responsibility for change does not lie with the senior management only but requires participation by employees (Beer et al., 1990). Compared to the top-down approach, the emergent course of bottom-up change makes the process more unpredictable and slower (Balogun and Hailey, 2008). Questions arise regarding which employee skills are appropriate and how top managers can integrate their views into the process. Hence, a combination of the benefits of both approaches while minimizing their disadvantages can be rewarding (Beer and Nohria, 2000, Beer et al., 1990).

The starting point of the change process is interrelated with management style or, more generally, management behavior. According to Maccoby and Brooks (1986), managers express characteristic values and behavior patterns as they carry out their tasks. Therefore, there are many different ways to manage the process of change. Balogun and Hailey (2008, p.35) describe change management behavior as being "on a continuum from coercion, in which change is forced on people, to education and delegation, in which change is delegated" (Table 2-1).

As change proceeds, management behavior can also vary according to individual personality and the type of problem to be solved. Since the task or problem requirements involve the people managed and the responsibilities taken, there are several factors influencing management behavior (Hope Hailey and Balogun, 2002, Maccoby and Brooks, 1986). Hence, there is no one best way to manage change.

In the public sector, reasons for strategic change are mostly found in abrupt and predominantly exogenous shocks. According to Sminia and Van Nistelrooij (2006), examples of exogenous shocks in the public sector are changed policies or legislation, technological change, top management replacements, and reorganizations. Following this shock, strategic change in public administrations is initiated mainly top-down and implemented by a top-down directed strategic man-



agement-inspired management behavior. This top-down approach is facilitated by existing hierarchical structures (Sminia and Van Nistelrooij, 2006, Ferlie et al., 1996). Bryson and Crosby (1992) differentiate the three approaches participation, dominance, and influence but emphasize that a top manager might not concentrate on one but use all three approaches according to situational needs.

*Table 2-1: Management behavior in strategic change*

Style	Description
Education and delegation	<p>Objective: commitment to and support for change from employees; employees suggest and implement projects within the organizational change goals.</p> <p>Approach: convincing employees of the need for change; equipping employees with an understanding; exploiting training, energy, emotion, and direction.</p>
Collaboration	<p>Objective: commitment to and support for change from employees; widespread involvement of employees.</p> <p>Approach: awareness of the need for change by challenging complacency; use of face-to-face collaboration, workshops in small groups</p>
Participation	<p>Objective: commitment to and support for change from employees; limited involvement of employees.</p> <p>Approach: employees are asked to contribute to the implementation of a vision, change leaders retain greater control over the change process</p>
Direction	<p>Objective: change leaders sell their approach to the doers; employees contribute very little to the means of change.</p> <p>Approach: communication and debate are possible;</p>

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	control remains with the change leaders.
Coercion	Objective: change is imposed on employees. Approach: behavioral change is enforced.

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*Source: According to Balogun and Hailey (2008)*

Many scholars agree that a bottom-up approach with widespread participation and the active involvement of employees, citizens, and other external stakeholders is important for strategic change (Poister et al., 2010). Public employees "must not simply comply with the changes, but be committed to them" (Farnham et al., 2003a, p. 444). Widespread participation is particularly relevant for generating commitment, building up internal support, reducing resistance, and for the sustainability of the strategic reorientation (Beer and Nohria, 2000, Beer, 2001, O'Brien, 2002, Coursey and Bozeman, 1990, Fernandez and Rainey, 2006). Thus, strategic change "involves a political process of developing and nurturing support from major stakeholders and organizational members" (Fernandez and Rainey, 2006, p.170). In addition, participation is an important asset for the public sector because of frequent leadership changes. Permanent employees might resist change until new political appointees come into power. Participation is seen as an opportunity to improve employee attitudes toward change and reduce resistance (Warwick et al., 1975).

However, even though participation might promote organizational, employee, and public interests at the same time, there are also constraints shaped by employees, unions, and top managers (Kearney and Hays, 1994). Many top managers avoid changes in their management behavior and fear that it would undermine their autonomy and control if they were to let employees participate. Thus, the success of participative management behavior highly depends on the perceptions and willingness of the top managers to take the first step and allow for participation (Parnell, 2001).

## **2.2 IT-Related Strategic Change**

In this chapter, I focus on the characteristics of IT-related strategic change. First, I introduce the interdependencies between IT and organizational dimensions in chapter 2.2.1. Second, I describe the challenges to managing IT-related strategic change in chapter 2.2.2. based on the interdependencies introduced in chapter 2.2.1.

### **2.2.1 The Interdependencies between IT and Organizational Dimensions**

Ten years ago studies found little support for the assumption that information technology (IT) transforms public organizations (Coursey and Norris, 2008, Heintze and Bretschneider, 2000, Serafeimidis and Smithson, 2000). The conceptualization of IT as “relatively stable, discrete, independent, and fixed” (Orlikowski and Iacono, 2001, p.121) was widespread and supported by research on information systems. Therefore, public managers assumed that IT is a rather neutral set of tools and its implementation unproblematic (Orlikowski and Hoffman, 1997, van Duivenboden and Thaens, 2008). This attitude ignores the fact that, even though the magnitude of IT-driven change is understood, the depth and complexities of the change can be grasped only during the implementation of the changes (Orlikowski and Hoffman, 1997).

IT can affect core functions of public administrations and their institutions (Meijer, 2007, Goodyear et al., 2010) and may have an impact on organizational structures and business processes (Norris and Moon, 2005), especially since its use has developed toward integrative systems. Integrative systems are of higher complexity and involve different data sources and various processes and are part of boundary-spanning system networks (Carr, 2010).

Regarding organizational structures, Pavlichev and Garson (2007) state that they can be flattened by using IT systems. In addition, inter-organizational networks might develop. The reorganization and the

automation of service provision processes make functions of front-line employees obsolete. Introducing expert systems and decision trees in IT systems may even decrease middle management functions. Moreover, the widespread availability and adoption of IT not only has an impact on concrete structures and assets, but changes communication patterns as well as organizational values (Danziger and Andersen, 2002, Danziger, 2004).

According to Pavlichev and Garson (2007), positive effects might arise from IT such as network efficiency through the sharing of databases across organizational boundaries. The authors argue that improved information access is possible on all levels within the organization, which creates new opportunities for decentralized decision making. However, there is consensus in the literature that such benefits are achieved only by putting forth a strong effort in implementing IT beyond merely automating existing processes (Pavlichev and Garson, 2007).

Summing up the effects which IT might have upon public organizations, IT can lead to strategic change. IT-related strategic change implies that the development of the organization as a whole in terms of present and future use of resources and organizational capacities is altered (Danziger, 2004, Frederickson, 1984, Johnson et al., 2003, Mintzberg et al., 1976). However, the influence of IT on public administrations varies since top managers and politicians have different plans for what they want to achieve with the implementation of IT.

In contrast to the arguments based on this so-called technological imperative (Orlikowski, 1992), research from a strategic choice stance emphasizes that only human action can change organizations but not IT itself. As Orlikowski (1992, p.100) describes, these researchers see IT as the dependent variable "contingent on other forces in the organization, most notably powerful human actors". Researchers who argue that IT serves as a trigger to improve public services and realize strategic change often combine the technological imperative and the strategic choice model. According to this combined approach, business processes have to be modified, managerial support is needed and the

interrelations with different administrative levels and organizational culture have to be taken into account in order to realize change (Carr, 2010, Goldfinch, 2007, Tolbert et al., 2008). Following Barley (1986, p.107), "technology influences organizational structures in orderly ways but their influence depend on organizational institutions". Orlikowski (1992, 2000) went even further in proposing a structurational model of technology which describes a dialectical interplay of technology and organizational level dimensions.

In the public sector, IT-related strategic change happens within a complex, diverse political context (Baez and Abolafia, 2002, Denis et al., 2005). Researchers who take the combined stance emphasize the intertwined relationships of IT and organizational culture: IT depends on culture, which in turn influences IT (Fountain, 2001, Schedler and Scharf, 2001, van Duivenboden and Thaens, 2008). For this reason, many of the challenges to be faced in the public sector are not only technical but also organizational, political, and cultural (Hackney et al., 2008). Similarly, Culbertson (2005) associates the implementation of IT mainly with changes in culture and administrative practices rather than with structure.

Another factor that has been described as hindering the implementation of new IT solutions are legacy IT solutions (Pavlichev and Garson, 2007), which have developed as separate so-called 'islands of automation' on decentralized levels and are often incompatible with new IT solutions (Homburg, 2008, Schuppan and Reichard, 2004, Bellamy, 1999). The interoperability of IT systems, however, is the main requirement for realizing inter-organizational data and process integration. The blend of existing islands of automation as well as innovative IT solutions creates new challenges for public managers. Better coordination and holistic management concepts are needed which integrate all organizational levels.

## **2.2.2 The Complexity of Managing IT Strategy Processes**

As challenges for public managers have risen during the last several years, so has the demand for IT strategies to facilitate the management of IT projects (Hazlett and Hill, 2003, Moon and Norris, 2005, Schedler et al., 2004). With explicit IT strategies, public managers try to improve the control of complex IT solutions and their impact on the organization and its workflows. In this sense, explicit strategies are "a way in which managers try to simplify and order a world which is too complex and too chaotic for them to comprehend" (Whittington, 1993, p.23).

Politicians regard IT strategies as necessary as well. Since power is based on information flows, the management of information and consequently the management of IT are highly political (Rocheleau, 2006). However, the interest of politicians in implementing IT differs from that of public managers. Politicians might have stronger higher interest in improving the image of public entities (Schedler and Summermatter, 2007), emphasizing cost savings instead of process improvements (Heeks, 2006) or increasing control over public bureaucracy instead of allowing for more indirect global steering (Ahn and Bretschneider, 2011).

Some of the arguments, e.g., cost saving, became prominent with a number of public sector reform approaches which have been realized mostly in Europe, Australia, and the USA since the 1980s. These reforms were summarized under the New Public Management (NPM) philosophy. According to the principles of NPM, the overall intent of reforms is to enhance efficiency and effectiveness within government while at the same time improving customer orientation and citizen services (Schedler and Proeller, 2010). Having an orientation toward outcome and efficiency at its core, the NPM philosophy regarded explicit strategies as useful for improving problem-solving competencies of public managers. Especially since context factors had become more dynamic and were changing continuously, explicit strategies seemed to be the adequate answer. Since IT affects not only business processes but also organizational culture, decision-making processes,

and organizational structure (e.g., Dedrick et al. (2003)), strategies are regarded as favorable for creating a frame for complex IT projects.

However, even though explicit IT strategies seem to encourage the guidance of the change process, they do not develop deliberately; rather they are part of a complex strategy process which develops incrementally. Diverse decisions, activities, and conceptions from different organizational levels constitute the process and lead to strategic change ((Mintzberg and Waters, 1990, Chia, 1994, Langley et al., 1995, Laroche, 1995, Hendry, 2000). As a result, explicit IT strategies are subject to ongoing adjustments due to organizational factors arising during the strategy process. Thus, the formation and coordination of an IT strategy process is a challenging task for top- and middle-level managers (Kranz, 2007)

During the last several years, a number of scholars have emphasized that existing models of managing IT-related strategic change according to strategies and plans are not adequate (e.g. Orlikowski, 1992, Orlikowski and Hoffman, 1997, Orlikowski and Scott, 2008). According to Orlikowski and Hoffman (1997), unexpected adaptations are in most cases necessary during the implementation of IT. One major factor adding to the complexity of implementing IT supported change is that line managers and IT staff drive IT strategy processes mostly bottom-up. Projects are initialized and implemented mainly without central coordination and planning or the use of standards (Homburg, 2008, Bellamy, 1999). Relevant knowledge on organizational processes is stored individually on the operative level. This knowledge is seldom integrated into explicit strategies, since top managers regard IT projects more as a technical challenge than as a strategic task affecting the whole organization. Therefore, explicit strategies and planned change can only embody parts of the complexity and the diverse influencing factors of IT related strategic change.

Taking the underlying complexity of strategy processes into account, the issue of strategy, as Jones and Thompson (2007) asserted, is the most neglected area within public management research. Therefore, as public managers turn toward IT strategies, more often the topic re-

quires greater academic and practitioner attention. As I described in the previous chapter, top-down directed actions are helpful for 'breaking the ice' in the beginning; however, during the IT strategy process, top managers need to acknowledge the complexity they face. Therefore, a sophisticated approach that integrates stakeholders and employees might be useful. Hence, the following chapter provides insights on the linkages of practices to the implementation of strategic change.

## **2.3 Linking Practices, Actions, and Strategic Change**

Chapter 2.3.1 refers to the analysis of practices managers use for strategic change. Following the strategy-as-practice approach, chapter 2.3.2 specifies participative practices in terms of communication, involvement, and empowerment practices.

### **2.3.1 Practice Perspective on Strategic Change**

As explained in 1.3.3., there is an important difference between praxis and practices. Praxis "embraces the interactions and interpretations from which strategic activity emerges over time" (Jarzabkowski, 2003, p.24). From a practice perspective, employees of public agencies engage in a set of activities to deal with some of society's most pressing problems (Wagenaar, 2004). More specifically, "praxis is concerned with the work of strategizing—all the meeting, the talking, the form-filling and the numbercrunching" by which strategy is actually formulated and implemented (Whittington, 1996, p.732).

As opposed to what people do, practices describe the organizational and institutionalized practices with which actors engage in (Jarzabkowski et al., 2007). Practices have been described as general and shared habits, artifacts, micro level processes and socially defined modes of acting within the construction of strategy and strategy processes (Mantere, 2005, Whittington, 2006, Mantere and Vaara, 2008).



Strategic practices include administrative and discursive as well as episodic practices. Administrative practices are rational practices such as control systems or performance indicators that continue to be relevant for top managers. Discursive practices "provide linguistic, cognitive, and symbolic resources for interacting about strategy", whereas episodic practices "create opportunities for and organize the interaction between practitioners doing strategy" (Jarzabkowski, 2005, p.9).

In this sense, practices are the infrastructure for an ongoing stream of strategic activity and actions (praxis) of individuals and teams (Jarzabkowski, 2003). To understand their relationship with strategic change, Jarzabkowski (2003, p.50) views practices as "mediators of interactions and contradictions" in order to construct shared strategic activity. Her analysis focused on formal practices like sanctions, planning cycles, and special meetings within direction setting, resource allocation, and monitoring and control. These formal practices both shaped and were shaped by the goal-seeking behavior of the activity or practice as in Giddens' (1984) theory of structuration on the macro level. Therefore, practices on the micro level are socially produced and reproduced by the routinization of the daily activities they form within social contexts (Jarzabkowski and Wilson, 2002).

To sum up, the focus of strategy-as-practice studies remains the "actions of individuals who are taken to be the authors of strategic change" (Chia and MacKay, 2007, p.226). Hence, the strategy-as-practice community follows a call made by Mintzberg, Waters, and Pettigrew more than twenty years ago (Mintzberg and Waters, 1990). The authors discussed the advantages of a change model of strategy formation that is based on actions and context instead of focusing on choice, which "can be a severe analytical and empirical limitation" (Mintzberg and Waters, 1990, p.7).

Strategy-as-practice endeavors to explain the connection between micro-level managerial activities on different organizational levels, interactions between levels within a context, and macro-level strategic change (Regnér, 2003). However, there is still considerable ambiguity. It needs to be clearer what top managers actually do in the strategy

process and how different types of managerial activities influence strategic change (Jarzabkowski, 2008, Johnson et al., 2007, Whittington, 2003, Regnér, 2003). In this study, I follow the call by the strategy-as-practice community and analyze the micro-level managerial activities and interactions (praxis) and the modes of action (practice) within macro-level strategic change in order to explain changes in managerial behavior.

### **2.3.2 Practice Perspective on Participative Behavior**

In the literature, different approaches exist to describe participative management practices. I grouped the different attempts into communication, involvement, and empowerment practices.

#### *Communication Practices*

Direct communications as well as formal methods of communication play an important role in the public sector. Practices such as team briefings, workplace meetings, newsletters, quality circles and consultative councils are widely used (Horton, 2003). Communication can be seen as the main daily activity of public managers and serves as a basis for setting goals, getting others engaged, and ensures cooperation (Denhardt and Denhardt, 2008). The different communication practices are used to develop a strong, shared commitment to strategies and change projects (Poister and Streib, 1999).

Especially when change is initiated in a top-down manner, top managers have to ensure a horizontal and vertical communication that flows continuously and intensively in both directions, bottom-up as well as top-down (Abramson and Lawrence, 2001, Wright and Pandey, 2010, Soltani et al., 2007). Soltani et al. (2007) conclude that the success of change projects depends on the ability of public managers to implement an effective communication system comprising direct and formal communication in order to gain commitment and acceptance.

### *Involvement Practices*

Cotton defined employee involvement as cultivating employee interest and dedication (Cotton, 1993). The concept seeks to integrate the members or stakeholders of an organization into the strategy process (O'Brien, 2002, Cummings and Worley, 2008). In contrast to communication, involvement goes beyond the exchange of information; for example, public managers negotiate and consult employee representatives or employees (Farnham et al., 2003a). Practices of involvement are ongoing formal and informal employee feedback (Roberts, 2002), staff attitude surveys, staff meetings, problem-solving groups, quality circles, and staff appraisals (Farnham et al., 2003b).

### *Empowerment Practices*

Concepts such as shared leadership, collaboration, and empowerment are often mentioned in the same breath with realizing participation within organizational contexts (Denhardt and Denhardt, 2000, Poister and Streib, 1999). Empowerment creates an opportunity for employees to "receive more authority for accomplishment of their work tasks in exchange for accepting responsibility for work outcomes" (Nyhan, 2000, p.92). Several studies in the private (e.g. Kanter, 1989, Argyris, 1998) as well as in the public sector (e.g. Rainey, 2009, Kernaghan, 1992, Frederickson, 1996) have revealed that empowerment can lead to higher commitment, increased innovation, further motivation, and organizational effectiveness.

However, even extensive participation is not the magic bullet for building up acceptance of change (Shareef, 1994). On one hand, public managers have to take participation seriously and commit time and effort to it during the entire change process (Bruhn et al., 2001). On the other hand, employees and stakeholders in general need to be willing to participate if they are to be involved (O'Brien, 2002). Otherwise, time and resources would be wasted (Quinn, 2000).

Hence, the combination of top-down and participative management behavior seems to be rewarding but remains a challenge (Balogun and Hailey, 2008, Coram and Burnes, 2001). The successful implementa-

tion of organizational change often resembles a hybrid combining elements of lower-level participation and direction from top management (Thompson and Sanders, 1997).

## **2.4 Making Sense of the Need for Change**

In this chapter, I will refer to the theoretical lens I use for the analysis of changing managerial behavior and underlying practices. In order to understand how managerial practices change, it is necessary to comprehend how top managers make sense of context factors and sensegiving practices within a shifting structural framework. First, I illustrate the underlying concepts and triggers for sensemaking during strategic change. I then describe the sensemaking process as constituted by interaction, promoted by idea champions, and embedded in an individual structural framework.

### **2.4.1 The Role of Sensemaking and Sensegiving for Strategic Change**

Sensemaking has become a "catch-all phrase describing processes that people use to impose or derive structure or meaning when they experience complex, ambiguous, or stressful situations" (Volkema et al., 1996, p.1441). A growing body of literature also examines sensemaking about strategic change and considers sensemaking as crucial to understanding change in organizations (Ericson, 2001, Balogun and Johnson, 2004, Van Vuuren and Elving, 2008, Weick and Quinn, 1999, Poole et al., 1989). Research from a sensemaking perspective refers to strategic change as change in the cognitive frameworks (Gioia and Chittipeddi, 1991), the patterns of thought composed of paradigms, beliefs, and viewpoints that help individuals to create meaning in the social world (Nonaka, 1994, Foldy, 2006).

Accordingly, several studies have indicated that in order to achieve strategic change, top managers have to change their interpretive

schemes or mental models beforehand (Bartunek, 1984, Gioia and Chittipeddi, 1991, Heracleous and Barrett, 2001, Barr et al., 1992, Canales and Vila, 2005). In this sense, top managers might introduce participation according to a new scheme that develops in order to understand new context factors or behaviors applied to it. Gioia and Thomas (1996) add that for strategic change a revision in the interpretive schemes not only of the top management team but of the organization's members and constituencies is needed as well.

In their ethnographic study of the initiation of strategic change, Gioia and Chittipeddi (1991) differentiate between sensemaking and sensegiving. On one hand, sensemaking is seen as the construction and reconstruction of meaning "by the involved parties for understanding the nature of the intended strategic change" (ibid, p.442). Sensegiving, on the other hand, "is concerned with the process of attempting to influence the sensemaking and meaning construction of others toward a preferred redefinition of organizational reality" (ibid, p.442).

Whereas Gioia and Chittipeddi (1991) see sensegiving as associated with the top management team and external stakeholders, they describe sensemaking processes as being associated with lower-level managers. The authors conclude that strategic change is a negotiation process: Each group tries to sell its vision of the organizational reality to the others even when they are engaged in making sense of what the others' concept is. More recent studies place greater emphasis on the sensegiving role of middle managers (Rouleau, 2005, Balogun, 2003) and describe sensemaking activities of top managers as embedded and dependent on interaction across organizational levels (Stensaker et al., 2008). I consider this rather new perspective in this study. It assists in understanding and identifying the dynamics and interdependent relationships between top managers' and IT/project managers' action.

## **2.4.2 The Different Dimensions of the Sensemaking Process**

The constructivist process of sensemaking is triggered by discrepancies (Thiry, 2001), interruptions (Weick, 1995), shock (Cyert and March, 1992), ambiguity (Gioia and Chittipeddi, 1991), uncertainty (Chaudhry et al., 2009), or complexity (Angus-Leppan et al., 2009) to ongoing cognitive activity. These triggers are formed mainly by new events that are unexpected and expected events that do not happen (Mandler, 1984). Louis and Sutton (1991) add that besides new situations or unexpected failure, actions taken in response to an internal or external request from stakeholders can cause a deliberate initiative and prompt sensemaking. "At this point, coping, problem solving, and 'learning' activities take place" (Mandler, 1984, p.188).

Triggers for sensemaking were also identified in the form of certain practices. Referring to a sensemaking perspective, Mantere (2005) describes examples of such practices. The author extends Jarzabkowski's (2004) insight regarding recursive and adaptive forms of strategic action practices and identifies different adaptive and recursive practices as enabling or disabling strategic champions' activities. A recursively-driven strategy process is based upon deliberate plans, task definitions, and organization design. In contrast, an adaptively-driven strategy process refers to a sensemaking approach.

In sum, adaptive practices, including sensegiving, social networks, interactive discussions, and continuous negotiation, contribute to the formation of the strategy process (Mantere, 2005). However, adapting an existing mental model for strategic change is demanding. Mintzberg (1978, p.948) concludes that due to an impossible overload of information "there is perhaps no process in organizations that is more demanding of human cognition". In order to interpret a new situation and change a mental model, coping, problem solving, and learning activities are needed.

In order to illustrate the complexity of interpreting a new situation or changing a mental model in a strategy process, I describe different

dimensions of the sensemaking process. In the following, I describe three clusters of different dimensions: *Action and interaction*, *change agents and idea champions*, and *environmental structure*. While action and interaction are the core of interpretation, changes of interpretive schemes need the support of powerful organizational members. Finally, sensemaking as a whole is embedded in environmental structures.

#### *Action and interaction*

Action is one of three cords of sensemaking: information seeking, interpretation, and action (Thomas et al., 1993, Gioia and Chittipeddi, 1991, Weick, 1977, Weick, 1979). Works on sensemaking emphasize that action and reciprocal interaction are closely linked to interpretation. In addition, Poole (1985) shows that action and interpretation are stimulated by communication. Since interpretive schemes are formed within conversations, they can be seen as a type of cognitive organizing (Weick, 1979). As Weick (1979, p.175) stated, "How can I know what I think until I see what I say?".

Moreover, communication is important for developing shared interpretations or team mental models and facilitating their diffusion (Heracleous and Barrett, 2001, Haleblian and Rajagopalan, 2005). Hence, the interpretive schemes and communicative actions of actors are interrelated into a recurrent dialectic (Gioia, 1986). Another relevant study suggested that organizational change arises from a dialectical conflict between competing schemata (Bartunek, 1993), and thus, the sensemaking process is dialectical: "One group holds one framework, the thesis; another group holds an opposing framework, the antithesis; and from this conflict a synthesis emerges" (Foldy, 2006, p.357). This dialectical process is assumed to continue in cycles with ongoing phases of information seeking, interpretation, and action. Langley (1995) notes that every communicative action will be a starting point for another cycle of information seeking and interpretation.

Following the dialectical argument, the focus shifts to objectives achieved over time and activities and events rather than relationships between things (Langley, 2007). Weick (1979) contributed to this perspective by turning nouns into verbs: organizing rather than organiza-

tion, strategizing rather than strategy, and innovating rather than innovation. Several authors who belong to the strategy-as-practice community have as their premises the sensemaking concept specified by Weick. Authors like Stensaker and Falkenberg (2007) and their study on organizational responses to change over time or Rouleau's study (2005) on micro practices of middle managers to interpret and sell change explain strategic achievements based on sensemaking and activities.

#### *Change agents and idea champions*

Interpretive schemes will only change when powerful organizational members are able to grasp the diverse concepts in their minds simultaneously (Foldy, 2006). The emergence of a synthesis will be supported by mediation or domination and will integrate heterogeneous beliefs through an interactive process of consensus building (Haleblian and Rajagopalan, 2005). The need for a powerful organizational member for realizing change is raised by Quinn (2000) with his call for a change leader. A change leader or change agent function can be realized by the chief executive, or even a team of people who are responsible for managing the change process (Balogun and Hailey, 2008).

Kanter (1983) adds that not only change agents but also idea champions are necessary to promote and support new ideas. While some authors like Fernandez and Rainey (2006) use the two terms change agent and idea champion interchangeably, there is an important distinction. Change agents are highly respected within their organizations and benefit from their positional power and network qualities in order to implement change. In contrast, change agents are responsible for overseeing the entire change process and may be constrained by their own involvement in the politics and relationships that constitute the organization (King, 2002).

Idea champions complement the work of change agents insofar as they engage in building support for change and overcoming resistance (Dyck and Neubert, 2010) and in inspiring others (King, 2002). Despite these broad characteristics there is "no universal model



of change agency, or a single type of change agent" (Caldwell, 2003, p.140). Most approaches show roles change agents might play during the change process such as the one described by Caldwell (2003, p.140), who differentiated among central actors according to four different roles:

- *Leaders* envision, initiate or sponsor strategic change of a far-reaching or transformational nature.
- *Managers* adapt, carry forward or build support for strategic change within business units or key functions.
- *Consultants* provide advice, expertise, support in project management, program coordination, or process skills in facilitating change.
- *Teams* operate on a strategic, operational, task or process level within an organization and may include managers, functional specialists and employees at all levels as well as internal and external consultants.

Referring to the three cords of sensemaking, information seeking, interpretation, and action, change agents as well as idea champions need to develop analytical, judgmental, and implementation skills. Both have to understand the organization, the motivations of employees, and be able to picture it within the change context. In order to persuade others of the need for change and sell the change idea throughout the organization, change agents and idea champions pay attention to the differing interests of employees, team members, and stakeholders (Balogun and Hailey, 2008, Dutton et al., 2001, Palmer and Dunford, 2008). Moreover, change agents have to prioritize or weight organizational features in order to design the change process. It is important that change agents prioritize according to the needs of the organization and not based on their own personal philosophy, perceptions, or prejudices. As for implementation skills, it is necessary that the change leader make decisions about how and in what order to proceed with the change process. This is important for preventing sit-

uations fraught with confusion or distrust during the change process (Balogun and Hailey, 2008).

#### *Environmental structure*

Sensemaking is embedded in environmental structures influenced by three concepts: *context, power dependencies, and interpersonal cognitive processes* (Ranson et al., 1980, Keesing et al., 1987).

*Context* is important for justification and thus determines what actions and interactions are singled-out for interpretation (Weick, 2001). Weick (1993) refers to the work of Ranson et al. (1980) to describe context as a framework of sensemaking processes. According to his view, interaction patterns promote meaning by creating shared interpretive schemes. Meanings again affect frameworks, which affect meaning. The frameworks are comprised of "roles, rules, procedures, configured activities, and authority relations that reflect and facilitate meanings" (Weick, 1993, p.645).

On the subject of *power*, Pettigrew (1985, p.443) stated that "the content of strategic change is thus ultimately a product of a legitimization process shaped by political/cultural considerations, though often expressed in rational/analytical terms". Therefore, Pettigrew argued that the strategy process is a process of 'politics as the management of meaning'. Maitlis and Lawrence (2003, 2007) also emphasized this view and saw politics and discourse as the key elements in the practice of strategy formation. Maitlis and Lawrence observed that power, constituted by formal roles and expertise, enables actors to influence the construction and selection of meanings. Such patterns of power become a vehicle that embodies dominant meanings (Weick, 1993). Actors with less formal power can still construct meaning in a way that resonates with others. Similarly, a high position of formal power does not necessarily lead to a dominant position in constructing meaning (Maitlis and Sonenshein, 2010).

*Interactions* stabilize the cognitive process of interpretation by creating shared interpretive schemes. They are the basis of patterns that have been described as informal structure, agency, social construction

(Ranson et al., 1980), shared provinces of meaning, meaning, or frameworks (Weick, 1993). Similar to structuration theory (Giddens, 1984, Bourdieu, 1977), interactions and frameworks are described as being closely interrelated and often mutually constituting. Therefore, these interdependent processes do not only have the capability to constitute but also to mutually destroy one another (Weick, 1993).

## 2.5 Synopsis of the Literature Review

In *chapter 2.1* of the literature review, I described strategic change and the management of strategy change in the public sector, emphasizing its distinctive characteristics and main change approaches. Strategic change is about people, their behaviors, mental models, and practices (Balogun and Hailey, 2008, O'Brien, 2002, Thompson and Sanders, 1997). It is derived from strategy processes that proceed as a sequence of events and directed relationships between its activities (Chia and MacKay, 2007, Van de Ven, 1992). Therefore, strategic change in the public sector is not only influenced by a vast combination of factors including legislation, political influences, and power relations, but also by actions, interactions, and meanings.

The existing public management literature mainly suggests either a top-down-oriented change management manner (Bryson and Roering, 1988) or describes an emerging bottom-up approach (Coram and Burnes, 2001). While the former approach emphasizes the role of the top manager as single leader and stresses his power and influence, the latter approach acknowledges the complexity of strategic change in the public sector involving a multitude of actors.

Very few authors have attempted to combine both views. These studies identify a top-down-oriented management behavior as a starting point and a participative approach as the strategy process continues (Balogun and Hailey, 2008, McNulty and Ferlie, 2004). Authors who acknowledged the bottom-up approach stated that without an adaptation toward participation values, beliefs, and behaviors change little

(Beer, 2001, Beer and Nohria, 2000, Sminia and Van Nistelrooij, 2006). Following these authors, I regard participation as essential for strategic change and the adaptation of management behavior to allow for participation as crucial. However, there is little insight about how and why management behavior changes.

In *chapter 2.2*, I acknowledged the specific characteristics of IT-related strategic change. I emphasized that IT-related strategic change in the public sector happens within a complex, diverse political context (Baez and Abolafia, 2002, Denis et al., 2005). In addition, I illustrated that IT and organizational culture are intertwined (Fountain, 2001, Schedler and Scharf, 2001, van Duivenboden and Thaens, 2008). The specific characteristics of IT, the mutual interdependencies between IT and organizational culture, and the different interests top managers and politicians might have makes it a challenge for top managers to manage IT-related strategic change.

In *chapter 2.3*, I suggested focusing on the micro level, the actions and interactions of the top managers. By using this approach, I follow the call originally made by Mohrman and Lawler III. The authors stated that "because of the difficulty of changing managerial behavior and the confusion and ambiguity experienced by managers who are asked to change, it may make sense to focus on the change in managerial behavior as the major change" (1988, p.56). The new approach by the strategy-as-practice community allows researchers to pursue this call by closer to the 'real' work in organizations by analyzing micro-activities and micro-processes of actors (Hendry et al., 2010). The focus on the micro level, the actions and interactions of the top managers adds to a better understanding of strategic change. I have given some examples of participative practices clustered into communication, involvement, and empowerment themes.

As I illustrated in *chapter 2.4*, sensemaking theory is relevant for a better understanding of strategy processes. Actions and interactions as well as interests or power structures can facilitate sensemaking, legitimate considerations, and stabilize cognitive processes and may help align managerial perceptions. Action and interactions are interrelated

with change agents, idea champions and environmental structures and can mutually create but also constrain or even destroy each other.

The literature review reveals that research has remained silent on how management behavior changes during ongoing strategic change. Therefore, the demanding adaptation of underlying practices top managers make use of and their main cognitive frames are still a black box.

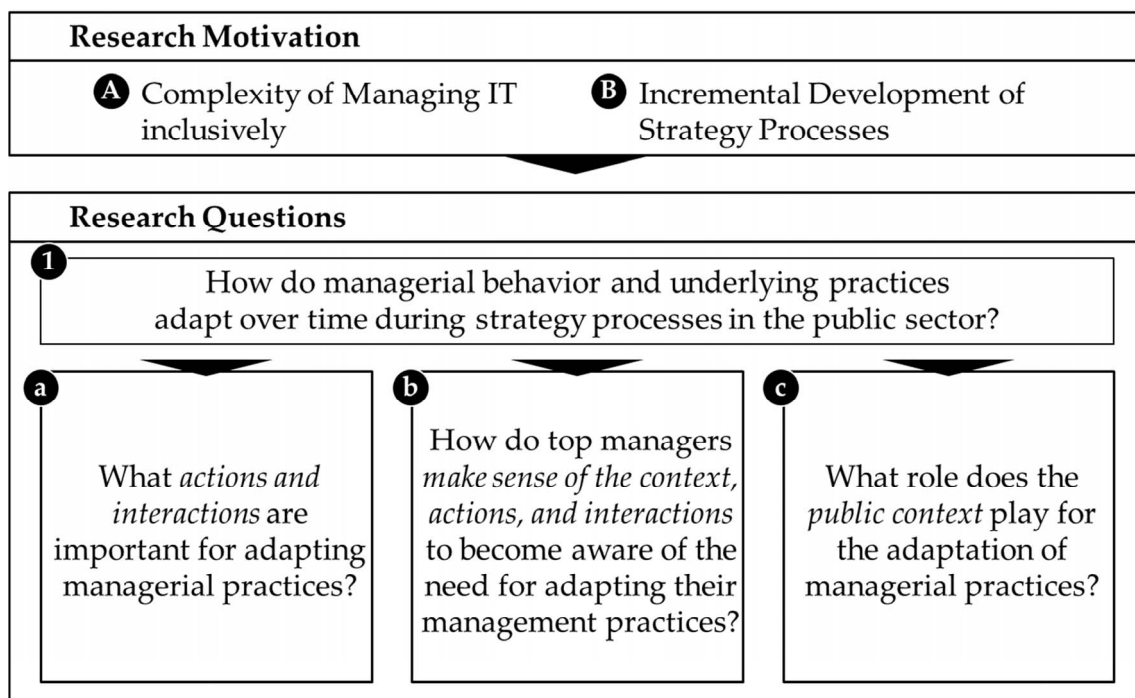


Figure 2-1: Research motivation and research questions (own illustration)

Based on the literature review, I identified the following research questions for this study, illustrated in the figure above (Figure 2-1). The main research question of this study focuses on *how management behavior and underlying practices adapt during strategy processes in the public sector*. In order to answer this research question more accurately, I developed three sub-questions. The first sub-query responds to the call from the strategy-as-practice community and asks *what actions and interactions are important to adapt managerial practices*. The second sub-query considers sensemaking theory by highlighting *how top managers make sense of the context, actions, and interactions in order to be aware of the need for adapting their managerial practices*. The last sub-query fo-

cuses on the public sector context and raises the question: *What role does the public sector context play for the adaptation of managerial practices?*

The second chapter of the dissertation outlined the relevant theoretical background and concretized the research questions of this study. The objective and research assumptions given in the introduction, the research questions, and the literature review form the basis of the research design and methodology, which I present in the following chapter.

### **3 Research Design and Methodology**

I start with a description of the different aspects of the research design and an explanation of the case study method in chapter 3.1. The development of a research design always has to fit the purpose of a study. The research questions of this study are of exploratory nature and seek an increased understanding of how and why top managers develop and change their managerial behavior and practices over time. The research questions call for a qualitative research design with the case study as the preferred approach (Yin, 1994). Following this approach, I look at change in the organization from within (Tsoukas and Chia, 2002).

In chapter 3.2., I illustrate the setting, site, actors, and activities of the case study. First, I provide a general introduction regarding the public sector context in Switzerland and the institutional background of the case study in particular. By relying heavily on the data from participant observations, I am following the call for a stronger consideration of ethnography within strategy-as-practice research (Rasche and Chia, 2009).

In chapter 3.3., I provide information on the data collection. Guided by ethnographic principles, the data collection evolved with the study. The research design was oriented toward the type of question addressed, my assumptions about the nature of organizations and methodological predispositions, as well as the data I had access to (Van de Ven and Poole, 2005). Chapter 3.4. comprises details on the data analysis.

#### **3.1 Case Study Method**

The following parts of the chapter illustrate the characteristics of the chosen case-study approach, what quality criteria were taken into ac-

count, and how the case study was finally selected. The study was based on an embedded longitudinal case-study design (Yin, 1994) in order to be able to trace process developments over time and survey actions and interactions on the micro level.

### **3.1.1 Longitudinal Case Study**

The research question of how and why managerial practices change calls for a qualitative research design with the case study as the preferred approach (Yin, 1994). As stated in chapter 1.4.2., the character of strategy process research involves assumptions that require certain research strategies. It aims at catching reality in flight and assumes that antecedent conditions shape the present and the emerging future. Therefore, a longitudinal case study considers the temporal interconnectedness. In addition, an embedded case-study approach acknowledges that processes are nested in outer and inner organizational contexts and have to be examined across different levels of analysis (Pettigrew, 1992).

However, according to Gerring (2004), there is no single definition of case study and any attempt to do so will end in a "morass" (ibid, p. 342). Existing concepts are highly dependent on the point of view of each researcher (Gerring, 2007). In a very broad approach, Gerring (2004, p.342) describes a case study as "an intensive study of a single unit for the purpose of understanding a larger class of (similar) units".

In contrast to case study approaches with  $N > 1$  cases, which allow for inter-case comparisons, studies that rely on a single case ( $N = 1$ ) have to show variations over time (diachronic analysis) or within-case variation at a single-point in time (synchronic analysis) (Gerring, 2007). Snapshot studies that analyze single-cases at a single-point are very rare and are seen as inappropriate due to their small explanatory power (Jensen and Rodgers, 2001).

Following the explanation of Gerring (2004), researchers using case studies must be aware of the fact that their results might not be representative or easily transferable to other units within different contexts.



Their interests are more in exploring and identifying conditions and mechanisms which lead to the rise of certain phenomena (George and Bennett, 2005).

Researchers most often focus on processes. However, administrative or management processes often turn out to be 'black boxes'. Within nomothetical research approaches, these processes continue to be largely unexplored (McClintock, 1985). As a result, it remains unclear how decisions are made within administrative or management processes, what top managers do exactly and how they act (Roberts and King, 1991).

Gerring (2004, p.352) argues that case studies are generally useful:

- when inferences are descriptive rather than causal,
- when propositional depth is prized over breadth and boundedness, - when (internal) case comparability is given precedence over (external) case representativeness,
- when insight into causal mechanisms is more important than insight into causal effects,
- when the causal proposition at issue is invariant rather than probabilistic,
- when the strategy of research is exploratory, rather than confirmatory, and
- when useful variance is available for only a single unit or a small number of units.

George and Bennett (2005) add that the strength of case studies is the weakness of quantitative methods. Besides developing new hypotheses, exploring causal mechanisms within individual context and solving causal complexity, case studies have great potential in achieving high levels of conceptual validity. In contrast, quantitative studies are often "lumping together dissimilar cases to get a larger sample" (George and Bennett, 2005, p.19).

Case studies have long been employed and are still the most used method in the field of public management (Stein, 1952, Brower et al., 2000, Jensen and Rodgers, 2001, Perry and Kraemer, 1986). According to many public management researchers, case studies are especially useful in understanding the multifaceted cause-and-effect relations (Jensen and Rodgers, 2001). One area of application is decision-making processes in the public sector. Decision making in the public sector has become more complex during the last several years. With the increasing importance of networks throughout society, the number of actors involved in decision-making processes grew simultaneously (Klijn, 2002, Bryson and Crosby, 1992).

Considering the public sector context, Stein (1952) refers to a case study "as a narrative of events that lead to a decision or group of related decisions by a public administrator or a group of public administrators". Following the specification made by Stein, the analysis needs to take into account the complex external context of juristic, political, institutional, and economic factors though avoiding any assumption of direct causal relations.

### **3.1.2 Quality Criteria for Single Case Studies**

Many different approaches exist to judge the quality of research in general. Taking the definition of quality of single case studies into account the use of indices like generalizability is highly criticized. It has been argued that case studies are appropriate for specific research objectives and form the basis for knowledge accumulation (Jensen and Rodgers, 2001). In the following, I use generalizability and triangulation to demonstrate the challenge to ensuring the quality of single case studies.

#### *Generalizability*

Any study has generalizability issues (Jensen and Rodgers, 2001). A common criticism of single case studies emphasizes that they are based on a population of  $N=1$ . Small samples limit the possibilities for testing hypotheses, conducting multivariate analyses and, finally,

generalizing results for application to other populations (McClintock, 1985). Trying to increase the size of the sample is, however, in many cases not useful: Increasing the size of samples for a better explanatory power and validity may lead to analyses of items that are not of interest for the given research objective (McClintock, 1985).

Applying the same quality criteria for qualitative data as for quantitative data is problematic. Following Lüders and Reichertz (1986), criteria such as reliability, validity and objectivity originate from a different understanding of reality. Accordingly, to ensure the quality of data, it is necessary to apply specific criteria and tests (Flick, 1992).

This insight resulted in various new approaches: George and Bennett (2005) suggested refining results from single case studies to reach generalizable insights. This means broadening or limiting the corresponding reference framework or introducing new variables. According to McClintock (1985), the introduction of case clusters is also promising: The researcher approaches the unit of analysis through different research lenses and by using various data sources (e.g., process, characteristic, activity, dimension of organizational behavior).

### *Triangulation*

Triangulation basically involves the combining of methods for the analysis of the same phenomenon (Denzin, 1978). Several types of triangulation exist: The triangulation of data bases on the utilization of various data sources; investigator-triangulation relies on various observer; the triangulation of theories is based on the assessment of hypotheses through various theories; and methodological triangulation overcomes the shortcomings of individual research methods by combining complementary methods (Flick, 1992).

Ethnographic research also applies triangulation: Besides investigator-triangulation and the triangulation of data bases, Hammersley and Atkinson (1983) describe the triangulation of techniques. The analysis of data from participant observations, interviews and documents ensures a qualitative assessment of the construct validity. Construct validity emerges from the data analysis process and is comprised of cor-

rect operational measures for the concept under study (Eisenhardt, 1989). Yin (2003) emphasized that the use of multiple sources of evidence, the establishment of a chain of evidence, and the review of initial case study reports by key informants enhance the construct validity of case studies.

According to Van de Ven (2007), the reliability and validity of coding procedures can be enhanced by two procedures: First, two or more researchers can perform the coding of incidents from raw data sources. Consensus among coders increases the consistency of interpretations of the decision rules used to identify incidents. Second, similarly to Yin (2003), key organizational actors can review codings. It is useful to ask the actors whether any incidents are missing or incorrectly described. Based on the feedback from the key informants, revisions in the incident listings can be made if they conform to the decision rules for defining each incident (Van de Ven, 2007, p.219). Typically, these two steps result in a more complete identification of incidents and may enhance a description of the change process being studied with a clear chain of evidence and improves as well the reliability of the case study (Yin, 2003).

### **3.1.3 Case Selection and Access to the Field**

An accurate selection of the case is most important according to Stake (1995, 1998). The research question is not limited to a certain strategic change approach or any public administration of specific national background. However, I selected this Swiss case, which had just begun undergoing an IT strategy process. The rationale for choosing this case study from a Swiss canton is based on the following reasons, which I pointed out in the research motivation and the literature review:

*First*, as a research associate at the University of St. Gallen focusing on IT strategy processes, I had contact with the top managers of Swiss public administrations and thus access to information.

*Second*, the IT strategy process I was granted access to represented a case that had just started and was challenging since it fostered comprehensive strategic change affecting organizational processes, structures, and culture. Since major IT projects had failed during the preceding several years even though strategies existed, the case was an opportunity for a better understanding of IT strategy processes and the management of IT-related strategic change.

*Third*, I chose the single case study because it was feasible since a longitudinal analysis is very time-consuming.

It is rather unique that I gained such broad insights into practice and was able to observe the actions and interactions of a top management team, conduct interviews, and talk with them without constraints. In general, the ethnographical approach is challenging because access to the research field is often denied. Including a researcher in top management team meetings to record and analyze their strategizing activities is normally seen as invasive (Cadbury, 1990). That is especially true for the public sector, where observations of top managers are even less common (Hoon, 2007).

The public sector in Switzerland does not have a long tradition of external evaluations and even less with research conducted from within using participant observation. Participant observation represents an excellent opportunity for researchers to gain real-time data in order to understand change and its evolution and interaction with context (Langley, 2009). However, the sudden transparency of their actions and interactions was unusual for public managers and created a threshold that the top managers had to overcome in order to take part in my study (Warren and Karner, 1990, Warren and Staples, 1989).

Originally, the study was set up as a comparative study comprising two or more cases. Two organizations withdrew their participation after initial contact and first exploratory interviews. The main reason was the destabilizing power of the topic. The complex formation and implementation of an IT strategy and the resulting transformation of state authorities were perceived as politically sensitive. Factors such as different interests of the top managers, fragmented leadership, and

fragile political support were already major constraints. In this context, the politicians and top managers feared any disruption that could become a possible cause for a total failure of the entire strategy process. However, a comparative case study design would have implied a reduction in analytical depth. Furthermore, a single researcher could not have executed it in the time given.

The case study is introduced in the following section. In order to gain access to the research field, I promised absolute anonymity to all participants in this study, and thus, there are no names or transcripts included in this study. All relevant documents such as code schemes remain with the supervisor of this thesis, Prof. Dr. Kuno Schedler, in order to allow the research quality of the work to be checked.

## **3.2 Description of the Case Study**

Switzerland features elements of a strongly federalized system: The 26 states (cantons) are in charge of many issues such as healthcare, welfare, law enforcement, education, and taxation. The Swiss democratic system is based on consociational principles with instruments of direct democracy. At the heart of consociationalism is the representation of all groups of people, including minorities, in order to overcome political fragmentation and to prevent conflicts (Lijphart, 1969). In the following, I refer to the case study using the pseudonym CH1 to refer to the specific cantonal public administration.

Based on the democratic model of the separation of powers, each Swiss canton has an executive, legislative and judicial branch. CH1, whose population is continuously growing, is situated in the German-speaking part of Switzerland. The canton's legislative authority is made up of more than 100 members, who are elected by the citizens of the canton for a period of four years according to a proportional representation election system. There are several permanent commissions whose responsibility it is to prepare certain issues for parliament

meetings. One of the commissions is in charge of general administrative and IT-related topics.

The executive authority is the cabinet, which has an uneven number (<10) of members who are directly elected for a period of four years. The public administration of the canton is subdivided into several departments and the state chancellery.

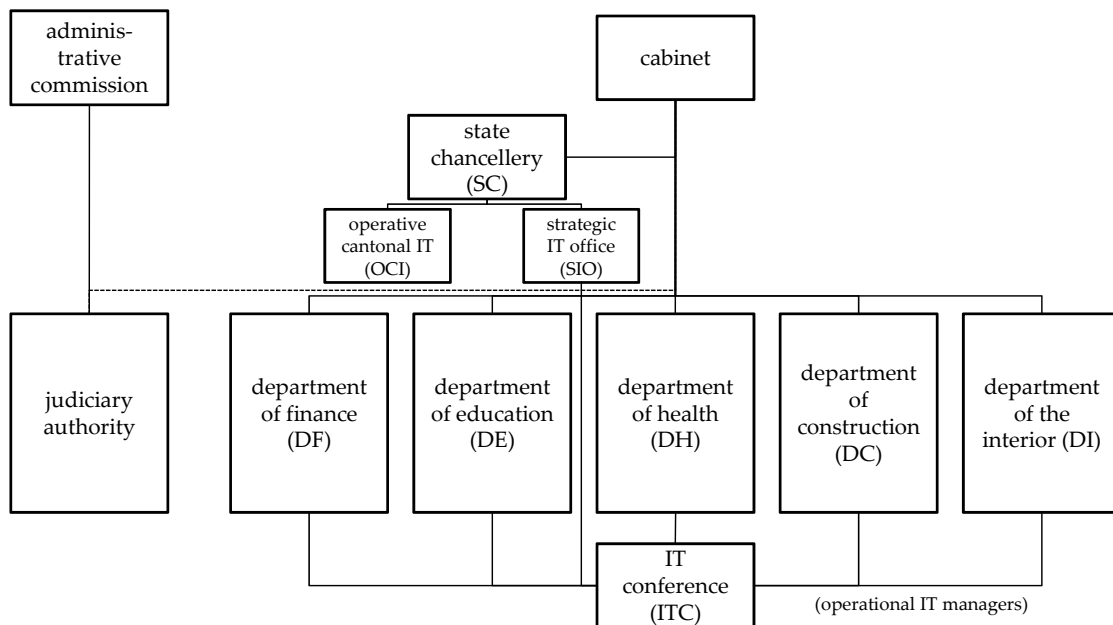
In 2008, the department of the interior (DI) was the largest of the cantonal departments, with a total number of more than 4,000 employees in the cantonal administration. The cabinet presides over the cantonal public administration, and every cabinet member is in charge of one department. The state chancellery supports the politically elected cabinet: It supports and counsels the cabinet members with regard to strategic and long-term planning activities as well as cabinet meetings, information policy, and legal advice. The state chancellery is directed by the state chancellor.

The third branch of the canton, alongside the executive and the legislative, is the judiciary. It is comprised of the cantonal high court, regional courts, juvenile courts, and several other courts handling specific issues. The judiciary authority is the administrative entity of the judiciary. The administrative commission, as part of the cantonal high court, presides over the judiciary authority and is in charge of all decisions concerning the autonomy of the judiciary.

During the last several years, the cantonal public administration has undergone major reforms toward tightening and liberalizing public administration. When taken together, the reforms resembled a complete revision of the cantonal public administration. Tasks between the canton and its municipalities were reorganized and a reform of the police was conducted. Between 2003 and 2005, a reform of leadership in government and administration based on the concept of outcome-oriented public management (Schedler and Proeller, 2010) and the reform of the parliament came into effect. The reforms were meant to lead to an efficient design of tasks, structures, and working processes and a reduction in the number of members of parliament. A

major goal was also to reduce expenses for the general cantonal administration, which represented about five percent of total cantonal expenditures in 2007.

Within this setting of major administrative reforms, the cantonal IT was also subject to change. The following figure (Figure 3-1) illustrates the organizational structure of the cantonal IT before the IT strategy process and before the initiation of the IT board. The IT board is the entity under study. It was an interdepartmental body comprising all of the top managers of the state authorities. The core members were the executive directors from the five departments, the executive director of the judiciary authority, the executive director of the state chancellery, the state chancellor, and the head of the strategic IT office (SIO). The main task of this body, the IT board, was the realignment of the cantonal IT and its ineffective organizational structure. The objective of the realignment was to create IT architectures, systems, applications, and structures that were able to meet future challenges. Based on a new IT strategy, the core framework for the statewide change of IT was the multilayered project Perfect IT (PIT).



*Figure 3-1: The organizational structure of the cantonal IT before the IT strategy process (own illustration)*



### 3.3 Data Collection

Since my research work focuses on the activities of actors, the data collection took place in the field and relied on ethnographical methods (Hammersley and Atkinson, 1995). I conducted a longitudinal in-depth case study focusing on the activities of one top management team. Over a two-year period lasting from January 2007 to January 2009, I conducted the data collection, including two years of retrospective and one year of real-time data collection.

The data I gathered came from a range of sources: Besides non-participant observations, I conducted semi-structured interviews and collected more than 350 documents of various kinds. As demonstrated in section 3.1, triangulation, the selection of multiple sources, leads to a higher trustworthiness of the data and a stronger substantiation of the theoretical constructs developed (Eisenhardt, 1989, Lincoln and Guba, 1985). I regarded the use of multiple data sources as necessary to developing a more holistic picture of the process within context (Pettigrew, 1990). For this study, I used different aspects of triangulation: triangulation of techniques and the review of codings by scholars and organizational actors.

Central aspects that convinced me to use participant observation were the opportunity to collect data in their *natural setting*, to gain insight into not only why people do what they do but *what they are doing*, and to gain *access to the meaning that guides people's behavior* (Hammersley and Atkinson, 1995). However, when using non-participant observation as a method, the researcher always has to be aware of the fact that the behavior of the actors is already influenced by the sheer presence of the researcher. Given this fact, I will not differentiate between participative or non-participative observations (Rhodes, 2005).

I had the opportunity to follow the IT board members and their activities for 110 hours (Table 3-1). Most settings of the observations were IT board meetings (including conferences and workshops) and project meetings (including workshops with IT and project managers) taking place at various locations. Even though IT board meetings were exclu-

sively for the top managers, as the strategy process continued, they increasingly gave other actors (e.g., IT managers, project managers, and consultants) an opportunity to state their opinions on certain questions. I also had many informal conversations (telephone calls, conversations during coffee and lunch breaks and train rides) with IT board members apart from official meetings, which expanded my background knowledge and enhanced interpretations.

During meetings and after conversations, I prepared field notes illustrating the most important actors, topics, statements, behaviors, specific characteristics of the setting, mood of the participants and other important incidents. The templates I used for the protocols are included in annex II. I did not transcribe all 110 hours of observation but rather those parts that were most central for the data analysis, the data that evolved during the identified episodes.

*Table 3-1: Analyzed observations, interviews, conversations, and documents*

Data Type	Number	Total Time (hours)	Transcripts/Notes (pages)
<b>Observations</b>			
TMT meeting	18	67	147
Project meeting	12	43	96
<b>Total</b>	<b>30</b>	<b>110</b>	<b>243</b>
<b>Interviews</b>			
IT Board member	12	18	144
Other experts	1	1.5	14
<b>Total</b>	<b>13</b>	<b>19.5</b>	<b>158</b>
<b>Conversations</b>			
Top Managers	21	4.2	30
IT Managers	9	1.5	7

Other	12	6	11
Total	42	11.7	48
<hr/>			
Documents			
<hr/>			
Project Reports	71	/	/
Resolutions	13	/	/
Presentations	26	/	/
Protocols	29	/	/
Other	70	/	/
Total	209		
<hr/>			

*Source: Own illustration*

In addition to the observations, I conducted 13 semi-structured interviews (Table 3-1). Interviews are a "highly efficient way to gather rich, empirical data, especially when the phenomenon of interest is highly episodic and infrequent" (Eisenhardt and Graebner, 2007, p.28). For this study, I used interviews to complement the real-time data I gathered and to enhance observations I made regarding, e.g., turning points, challenges or constraints. The open questions I used were unweighted and focused on the strategy process, the most important incidents, influences, and the top managers' perception of the process (see Annex I for the questionnaire).

Most interviews were with the nine IT board members. I also interviewed the external consultant who was following the strategy process and supported the IT board members in different tasks. Since the head of the strategic IT office (SIO) and the state chancellor were the central actors on the team, I interviewed them several times throughout the process. On average, each interview lasted 90 minutes. I digitally recorded all interviews and afterward, transcribed them, resulting in more than 100 pages of transcription.

The document analysis over the two-year period included presentations, protocols, reports, roadmaps, charts, conceptions (352 documents, 01/2007-01/2009). Of the 352 documents, I selected 206 for analysis, all of which dealt with strategic topics and multilayered pro-

ject Perfect IT (PIT) as the core of the IT strategy process. The document analysis was necessary to gain an *overview of the formal process* including decisions and newsletters that the top managers shared in the organization. Furthermore, it *gave me an impression of the top managers' sensegiving* actions. Lastly, the top managers dealt with many different subjects in one single meeting and had to decide or comment on various status reports, statements, and requests. Without the documents at hand, it would have been impossible to *follow or understand fully the remarks and comments the top managers* had made or the positions they had taken.

### 3.4 Data Analysis

Due to the nature of qualitative data, making sense of data implies being "imaginative, artful, flexible, and reflexive" (Coffey and Atkinson, 1996, p.10). Though there are often no predefined measures and hypotheses, it does not mean that an exploratory analysis process is done without applying any structure. The data analysis process is inductive including the social context in the interpretation (Chambliss and Schutt, 2009).

The procedure for analyzing qualitative data depends on a) the research question, b) the type of data, c) the selected research method (which also depends on the research question) and forms d) a continuous, iterative process (Hoffmeyer-Zlotnik, 1992).

Following Miles and Huberman (1994, p.10ff.), I analyzed the data in three steps:

- *Data Reduction:*  
Selecting, focusing, simplifying, coding, grouping, and organizing the data into categories
- *Data Display:*  
Organizing and assembling information into matrices, graphs, and charts to illustrate the patterns and findings from the data

- *Drawing Conclusions and/or verification:*  
Process of interpreting patterns and explanations and verifying them constantly

Gioia and Chittipeddi (1991) and Van Maanen (1979) combine some stages of the data analysis process and emphasize the differences in perspective. Following the authors, data reduction and data display in this study constitute a first-order analysis based on themes expressed by the participants and reflecting the social context under study. In the second-order analysis, I created an explanatory framework to place the story in a more theoretical perspective. Thus, the theoretical perspective is grounded in and emerges from first-hand data.

However, developing process theory from data remains a demanding task since process data are often complex and do not come neatly sliced and packaged (Langley, 1999, Van de Ven and Poole, 2005). The method chosen for the analysis of process should meet the two following requirements. First, it has to allow the identification and test of temporal linkages between events and overall temporal patterns (Poole et al. 2000). Second, it has to be able to cope with the multiple time scales that often occur in processes (Langley 1999).

A theory of process includes statements that explain how and why a process unfolds over time (Van de Ven, 1992). Process research usually takes on the form of producing a 'story' with regard to what is being investigated (Langley 1999). Therefore, process data deal mainly with sequences of 'events'. Whereas events are a more second-order construction of bracketed or coded sets of incidents, incidents are directly observable first-order activities. It is possible that incidents are constituents of different events and related to more than one overlapping event (Van de Ven, 2007).

Pettigrew (1992) stated that the purpose of the process analysis is not simply to describe the sequence or tell the story, but to identify patterns in the process. Acknowledging the dynamics of context, Pettigrew described social processes as "inherently discontinuous, open ended and full of surprises" (ibid, p.8). Hence, the challenge of process

analysis is to recognize these patterns among diversity and unpredictability. The nature of the data tends to be eclectic as it involves multiple levels and units of analysis with ambiguous boundaries and varies with regard to their temporal embeddedness in terms of precision, duration, and relevance (Langley, 1999, Pettigrew, 1992).

In order to reduce some of the enormous amount of data and be able to analyze the interaction between the top managers and IT managers, I focused on the activities of the three most complex subprojects of PIT: *server centralization*, *coordinated procurement*, and the *new cantonal IT organization*. During the time of observation, most statements, discussions, and disagreements in and outside the IT board meetings dealt either with the overall strategic topic or with these three projects.

Before starting the analysis procedure, I prepared the data. According to Hoffmeyer-Zlotnik (1992), this includes transcribing all verbal and non-verbal actions as well as the classification and sorting of data according to topics. Since all observations, interviews, and documents were in German, the transcripts of observations and interviews were in German. Using German data for analysis was also important so that the meaning did not change due to translations. I provided translations into English for all codes and important text data after I finalized the data analysis. In order to develop emergent concepts from the data, I adopted an inductive approach to the data analysis. The analysis process was done in a continuous iterative manner between data reduction, display, and conclusion drawing/verifying (Eisenhardt, 1989, Brower et al., 2000, Miles and Huberman, 1994).

Following the general concept by Miles and Huberman described above, I reduced, displayed and concluded from the data using (Figure 3-2): (1) a chronological case study description and visual maps, (2) temporal bracketing, (3) categorization of initial concepts, the development and aggregation of first-order and second-order order concepts (Glaser and Strauss, 1967, Langley, 1999). At the end of each of these three steps, results were validated through feedback from scholars and from participants in the case study. Similarly, the

results were used to reinforce the theoretical basis and to concretize further steps.

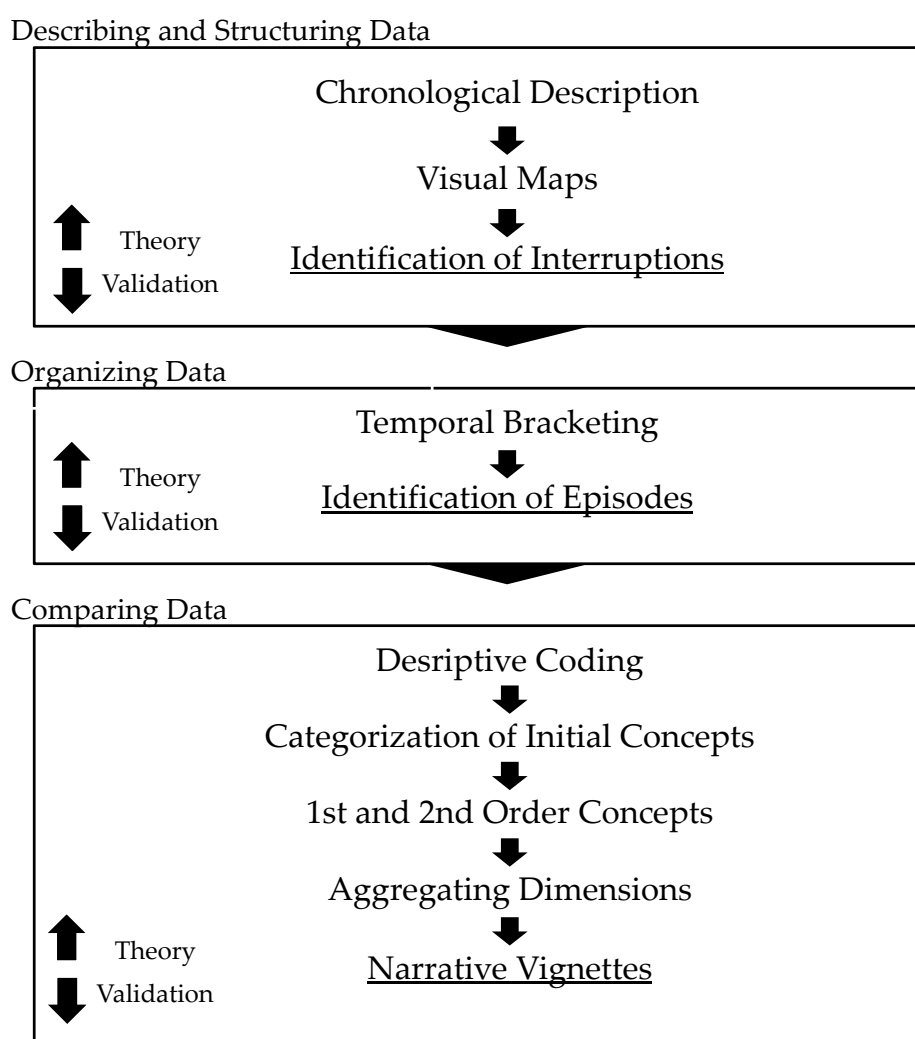


Figure 3-2: Process of data analysis (own illustration)

*Step 1: Describing and Structuring Data*

In the first step, I established a comprehensive description of activities and incidents as a stimulus for theorizing. Following the features described by Pentland (1999), I included focal actors, context factors as well as certain meaning and cultural value in a chronological story (Sections 4.1.1 and 0). For this descriptive part, I used transcripts from observations and interviews as well as official documents. The description captured key issues of the data and provided a more orga-

nized overview of how the top management team acted to shape the process and to what factors they responded.

Based on the description, I created visual maps (see Figure 4-6 for an example) as an intermediary step toward a more abstract conceptualization. This approach was helpful in refining and organizing incident data in order to identify patterns (Langley, 1999). Van de Ven (2007) describes it with the saying, 'a picture is worth a thousand words.' The usefulness of visual maps for analyzing process data lies in the simultaneous display of a large number of dimensions, the illustration of precedence, parallel processes, and the passage of time. Therefore, visual maps represent more than just a compact presentation of large quantities of information (Van de Ven, 2007).

There are various approaches to visual maps and ways of displaying data intended for different steps in analysis (Barley, 1990, Barley and Tolbert, 1997, Ezzamel and Willmott, 2008, Stensaker et al., 2008, Tyre and Orlikowski, 1994). For the purpose of this research, I described the process according to main events, including decisions, conflicts, actions, and interactions on different levels, and plotted them on a process chart. Actions included important sensegiving behavior directed toward other organizational units and actors as well as decisions. Discussions, information exchange, and conversations were labeled as interactions.

I structured all actions, interactions, and events according to organizational functions. Thus, it was possible to trace the interplay of actions, cross-level interactions, and context factors for the adaptation of participative practices. Examples of visual maps are included in the annex (Annex III), where I included visual maps on the progress of the three central PIT projects. An additional visual map giving an overview of the IT strategy process is displayed later (Figure 4-6). In this visual map, I marked down events, actions, and decisions which had an effect on three levels: 'project manager', 'IT manager', and the 'organization'. The organization stands for all other organizational members such as IT staff. In addition, I mapped contextual factors which influence actions and interactions on all three levels.



From the beginning, the influence of political factors, institutional power, IT board regulations, but also of individual experiences was obvious. Since these influences had a strong impact on actors and their actions, I described these factors as process design factors and grouped them into external, institutional, team-related, and individual factors.

Creating the visual maps, interrelations and dependencies between actors, environmental and design factors became obvious. The most important output of this step was that it was possible to identify interruptions. Interruptions that redirect the process (Mintzberg et al., 1976, Abbott, 2001) can be described as turning points in case history (Tuckermann and Rüegg-Stürm, 2008). In this study, interruptions are coded and classified as an indicator of a theoretical event (Van de Ven, 2007). Interruptions occurred whenever changes were established which either endorsed or constrained the participation and involvement of the IT managers, project managers, or other organizational members. To complete the shift, however, action is necessary (Abbott, 2001).

### *Step 2: Organizing Data*

After the identification of various categories of events through visual mapping, they can be structured and arranged into phases, stages, or distinct periods of activities (Van de Ven, 2007). In this study, I use the term episode, which serves as unit of analysis, as described in section 1.3.4.

In this second step, I employed a temporal bracketing approach (Langley, 1999, Barley, 1986). I decomposed the data into analytic episodes according to identified interruptions. Continuity was still given within episodes, but at the frontiers they were characterized by discontinuity (Langley, 1999). Based on this approach, I identified four episodes indicating adaptation (Attention, Awareness, Acceptance, and Recognition) and three episodes illustrating realignment (Directing, Controlling, and Coordinating) regarding managerial behavior and the involvement and participation of organizational members.

These episodes do not represent *stages* of a predictable sequential process (Van de Ven and Poole, 1995). I used the episodes as *units of analysis* that allowed for comparative analysis between the episodes. This is important in that it allows one to be able to explore and replicate theoretical ideas (Langley, 1999) and to examine how actions of one episode lead to changes in the next (Denis et al., 2001a). During both steps, step 1 and step 2 of the data analysis, I shared the results, the identified turning points and episodes, with the top managers from the case study in order to validate and enhance the trustworthiness of the analysis.

### *Step 3: Comparing Data*

In this last step, I sorted through the various actions and interactions of the identified episodes, deriving categories from the ground up, using the constant comparative method for identifying concepts from data (Van de Ven, 2007). I developed coding schemes inductively to reduce data while preserving the meaning. This form of within-case analysis is based on iterative analysis cycles and coding techniques of data reduction similar to those used by Miles and Huberman (1994) and Glaser and Strauss (1967).

Jarzabkowski (2008) based her work on these approaches, which are similar to grounded theory, and introduced a practical technique, which I am following in my study: First, I coded the *behavior of the top managers during each episode*. Second, I *reduced these descriptive codes to interpretative clusters* (Miles & Huberman, 1994) according to *whether they were qualitatively similar or different in character and purpose*. In order to make this distinction, I used two questions to guide the clustering. The first question was needed to ensure internal consistency by asking whether one code was similar to another code. The second question I used to develop discrete clusters by asking: Are these codes different from those codes? (Jarzabkowski, 2008). In addition, I coded the behavior of the IT managers as well as the nature of contextual factors in the same manner.

Using these generic clusters, I was able to make comparisons between episodes and analyze similar or distinct patterns of managerial behav-

ior throughout the process. In the iterative process of data analysis, I compared my initial results again with theory and especially with the literature focusing on sensemaking theory and public management. Throughout the process, I ensured the reliability of the coding framework by presenting the results of the different steps to recognized scholars in public management and strategy-as-practice at conferences, meetings, and internal colloquiums. In addition, I discussed the framework with IT board members and reviewed results and possible theoretical conclusions with individual research colleagues.

Finally, I integrated the results into narrative vignettes to comply with and emphasize the contextual richness of the longitudinal case study (Miles and Huberman, 1994). This narrative integrates the interpretations of the IT board members and the explanation of the observer. Whereas data and first-order findings are examined for underlying explanations, the researcher's second-order analysis moves to a more theoretical level. Therefore, the narrative vignettes help to integrate three different perspectives: "(1) a first-order view from the ethnographer's perspective; (2) a related first-order view based on the informants' perspective; and (3) a second-order view from the outside researcher's perspective that is induced from the raw data and the first-order findings" (Gioia and Chittipeddi, 1991, p.438).



## **4 Adapting Managerial Practices: Toward a Process Model**

The following three chapters present the results of the case study analysis as well as a comprehensive discussion of the results. The sections are structured following an approach presented by Kjaergaard and Kautz (2008). In the first section, *Periodization* (chapter 4.1.), I give a chronological outline of the overall strategic change process. In addition, the periodization comprises the narrative vignettes, which illustrate the influence of a variety of factors and the role of different actions and interactions toward the adaptation of managerial behavior and underlying practices.

In the second section, *Conceptualization*, I illustrate the concepts that emerged from decomposing the data into episodes, coding the content, and comparing the codes constantly. Based on the narrative vignettes, I show the combined results that are merged into an overall process model. The process model explains how and why managerial behaviors and underlying practices change toward enhanced participation. In the last section, *Theorization*, I will show the theoretical contributions that are derived from a comparison of the results with the literature in the fields of public management, sensemaking, and strategy as practice.

### **4.1 Periodization**

This chapter includes an outline of the IT strategy process as well as the chronological outline of changes. It also describes the identified turning points and contains the narrative vignettes illustrating four episodes supporting adaptation (Attention, Awareness, Acceptance, and Recognition) and the three episodes that represent setbacks (Directing, Controlling, and Coordinating) regarding participative management practices. These descriptive as well as analytical results are the basis for the *conceptualization* and the *theorization*.

### **4.1.1 Outline of the IT Strategy Process**

The legacy paradigm of IT in the canton CH1 was historically developed and based on a decentralized structure of the cantonal administration with strong subcultures. The process of decision making was slow and influenced by individual departments and their units. Each department had its own IT division and decided independently on most IT-related issues.

In 1998, the strategic body of the cantonal informatics (SIO) was created, acknowledging the increased importance of information technology and improving the coordination of IT. A change of staff in the leading position of both the strategic and the operative units (OCI) was meant to facilitate the process (Figure 3-1). The millennium bug in 2000 put the SIO to its first test, which the cantonal administration passed due to its strong and effective efforts.

After a change of staff in the most important IT positions, cooperation between the strategic and the operational levels of the cantonal informatics was good in the beginning. Both units were part of the state chancellery under that office's leadership. However, the lack of a coordinating body soon led to friction between the head of operational informatics and the head of strategic cantonal informatics. The IT conference (ITC), a meeting of all IT managers from the different departments and the head of strategic cantonal informatics, was in charge of operational IT questions. After a while, however, the IT managers at the conference developed certain self-dynamics because the power and influence of the departments were unbalanced: Some departments were stronger than others, and the IT conference thus remained weak and without vigor. This was made clear by the fact that the head of the SIO was not actively coordinating the work of the ITC but only giving advice.

At that time the top managers of the departments dealt only infrequently with IT topics. Their focus regarding all strategic IT questions was on financial management especially budgetary matters. The top managers mainly aimed at not exceeding the upper limit on expenses

and exhausting the budget for their departments at the same time. Hence, the most important task of the head of the strategic cantonal IT office was to develop the overall financial planning of the cantonal IT expenses.

2004 saw a major change: Before the state chancellor resigned in March, he decided on the initial steps toward a new organization of the cantonal IT. One of his last decisions was to decentralize the operational OCI division and integrate it into the Department of Finance (DF), which was based on the idea that this would improve the operational unit's effectiveness. The division maintains interdepartmental and cross-sectional applications as well as operates the communication networks of the canton and ensures data security.

When the new state chancellor took charge in June 2004, he initiated a major reform of the state chancellery and its tasks. Since he was experienced in leading major public administrative reform projects on the regional and local level, he soon became an important figure for major change initiatives in CH1. Based on the concept of New Public Management, his reform of the state chancellery focused on the separation of tasks between the politically elected cabinet and the state chancellery. This followed the insight that the main task of the cabinet lies in strategic decisions for the canton, while the main task of the state chancellery is the provision of managerial support. As a result, the state chancellery abandoned diverse services and focused on services of strategic and corporative impact.

A close investigation conducted on behalf of the state chancellery in 2005 revealed that the cantonal IT infrastructure faced major problems as it had developed into a bottomless pit, and lacked central coordination or restrictions. The defragmented IT management implied that actors acted and made decisions independently. As a result, the cantonal IT was characterized by complex structures, systems, and applications, which led to high maintenance costs and redundancies. This initial analysis of the situation triggered a fundamental reform of the cantonal IT, whose core strategy process in the overall transformation process constitutes the case study of my research.

Table 4-1: Formation, orientation, and strategy stages

<i>Stage</i>	Formation	Orientation	Strategy
<i>Time</i>	5/2006—12/2006	12/2006—10/2007	10/2007—3/2008
<i>Focus</i>	Initiation of the transformation	Common understanding of change	Common goals and concerted action
<i>Key members</i>	State chancellor, SIO	State chancellor, SIO, DF	State chancellor, SIO, external consultant, DF
<i>Interaction between levels</i>	Low	Low	Low
<i>Examples of activities and action</i>	Resolution for change, IT board	Project PIT	IT strategy

Source: Own illustration

To sum up, three major effects led to the transformation of the cantonal IT. First, there was a strong need for action in response to the defragmented IT management, a situation that created dissatisfaction for public managers and employees. Second, there was a change of staff in major positions in the cantonal administration. Third, the number of reform approaches created a type of reform eagerness and attempted to change not only the organization and its tasks but also its culture.

For an overall understanding of the IT strategy process, it is useful to subdivide the overall transformation process of the organization into six successive stages: formation, orientation, strategy, implementation, pre-reorganization, and reorganization (Table 4-1 and Table 4-2). I identified the stages based on the tasks and topics of the IT board and validated them through the descriptions of the transformation made by IT board members.

Table 4-2: Implementation, pre-reorganization, and reorganization stages



<i>Stage</i>	Implementation	Pre- Reorganization	Reorganization
<i>Time</i>	3/2008—6/2008	6/2008—01/2009	01/2009—01/ 2010
<i>Focus</i>	Acceptance of change	Cooperation and integration of staff	Reorganization of the OCI and change of staff
<i>Key mem- bers</i>	State chancellor, SIO, IT manag- ers, OCI, external consultant, DF	State chancellor, SIO, IT managers, OCI, DF	State chancellor, SIO, IT manag- ers, OCI, DF
<i>Interaction between lev- els</i>	Medium	High	High
<i>Examples of activities and action</i>	Conflicts and meeting with IT managers	Workshops and Reinitialization of the IT conference	Newly created OCI and change of SIO

*Source: Own illustration*

The overall transformation process started with the formation stage, which lasted from May until December 2006, and was followed by the orientation stage, from December 2006 until October 2007. The process continued with a shorter strategy stage from October 2007 to March 2008 (Table 4-1). In 2008, I started my observations of the IT strategy process with the strategic groundwork done by the IT board members. Subsequent to the strategy stage, two stages of incremental progress regarding the different projects took place from March 2008 until June 2008 and from June 2008 until January 2009. During the last stage, important decisions led to the reorganization of the OCI division at the beginning of 2009. The final stage of the case study, beginning in January 2009, showed the definite character of the IT-related organizational transformation (Table 4-2).

The IT-related strategic change of the cantonal administration followed a new organizational paradigm. It aimed at an integration of *customer orientation* and satisfaction, *optimization of capacities* and *com-*

petencies, increased efficiency and effectiveness, a new organization of IT resources as well as a consolidated and standardized IT infrastructure (Figure 4-1).

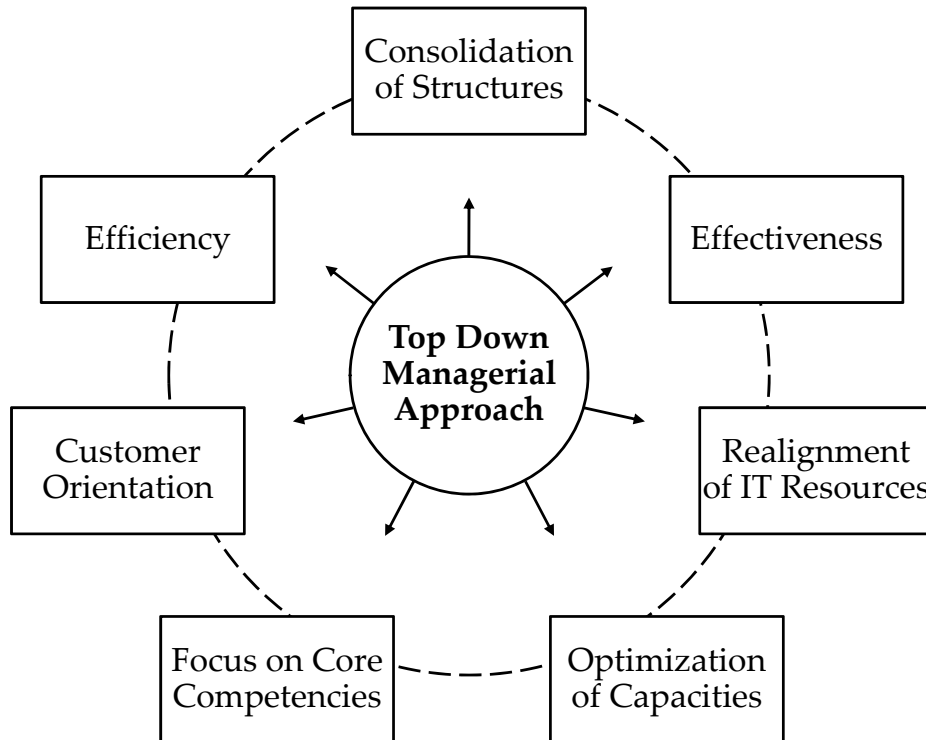


Figure 4-1: Change of paradigm in the organization (own illustration)

The transformation process consisted of simultaneous initiatives taking place in many fields of action. Thus, the changes had a remarkable impact on the organizational culture and underlying values and principles as well. The design of most changes regarding the business environment, control systems, and strategic objectives followed New Public Management principles. However, the change process itself focused on reducing operating costs and increasing coordination by means of centralization and standardization. To meet the ambitious goals and timelines, *the IT strategy process started in a top-down directed managerial manner.*

### **4.1.2 Strategic Change: A Chronological Story**

Based on the structure of the six stages of the IT strategy process introduced in the last section, I summarize the evolution of the case study in a chronological order in the following section.

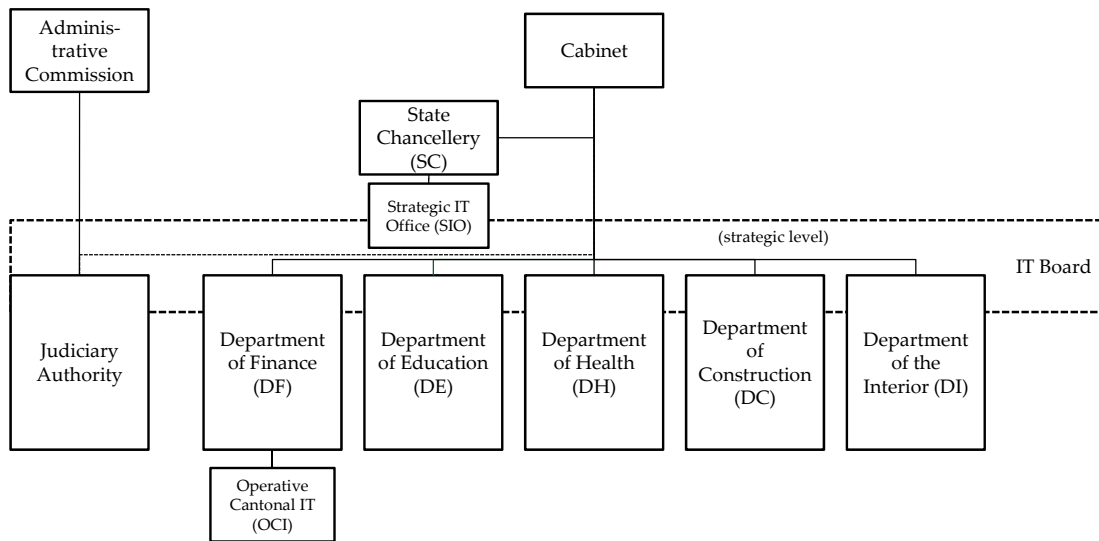
#### *Stage 1: Formation Stage (May - December 2006)*

Prior to the formation of the IT board and the launch of the transformation process, the staffing of two key positions changed at the beginning of 2006: the head of the SIO and the DF. The new director came from the private sector, had profound knowledge of law and business administration, and had already managed the termination of a large business and, therefore, met the high selection criteria shaped through the impending challenges of this position. The state chancellor together with the top manager of the DF and the new head of the SIO then initiated the transformation of the cantonal IT. The introduction of the DF's new top manager was accompanied by another advantageous new appointment: The new executive director of the DC was a young professional with an academic background.

As the situation of the cantonal IT became increasingly dissatisfactory, the departmental top managers agreed upon the initiation of a comprehensive IT project and the institutionalization of an interdepartmental body. With the support participation of most executive directors, the top managers proposed the reorganization and transformation of the cantonal IT, which the government signed as a resolution in September 2006. The core element was the Perfect IT (PIT) project, which was comprised of actions and activities according to the major objectives of the paradigm change illustrated in Figure 4-1. PIT was initiated as a linchpin of the joint IT activities in the cantonal administration. The project included several different projects and was meant to lead to a new IT landscape.

The central coordination of the transformation project required a new management tool: The newly created IT board was an interdepartmental body consisting of the state chancellor, top managers from the departments, the state chancellery and the administrative body of the

judiciary, the judicial agency. Figure 4-2 presents the governance structure of the IT board in its initial stage.



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Figure 4-2: Organizational structure after the creation of the IT board (own illustration)

The SIO became the coordination office of the cantonal IT board as part of the division strategy and external affairs of the state chancellery. Its task was to support the IT board with the development and implementation of an IT strategy. In general, all members had the same opportunities to act and interact during IT board meetings. The head of the SIO participated in the meetings with an advisory voice, and the state chancellor chaired the IT board. The meetings were usually once a month, but more frequently when necessary. The length of the meetings varied between one and several hours depending on the topic.

The main task of the IT board was the coordination of the IT-related strategic change. Therefore, the IT board had to define obligatory directives for the operative level within existing government conventions. The IT board and its members supported the government in the fulfillment of its tasks through purposeful and solution-oriented work according to political directives. If IT board members were not able to

find an agreement on a topic, the political cabinet could decide upon the problem.

Further tasks of the IT board were:

- *Evaluation:* The IT board judged reports from the departments, the state chancellery, and the judicial authorities in the context of the existing project management and controlling guidelines.
- *Confirmation:* The IT board ratified strategically relevant projects based on project reports provided by the departments, the state chancellery, as well as the judicial authorities.
- *Endorsement:* The IT board authorized IT processes, IT standards, a list of preferred vendors, and the cantonal IT security concept.
- *Approval:* The IT board also approved exceptional cases of self-developments or the procurement and implementation of non-standard IT solutions.

*Stage 2: Orientation Stage (December 2006 - October 2007)*

Started in 2007, PIT and its objectives consisted of six separate project units (Figure 4-3). PIT's subprojects included (1) a new structure of the cantonal IT organization, (2) a reduction in servers and server locations, (3) centralized procurement of hardware products and services, (4) improved desktop management, (5) increased use of standards for applications, and (6) a new departmental IT organization.

At the beginning of 2007, the top managers responsible for the projects and the project managers were assigned and detailed timelines were developed. Almost every top manager was held responsible for the overall coordination of one of the project units of PIT. Originally, it was planned to complete most of the transformation by January 1<sup>st</sup> 2008. Each project had its own project structure and its own project manager, most of whom were IT managers who had taken over the function of implementing the project.

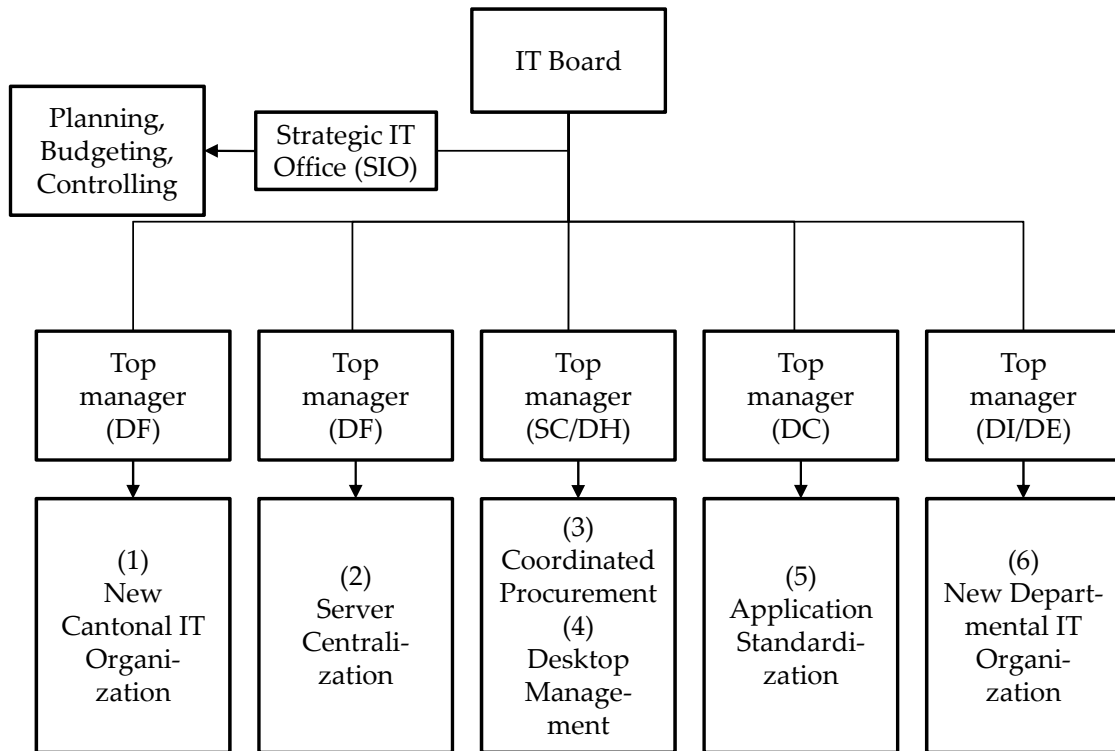


Figure 4-3: The organization of the project PIT and its subprojects (own illustration)

The project units of PIT changed very little over time. Desktop management was split first between other subprojects before it became a separate subproject in 2008. Initially, the top manager of the Department of Health managed the projects *coordinated procurement* and *desktop-management* together with the top manager of the State Chancellery. As the process proceeded, the top manager of the State Chancellery and the SIO coordinated most of the project. Similarly, in comparison with the Department of Education, the Department of the Interior managed, over time, significantly more tasks involving the new departmental IT organization.

As previously mentioned, I focused on activities regarding the three subprojects: *server centralization*, *coordinated procurement*, and *new cantonal IT organization*, as these projects were the central subprojects during the time of observation. The main part of the overall transformation was the new structure of the cantonal IT organization, which included the reorganization of the OCI. The top manager of the De-

partment of Finance (DF) coordinated both subprojects *server centralization* and *new cantonal IT organization*.

For better communication within the IT board, a shared drive was set up to enable the upload of project information. Comprehensive topics like communication with IT staff and the scale and scope of centralization were problematic from the start. By September and October 2007, project deadlines were often being exceeded, the reasons for which mainly involved shortages of staff and wait times because results from other projects had to be taken into consideration.

The project *coordinated procurement* started especially slowly. From its beginning, the IT managers were integrated into the process and asked for their opinion, which led to intense and time-consuming discussions. The other two projects were initiated without intense involvement of diverse organizational members. It was argued that conceptual work was needed that could be only done by a small project group consisting of a few IT managers. Therefore, the top manager in charge chose this approach in order to clarify specifications and achieve a faster start.

### *Stage 3: Strategy Stage (October 2007 - March 2008)*

At the beginning of the strategy stage, delays of all three projects became obvious. Projects took a wrong direction and thus decelerated further progress; however, the top managers considered it normal. They paid more attention to raising further understanding, acceptance, and commitment for the overall approach on lower management levels and especially from the political cabinet.

Newsletters as well as a general information event toward the end of 2007 were instituted to spread information about objectives and planned activities. As the scope of the information event was very broad, the information given was general and not adapted to certain functions or organizational levels. Accordingly, this communication approach did not lead to acceptance across all organizational levels, but, even contrary to the intended result, raised new questions and increased concerns.

At the beginning of 2008, the top managers completed the first draft of an overall perspective and common goals. At this time, most activities concentrated on the creation of an IT strategy and its presentation during a cabinet session at the beginning of March 2008. The PIT project steps and achievements were of less relevance during this time of strategy formulation.

During a daylong meeting in January 2008, the top managers invited external practitioners and scholars to demonstrate good practices of IT-related organizational change and requirements for successful strategic IT management. One suggested change was a central budgeting and planning process. Since every department had its own IT budget and feared the loss of power as well as financial deficits, this idea was critically discussed.

A top-down management approach was strongly preferred; however, some top managers discussed the direct involvement of employees, the required provision of information for employees, as well as the desirable level of transparency. By the end of February, the IT managers and staff expressed criticism that the IT board did not act openly toward the employees. Most of the top managers feared that this criticism from the IT managers and staff could hinder their efforts to have the IT strategy approved by the cabinet in March 2008.

Despite the criticism, the top managers specified features necessary for the first draft of the strategic objectives during the following weeks. They focused especially on the question of resource planning and the reduction in IT staff in a highly emotional manner. Regarding the resource cut, some top managers expressed their impression that the suggestions were neither reasonable nor fair, which further increased the emotional level in the IT strategy process.

The top managers judged the implementation of the projects as crucial for the success of the whole transformation. However, different opinions existed regarding the need for an open discussion, the importance of quick results, and the visibility of progress. Furthermore, even though it was acknowledged that every top manager should



have been committed to PIT, its project units and the overall objectives their degree of engagement varied.

Since the top managers regarded the political approval of the strategic objectives and the implementation of PIT along with the necessary financial resources by the political cabinet as most important, the presentation of the IT strategy was worked out in a detailed way. A professional manner of presenting, the use of clear language, and the emphasis on the IT board as the leading authority were key points to focus on. To gain acceptance by the cabinet members, the top managers used the potential reduction in IT costs as their strongest argument. In order to generate financial calculations and an overall account balance, the SIO had to gain a financial overview of all decentralized IT budgets and project expenses within the departments. Since this was difficult to achieve, top managers repeatedly revised the presentation up to the very last moment in order to find the right expressions, to avoid controversial terms and avoid unclear topics. Without communicating any particular numbers, the top managers predicted that PIT would not only stop the rise in IT costs but also even decrease them after full implementation.

Finally, the political cabinet approved the IT strategy at the beginning of March. The state chancellor and the IT board members had informed the cabinet members well beforehand. The cabinet agreed on one additional requirement for the implementation of the strategy: The IT board had to conduct further analyses regarding the goal of a centralized and standardized *desktop management*, which was a sub-theme of *coordinated procurement*.

#### *Stage 4: Implementation Stage (March - June 2008)*

Most top managers stated that this stage was the most crucial because it entailed the implementation of agreed measures throughout the entire organization. However, in March 2008, the SIO and individual top managers realized that they also had to inspire other top managers: After the cabinet's approval of the IT strategy and PIT, the engagement of several top managers decreased. The project units lacked long-term commitment and continuous engagement to ensure the im-

plementation of new concepts. Thus, the implementation stage was very difficult and required strong efforts to achieve common ground and major results.

The first event to inform the employees of all IT-related sections was held in mid-March 2008. Despite remarkable efforts for the preparation of the event, some top managers commented that it did not fulfill the intended goals: The participating employees did not understand well or even did not accept the communicated information. The different professional backgrounds of the employees and a low level of previous information enforced the effect. Uncertainty, unclarity, irritation and discontent arose among middle managers and especially the IT managers. In the course of the strategy process, a growing number of IT managers complained that they did not feel well informed and communication was lacking between the operative cantonal IT division and the IT units in the departments. In addition, the top managers increasingly shared the impression that communication was insufficient and inadequate.

Besides problems in the communication of the overall objectives, unclarity also existed within the subprojects: The scope of the coordinated procurement remained a continuous issue, and the organization of server centralization was intensively discussed, particularly the diverse demands of the departments. The third subproject did not make much progress but had to face a change in staff.

In April 2008, communication with staff was still a problematic issue due to continuously rising discontent on the operational level. The IT board members agreed that the pressure had to be maintained in order to implement PIT organization-wide. Additionally, questions of accountability and responsibility required a clarification of the proper allocation of tasks. Misunderstandings concerning responsibilities existed throughout the departments. IT board members were concerned that documents for the regular meetings were not being turned in on time. Further discussions focused on the choice of either reducing staff or simply shifting staff within the organization and on the question of whether it was possible at that point to enforce an outsourcing

of IT services or whether further analyses were required before outsourcing. Discussions about the imminent financial planning rose as well.

At the beginning of May, a special meeting with all IT managers and the IT board members addressed the negative aspects of the situation. The IT managers criticized that mutual trust was lacking and they felt uncertain about their role and tasks. Furthermore, they felt no longer represented by an organizational panel like at the previous IT conference. Thus, they called for a new panel on the operational level. In contrast, IT board members emphasized that everybody had to contribute in order to realize the transformation but the IT managers would need to understand the strategic view and its relevance as well. The top managers assessed the transformation as a painful change project with a focus on the overall benefit. The special meeting ended with some concessions from the top managers on the issue of transparency and the distribution of information such as protocols from IT board meetings. The IT managers also agreed to support PIT and to be more cooperative.

Later in May, some IT board members hesitated to proceed with their projects. In their opinion, issues such as staff appointments, financial planning, and outsourcing had to be resolved first. Toward the end of May, the task of financial planning became more relevant. The top managers intensively discussed the difficulty of estimating IT costs in order to be able to present a new financial plan before the cabinet and gain its support. During these discussions, desktop management, identified as problematic and unfinished by the cabinet, became a buzzword.

In June, a rising number of IT managers and their staff complained that they were overworked. Nevertheless, further efforts and additional bilateral clarifications were greatly needed, especially between the departments and the project managers of the projects *server centralization* and *new cantonal IT organization*. The project “server centralization” was increasingly behind schedule. Feedback from the departments on the project was too detailed and not in line with the

overall objectives of the IT strategy as it tended to express individual concerns and interests. Thus, the state chancellor called for more cooperation in order to achieve the common goal set.

With regard to the project deadlines, the top managers expected significant progress for the project *coordinated procurement*; however, in the middle of June, it became clear that the project would fail to meet a deadline set for the end of the month. Therefore, it was not realistic to finalize the concept for the official procurement process before the summer break. At the same time, IT board members criticized the overload of documents discussed in the meeting.

Due to the initiative of an individual top manager, the project team picked up the discussion of the IT conference as a communication instrument again at the beginning of June. The top manager based his arguments on critical comments within his subproject and stated that the IT managers would need such a panel to resolve operative issues and in order to feel accepted. However, there was no consensus about the scope of participation when rebuilding a panel like the IT conference. While some top managers suggested starting with a specific group solely dealing with the topic of IT architecture, the state chancellor and the top manager of the DF preferred a wider scope. Even though this approach should have prevented the IT managers and staff from feeling overlooked, it led to some irritation because it opposed the previous position of the IT board. The fear arose that the new panel would end like the earlier IT conference. As mentioned in section 4.1.1, the earlier IT conference had no authority or influence but slowed down or even hindered decision-making processes.

Additional meetings were necessary in order to use the interactive dynamics in the IT board before the summer break and make important decisions. The project team expected no major developments until the end of the summer break in mid-August. Accordingly, the last several weeks before the summer break were hectic. Even though the top managers spent a significant amount of time in discussions of the issues, the team realized the risk of making hasty decisions due to time pressure.

One discussion dealing with communication began as some IT board members expressed their discontent: Several documents reviewed during IT board meetings were not yet ready for approval, as they were not the final version. Hence, it was determined that documents which had a status of initial information only must not be discussed during meetings. In addition, the team decided that documents discussed during the meetings could be forwarded to the IT managers. The top managers decided that the choice of what documents to forward had to be made at the end of every meeting.

Toward the end of June, the team took a small step forward regarding the new IT conference and the integration of the IT managers. The top managers were tasked with informing the project and IT managers that the IT conference would meet again after the summer. However, since the scope and format were still unclear, the IT board postponed further discussions of the details of the IT conference to a later meeting in August.

Toward the end of June, the project *coordinated procurement* required a decision: The top managers had to select one of two suggested options which differed with respect to the scope of the outsourcing activities. The top managers in charge of the project pointed out that a solution based on a least common denominator between the IT board members and IT managers allowing only a narrow scope of hardware outsourcing would pose a threat to the whole project. Due to diverse opinions, the top managers made the decision based on a majority approach. This approach was a novelty in IT board practice and unusual for a public administration in Switzerland. As a result, an external consulting firm that was already in charge of formulating the two options was assigned the task of preparing the final procurement documents.

Regarding the project *server centralization*, the IT board members complained about the weak and misleading information departmental IT managers received from the OCI. The top managers argued that due to the lack of information distrust toward the OCI, but also the IT board, still existed in the departments. Under these circumstances, the IT board members agreed that they needed to make a decision con-

cerning the further coordination of the project. The state chancellor and the top manager from the DF emphasized the need for drastic measures in order to create transparency and trust. Most top managers agreed to take action in respect of the communication practice of the OCI and acknowledged the importance of the overall cantonal perspective.

*Stage 5: Pre-Reorganization Phase (June 2008 - January 2009)*

After the summer break, plans for reviving the IT conference arose, assigning a new operative role to the group and leaving strategic decisions to the IT board and its members. The top managers intended the IT conference to consist of all IT managers and deal with certain topics like information system architecture. They also proposed that the tie between the IT board and the IT conference should be closer than before. However, since the IT conference was still not implemented in August, the IT managers criticized that the IT board and its activities had not yet improved.

In the second half of September, the members of the IT board called a special meeting to discuss future developments regarding the cantonal IT. Again, the IT board discussed several options for the project *server centralization* and for the final concept of the project *coordinated procurement*. Two different approaches for publishing the final procurement documents were possible: a sequential approach, launching procurement documents gradually corresponding to different topics, or a parallel approach, distributing all procurement documents at once.

At the end of October, a new protocol for the IT board meetings specified the responsibilities and tasks of each top manager. This attempt targeted better fulfillment of tasks and overall control of the progress of the organizational transformation and its subprojects. At the same time, top managers unveiled a critical development: The IT staff was about to leave the cantonal administration. The IT board decided to inform and communicate in a better and more positive manner in order to effectively prevent the increasing loss of professionals.

The final concept for the project *coordinated procurement* almost reached its final state in November. After sending the documents to the departments, comprehensive feedback was returned. Some of the top managers asked for another review in the departments, while other top managers refused an additional review because it would slow down the development of the project. An agreement on bilateral meetings with the top managers who were asking for further clarifications resolved the conflict .

During this time, the other two subprojects unveiled major weaknesses regarding the staff in charge: The employees increasingly felt overworked due to challenging agendas. As a result, these subprojects received more time and top managers allowed for more time.

In mid-November, the first IT conference meeting was realized. The head of the SIO and the top manager of the DF participated and reported that most IT managers were willing to cooperate and work together with the IT board. According to their view, the link between the IT Board and the IT managers had significantly improved compared to the situation earlier.

At the end of November, the documents for the project *coordinated procurement* were ready for publication. Even though IT board members acknowledged that they needed to overcome the cultural gap between the IT managers and IT board members, all involved praised the level of cooperation on the project.

For the project *server centralization*, it became evident that organizational changes were necessary. In addition, results from other projects were needed which were not yet available. The same was true for the project new IT organization. In order to achieve the objectives, the IT board suggested a separate project focusing on the required organization development.

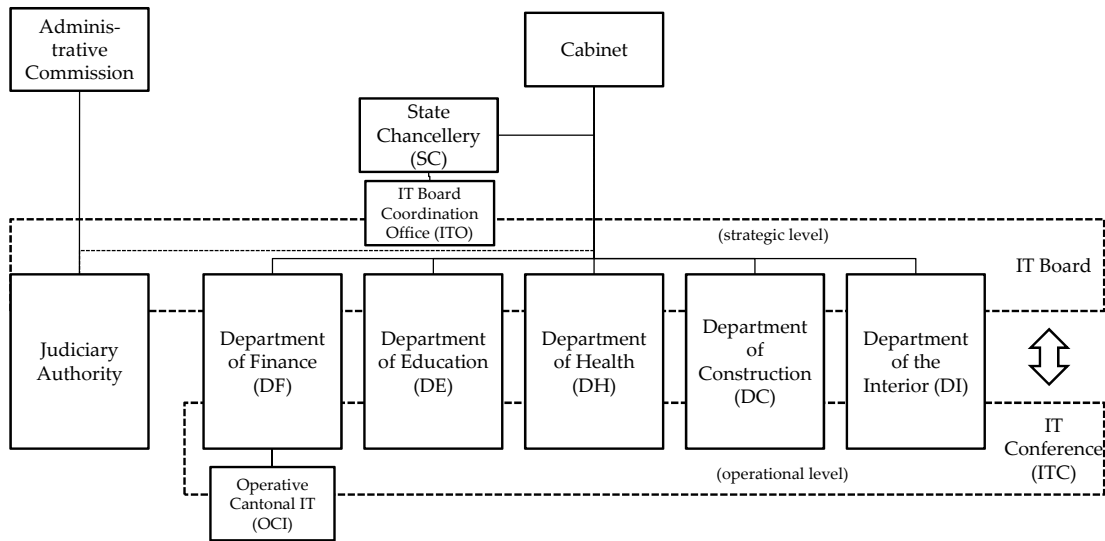


Figure 4-4: The new organizational structure of the cantonal IT (own illustration)

Stage 6: Reorganization Stage (January 2009 - present)

At the beginning of 2009, the IT board confirmed the catalogue of services and products, which was one major task of the subproject *new cantonal IT organization*. The catalogue also served as a trigger for a general information event for the cantonal administration. The IT board had originally planned to organize the event in December 2008; however, since information on the catalogue and other major projects was still incomplete, the top managers agreed to postpone the event to mid-February.

The top managers also initiated the second major task of the project unit *new cantonal IT organization* whose main element was change in the OCI. The change process started with the replacement of the head of the unit, who was also the project manager of the catalogue of services and products. In order to improve cooperation between the OCI, departments, and the IT board, the former head of the SIO took over at the end of January.

In turn, the top managers decided on the adaptation of the responsibilities of the SIO so that its main purpose became the support of the IT board and its work. In early 2009, it was officially converted to a



coordination office of the IT board (ITO) (Figure 4-4). The new head of the ITO was an external professional. After the completion of these changes, the new head of the OCI started to redesign and expand the tasks and responsibilities of the OCI, with the OCI as the central IT unit of the cantonal administration. Since the centralization of responsibilities and tasks also reduced the field of action for departmental IT managers, many of them started working for the new unit.

Additional changes continued, even beyond the completion of the observation phase in January 2009. Major changes affected the OCI. The IT board decided on a cantonal IT profile including a new vision and goals. Most important were the three issues of customer orientation, professional project management, and the separation of core tasks and support structure. At the end of 2009, the OCI established a new overall IT concept also emphasizing the role of internal communication.

The project *server centralization* experienced further delays due to incomplete information on prerequisites. Regarding the subproject *coordinated procurement*, it hit its targeted deadlines. However, the project *desktop management* was still pending at the end of 2009. As new managers and staff with private sector backgrounds entered the organization, top managers expected further positive impacts, as the new actors would be less prejudiced against restructuring or even outsourcing desktop management.

In sum, the top managers perceived the situation in the beginning of 2009 as a major opportunity for two grounds: The first was that a shared understanding about strategic IT goals and their realization existed between the three driving units, the OCI, DF, and the state chancellery. The second reason was the beneficial cooperation between the top managers and IT managers and the functioning of the IT conference as an operative advisory panel.

### **4.1.3 Identification of Turning Points and Episodes**

The chronological story above describes the entire process, pointing out the actors, their actions and the setting (who, what, and where) of

the strategy process. The stages in the story are based on the decisions and the subsequent actions of the IT strategy board. The first two stages dealt with the institutionalization of the IT board. The creation of a team identity and a mutual consensus on the PIT project units lasted until stage 3, the strategy stage. After the formalization of the IT strategy, its implementation (stage 4) followed, moving on to a pre-reorganization (stage 5) and a reorganization stage (stage 6). The study observation covered the central and more dynamic stages of the IT strategy process and lasted from 01/2008 until 01/2009 (Figure 4-5).

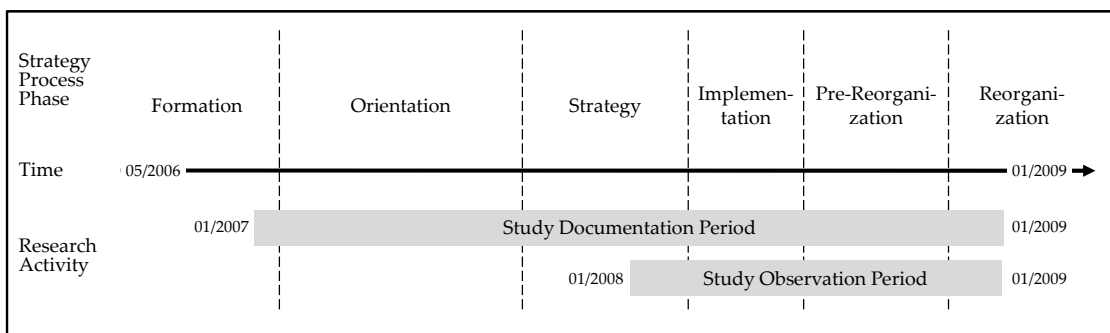


Figure 4-5: IT strategy process stages (own illustration)

To answer the research questions of this study, it is necessary to decompose the strategy process into analytic episodes based on the dominant management behavior and its underlying practices. I identified the episodes according to turning points, which occurred when managerial behavior changed toward more participation. Using visual maps, as shown in Figure 4-6 and in Annex III, I recognized interruptions in management behavior and practices. Novel actions and modes of behavior allowed for more information, communication, participation, and finally the integration of operative managers and staff.

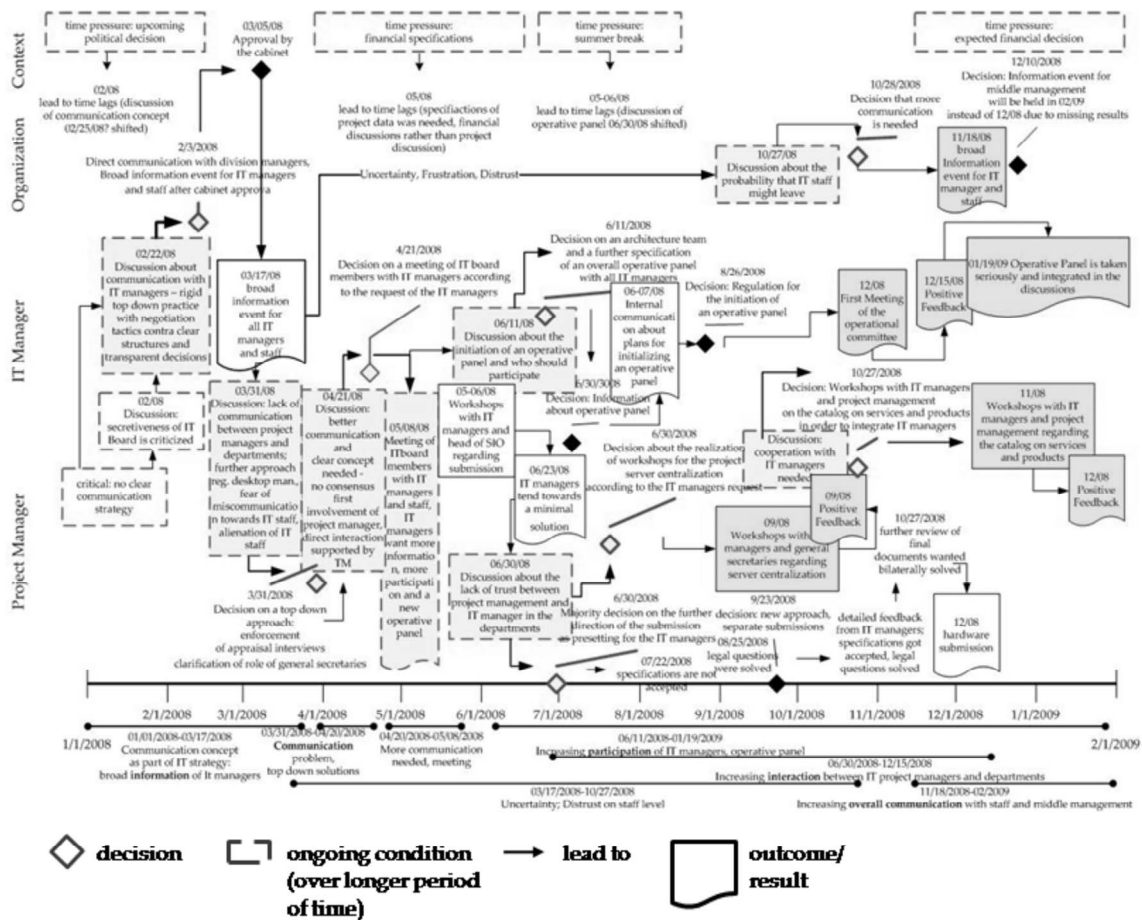


Figure 4-6: Exemplary visual map for the identification of turning points (own illustration)

As described in chapter 3.4, decisions influencing the actions and behaviors of the top managers were considered first (major decisions are marked with black diamonds). I later added other determining factors like activities and interactions which represented a change in managerial practices.

The analysis of the visual maps, the comparison of the different interruptions, and the evaluation of the behavioral patterns within episodes revealed the following four adaptation episodes in which management behavior and underlying patterns changed: attention, awareness, acceptance, and recognition building. The names of the adaptation episodes reflect top managers' perception of the need for changing managerial behavior and underlying practices toward participation. During the first adaptation episode, the realization arose

that certain characteristics of a participative management behavior were helpful for proceeding with the implementation. In the second adaptation episode, there evolved a greater awareness not only of the need for information and communication but of the advantage of interaction for creating acceptance. Top managers accepted that interaction and cooperation were an important part of the implementation in the third adaptation episode. In the last adaptation episode, top managers recognized the important role of the operative level and took the participation of operative members as a given.

The four adaptation episodes were identified due to the turning points regarding participative management practices and did not proceed in a sequential manner (Table 4-3). Episodes of realignment occurred which questioned and undermined participative achievements. The realignment episodes demonstrate the challenge of overcoming institutionalized behavioral patterns, modes of action, and individual opinions. In the three realignment episodes of directing, controlling, and coordinating, a variety of deficits became obvious. In the first realignment episode, the top managers reacted with increased pressure and direction to misguided project developments, isolated implementation, and a lack of coordination. In the second realignment episode, independent actions taken by project managers concerned top managers. Consequently, top managers enforced separation but also decreased role uncertainty and unclear tasks and responsibilities. The third realignment episode centered on the importance of making decisions without obtaining consensus and increased coordination.

*Table 4-3: Episodes and turning points of practices*

Episode	Turning Point of Practices	Underlying Characteristics of Practices
Attention	Individual top managers allude to the need for information	Criticism from IT managers
		Unclear communication

		Top managers fear uncontrolled reactions
		Bilateral communication with operative level
Directing	Independent activities of project managers	Top managers fear project failure
		Unclear communication
		Top managers fear uncontrolled reactions
Awareness	Individual top managers support IT managers' request for more cooperation	Discontent of IT managers
		Direct Interaction with operative level
		Unclear communication
Controlling	Anticipating views of project managers	Top managers fear project failure
Acceptance	Individual top managers support the institutionalization of cooperation	Top managers fear project failure
Coordinating	IT managers and staff want to leave	Top managers fear project failure
		Proactive engagement for more communication and involvement
Recognition	Individual top managers interact with the operative level on a daily routine	Acceptance of an active role for implementation
		Opportunity to create a beneficial collaboration

*Source: Own illustration*

The identified seven episodes structure the IT strategy process for the next step of analysis and comparing data. The following section pre-

sents narrative vignettes which explicate details on modes of action and comprehensive insights on behavioral patterns and influencing factors for every episode.

#### 4.1.4 The Episodes of Adaptation and Realignment

In the following section, I describe the four different episodes of adaptation (attention, awareness, acceptance, and recognition) and the three realignment episodes (directing, controlling, and coordinating). Throughout the episodes individual perceptions, discrete activities, and ongoing interactions between the IT board members and with other organizational levels unfolded. Within the adaptation episodes, activities and interactions contributed to more participation and widespread involvement, whereas realignment episodes had a stronger focus on direction, enforcement, and control (Figure 4-7). At the beginning of each episode, I describe central factors of the following aggregate dimensions, which I identified through comparison within and between the episodes: process context factors, process design factors, and practices.

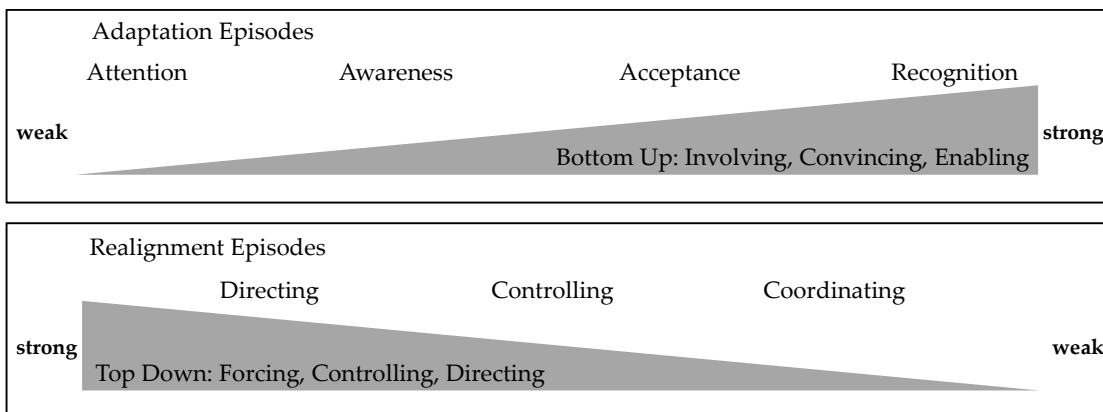


Figure 4-7: Identified episodes and differences in managerial practices (own illustration)

#### 4.1.4.1 Adaptation Episode 1: Attention Building - Alluding to Risks, Mediating Understanding

In the first episode, most discussions did not focus on participation and agreement was rare, individual managers developed some appreciation for the criticism from the IT managers and expressed it through specific engagement. In addition, I illustrate that the cabinet approval caused time pressure and political pressure, which superseded other difficulties, as top managers regarded cabinet approval as the most important (Table 4-4). I also show the influence of uncertainty and ambiguity on top managers' perceptions of how to communicate with organizational members and how to manage the PIT projects.

*Table 4-4: Central factors of the adaptation episode "Attention"*

Process Context	<i>Time pressure and political pressure</i> were the main influencing context factors of this episode. Both existed due to the <i>political directive</i> to reduce IT costs and because of the impending cabinet approval of the IT strategy. The IT board regarded the support of the political cabinet and the authorization of the IT strategy by the cabinet as key for the targeted paradigm change.
Process Design	<i>Powerful</i> individual actors with a directive management attitude dominated the episode. <i>Uncertainty</i> about the role of IT board members and IT managers existed. <i>Ambiguity</i> occurred regarding both how top managers should communicate with IT managers and how to manage change. Few top managers demonstrated <i>appreciation</i> for the criticism on the operative level. Most top managers recalled <i>past (negative) experiences</i> for supporting their decisions regarding the operative level.
Practices	Actions and interactions concentrated on <i>discus-</i>

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sions in the IT board. The most active IT managers showed a *directive management attitude*. Only individual top managers communicated directly with the operative level and showed their support.

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Participation      This episode led to first efforts to provide more information to employees.

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*Source: Own illustration*

### *Time pressure and political pressure*

The top managers were pressed for time due to their decision to present the IT strategy before the cabinet in order to secure political approval. The top managers agreed that the potential loss of political approval was a major threat. In addition, they needed a consensus on PIT subprojects and strategic issues such as the allocation of resources. This consensus was hampered by the increasing number of discussions that focused on departmental interests and emphasized that IT strategy issues were affecting their independence and autonomy. Some top managers articulated their impression that they were not treated equally since they were required to decrease IT-related expenditures even though they already had lean workflow processes and infrastructure.

Therefore, top managers invested considerable time and effort in preparing the political cabinet session. Due to time pressure, the top managers eased the tension not through discussion but by leaving out problematic topics, e.g. the reduction of resources. This approach was in contrast to the opinion of the few top managers demanding more discussions in order to establish a shared understanding (Weick et al., 2010). However, this approach only shifted the topic and discussions recurred throughout the strategy process.

The following account (1) shows a typical conversation that underlines the influence of individual top managers, the importance of the political approval, the lack of time, and especially the desire of some top managers for more discussions.



TM1: "We have to come to a decision (.) For the majority decision of the political cabinet it is important to explain that jobs will be shifted and how jobs are distributed according to applications and projects (.) If there is no agreement, the projects and the new OCI will die"

TM2: "It should be possible, though, to have an open discussion"

*Transcript quotation 1: Demand for more discussion<sup>1</sup>*

### *Ambiguity and uncertainty on managing the strategy process*

Different perceptions about the prevalent management concept existed within the top management team. It was unclear, what leadership roles top managers had to take, how to communicate, and how to handle criticism. While uncertainty, as a lack of information, could have been resolved with more information, ambiguity refers to confusion created by multiple meanings (Weick, 1995). A clear management concept containing "a coherent story about why and what type of change is needed" (Beer, 2001, p.243) and how to approach it would have been useful. However, the IT board did not negotiate such a concept.

Throughout the episode, an asymmetric level of information and power was apparent between top managers. Therefore, many top managers had the impression that influential board members chose the topics for the agenda. Decisions depended heavily on the advocacy and engagement of the most powerful members of the IT board. These members favored an implementation of the strategy process by means of directive managerial practices. They easily made their point and determined the course of action. Some of them stated that "*a certain criticism (.) is part of a change process*". If there were no criticism from the operative level, they would be "*too polite and accomplish too little*". In addition, their interest in the operative level was low even

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<sup>1</sup> The original text is quoted. The following symbols were used for the transcriptions: (...) long pause, (.) short pause, [...] all changes to the original text, such as deletions or additions, TM stands for Top Manager/IT board member, C means consultant, and PM stands for project manager/IT manager.

though the operative level had suffered "*frustration and a high loss of power*". Again, this approach clashed with the position of very few other top managers.

The clash between top managers favoring a directive management attitude and those who emphasized communication, transparency, and overall acceptance of the strategy process becomes clear in the following account (2).

TM1: "*Transparency is important for leadership (.) but it needs an external 'bad guy' especially during times of change*"

TM2: "*If you have clear structures and a strategic decision that is comprehensible, you do not need a bad guy but a good guy (.) It is necessary that the whole public administration accept the strategy [...]*"

TM1: "*Change projects are managed top-down*"

*Transcript quotation 2: Discussion about the right management behavior*

Since ambiguity existed regarding top managers' roles and engagement decreased after the cabinet approved the IT strategy, the head of the SIO had to make clear that: "*Regarding the coordination, executive directors still have (.) control functions within the projects, not only as an observer of what is going on*". Uncertainty concerning the role of the IT board and its members declined during the first episode of adaptation. However, top managers had not yet perceived their role in the way the head of the SIO required and did not act according to his expectations.

#### *Understanding criticism from the operative level*

Negotiations concerning a communication concept, which could have decreased confusion, were not successful. Due to time pressure top managers could not discuss novel managerial practices but continued using simple routines and choice rules that had worked before (Dutton, 1993, Weick, 1990).

Originally, the top managers had planned to specify an explicit communication concept after the cabinet approval of the IT strategy and PIT in March 2008. However, the issue of communication with the IT managers and other employees received low attention. Since there was no time for discussions and top managers valued the topic as rather unimportant, they postponed the communication concept several times but never picked it up again after political approval was granted. Consequently, communication between the IT board and the operative level did not take place directly. Information was spread only once during a general information event but not continuously. The IT board left opportunities for integrating the IT managers into the strategy process unexploited.

Accordingly, resentment arose: Some departments and IT managers expressed their irritation directly to their principals. Questions were asked like *"what is going on? (.) Why don't we know anything? (.) Why do you decide without asking us? (.) Why are you that secretive?"*. They felt that their situation was unsatisfactory and requested more information, greater transparency and wanted to be involved in the process.

After individual top managers reported such situations in IT board meetings, it became clear that more bi-directional communication between the IT board and the operative level were necessary for the IT strategy process. The criticism forced some top managers to respond. Apparently, *"we were not able to get the message right and to say what is important"*. They felt obliged to take the criticism of the operative level seriously *"This bothers me (.) Shouldn't we ask them for their opinion? (.) I would appreciate it if we could give out information to the department managers before the political cabinet meeting or shouldn't the people from the departments be integrated?"*

Other IT board members also noted that they understood the situation and that action was required. *"I tried to solve it tête-à-tête and they told me (.) that they were a little surprised (.) that they have to implement something without being able to participate (.) I do have some understanding (.) [...] and my question is (.) how (.) can we give out information."* As a re-

sult, several top managers realized the importance of dealing with the operative level and joined in the discussion about informing managers and staff.

*Calls for more information and the role of negative experiences*

Individual IT board members influenced and redirected the interactive discourse on information and participation in the IT board as they expressed their sympathy for critical statements made by the IT managers. Their concern was that information, communication, and transparency were insufficient.

Their impact depended not only on their engagement but also on their organizational affiliation and power to demonstrate their perceptions and values. Communication between top managers was crucial not only for exchanging opinions, management perceptions, and views but it also helped to make sense of the provocative actions from the IT managers (Weick, 1995). Therefore, negotiation helped to align views and perceptions to a certain degree. Some top managers even pushed exchange and alignment "*I ask myself if the other departments are facing the same situation*".

Discussions increased continuously due to ambiguity regarding the communication concept. Several negotiations focused on the question of when to give out information to whom about what and to what extent. These discussions dealt with the correct timing for providing information, the right type of communication (bilateral or broad), and the identification of the accurate target group for the respective information.

One group of top managers argued that information should spread throughout the organization before the approval of the cabinet: "*After our conference meeting I assumed that we would give the slides to the political cabinet and after that we would have a communication event for employees (.) before we got the cabinet's approval*". Without an information event before the approval, IT board members noted, "*we will have a big problem*": Employees will feel uncertain about their work, which may increase the risk of losing important experts on the operative level. "*The*

*danger is", several top managers declared, "that people will leave" or even that "the wrong people will leave". "Key players", some top managers said, "must be kept" and assumed that they would have to "involve the people we really want to keep as soon as possible".*

Contrary to the approach of early communication with employees, other members of the IT board argued for a delayed communication: "I know from past experience", one top manager recalled, "that efforts ended in disappointment because people were involved too early". Instead, they emphasized the importance of political approval, which would increase the acceptance of and the support for the IT board.

As negotiations proceeded, all top managers acknowledged the need for information but it was still most important "that the political cabinet approve the strategic direction". First, the "political cabinet should decide strategically [...] (.) then we will have something we can communicate in a clear manner." However, even though the IT board decided to inform employees after obtaining political approval by the cabinet, they regarded it as crucial: "because otherwise the dispute is shifted to a later time (.) and that's very bad [...] but it must be specific (.) no communication of a bad plan."

#### *Powerful top managers mediated decisions*

The combination of acknowledging the importance of political approval while meeting the interests of the operative level was demanding. Since agreement between top managers was rare and time pressure was high, the state chancellor or another influential IT board member mediated most decisions.

Regarding communication with the operative level, the first suggestion was "bilateral talks with respective key players". In addition, the top managers should inform their IT managers and executives about the IT strategy process. However, the top managers criticized this approach in favor of a homogenous level of information. Therefore, a centralized method of informing all employees was suggested. Again, criticism arose: Due to their different backgrounds and knowledge, the top managers argued that one should "not invite department manag-

*ers and IT managers and staff at the same time". As a result, the IT board discussed another approach to inform the organization properly: A centralized event only for the department managers and another joint event between the IT board and IT managers. This compromise was again met with disapproval as the dominant opinion was that "strategic issues have to be decided at the top and then they are passed on downwards".*

The final suggestion for the right method of informing organizational members about the IT strategy process was that "*communication is done individually with the management staff of the departments*". Furthermore, "*all IT managers should be informed during a special event by the IT Board (.) The key players should be informed as a group or bilaterally*".

These negotiation processes and decisions regarding information, communication and the right way to manage the IT strategy process marked a first change in the process. Attention to the role of the IT and project managers and the importance of communication had developed. For many top managers it was unusual to inform employees about strategies and objectives intensively. Some top managers even had had a bad experience with comprehensive communication. However, the decisions made in this episode did not lead to a consistently high level of information throughout the organization.

#### **4.1.4.2 Realignment Episode 1: Directing - Pushing through and Enforcing**

After the approval of the IT strategy by the cabinet and after initiating the PIT project, there was ambiguity about the functions of the top managers during the implementation phase. Soon it became clear that several PIT subprojects were lacking coordination and that they operated in isolation from other PIT projects. Additionally, the IT board faced difficulties in terms of knowledge sharing: Besides a common ground of knowledge, each member of the top management team had different particular and specific pieces of information.

The situation culminated in confusion and anger when project managers of one central project acted independently. Two characteristics facilitated this development: First, the project was based upon organically grown operative structures with traditionally separated organizational units which acted independently; second, the project remained a technological linchpin, which enforced the encapsulation of other subprojects due to few or even no linkages.

*Table 4-5: Central factors of the realignment episode "Directing"*

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Process Context	The level of <i>time pressure</i> remained high because several top managers feared the failure of the IT-strategy and the implementation of PIT. The <i>complexity of the IT projects</i> made obvious that projects were interdependent: Complications in one project affected other projects as well.
Process Design	<i>Powerful top managers</i> who favored directive practices mainly influenced the realignment activities. <i>Uncertainty</i> and <i>Ambiguity</i> about the role of the IT board, top managers, and IT managers and about the method of communicating across organizational levels existed. Fear of failure increased due to <i>negative experiences</i> expressed by powerful top managers.
Practices	Actions and interactions existed mainly <i>within the IT board</i> . Outside the IT board, <i>some bilateral interactions</i> took place with project managers but were reduced to appraisal interviews.
Participation	The episode nullified first attempts toward more participation. Confusion and anger about independent actions from project managers dominated and hampered interaction.

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*Source: Own illustration*

As a result, fear grew among the top management team that the entire implementation of PIT might fail (Table 4-5). In addition, even though top managers had planned communication activities to inform employees about the IT strategy process, the level of information was inhomogeneous and remained insufficient throughout the organization.

*The need to proceed with pressure*

Subsequent to political approval of the IT-strategy by the cabinet, the influence of external, especially political, factors diminished. However, some top managers feared the failure of the IT-strategy. They felt responsible for the success of PIT and worried that other top managers' commitment would decline with reduced external pressure. Therefore, these top managers attempted to stimulate pressure and commitment: "*We have to keep up the dynamics we had so that the organization feels that we are making progress*". Additionally, they emphasized the importance of a successful implementation. However, since some top managers were uncertain as to their role during implementation, their level of engagement and therefore their power were low.

*Directive management with top managers as "sponsors"*

Powerful IT board members who favored directive practices mainly influenced the realignment activities. Within the top management team there existed different perceptions about the prevalent management concept. Leadership roles were ambiguous on the top management level: No single definition existed and no mutual understanding had developed.

Furthermore, the coordinating role of the IT board was unclear to the operative level. The IT and project managers gradually acted more independently and autonomously. The IT board members regarded a strict assignment of tasks and competences according to strategic and operative characteristics as necessary. As a result, the IT board members preferred a clear command and control approach in order to get the projects back on track, as illustrated in the following account (3).



TM1: "Well I would be glad if [...] you (.) do you understand what I mean [...] that you instruct them [project managers] on their tasks with strict authority (.)"

TM2: "Yes it would be a very precarious situation (.) if anything went wrong [referring to the management of PIT]"

*Transcript quotation 3: Emphasizing directive managerial practices*

However, the role of the top management team for the implementation of the PIT projects was still unclear to most top managers. To solve this problem, IT board members stated that the top managers still had "*executive and coordination functions*" and that "*it's important that the projects are coordinated in a clear manner*". In addition, the state chancellor emphasized that "*the IT-board is the steering committee of PIT (.) [...] the individual implementation tasks (.) [...] are (.) managed (.) by the top managers*". Through continuous discussions in the IT board, the top managers increasingly realized the scope of their role as IT board members. As one top manager stated: "*I appreciate that we have an identity (.) it was very important to me that this got clarified (.) what role each of us has as a 'sponsor' managing [one of the PIT] projects*". However, even though the scope of their role as IT board members was clarified, there was ambiguity about how to fulfill that role and how to manage the PIT projects.

*Expressing fear of failure*

Actions taken independently, especially by project managers of one PIT subproject, lead to confusion and anger among the IT board members. Since no direct interaction between the IT board and IT or project managers and staff existed, individual top managers reported their experience and opinion to the IT board. Accordingly, criticism arose that addressed the manner in which the project was managed and in how the project managers communicated with the IT managers and departments. The following account (4) stems from one IT board member who was especially affected but also expressed an overall opinion about the role of project managers.

TM: *When I heard that they [the project managers] sent the new plan to the [IT managers of all] departments, I must tell you that this [approach] is wrong (.) [The project managers] must get out of their holes or out of their ivory tower now (.) They must not assume that we [the departments] have something which is all done and can be handled by e-mail (.) That is impossible since our situation is relatively heterogeneous [...] (.) Such an approach is not acceptable [...]*

*Transcript excerpt 4: About the role of project managers*

### *Imposing change and enforcing direction*

When the members of the top management team realized the difficulties of the project implementation, discussions started about what made the project managers act independently and how to respond to it.

Some members of the IT board felt overwhelmed and rather helpless, recognizing that *"our people are motivated to get started now and help, but first, the main conceptual work has to be done in that project [...]"*. While the IT board members assessed the already completed work as positive, the major driver for the perceived misguided developments focused on a lack of transparency. An external consultant summarized the situation: *"Technically everything seems to be running well but once again the problem is that everything is done in secret and that there is too little communication [...]"*. Most top managers became aware of the lack of guiding principles and insufficient coordination of subprojects *"from my point of view this is a question of leadership. [...] But who is leading the implementation"*.

During the discussions, the need for more coordination became obvious. After further independent action from the project managers, uncertainty and fear of failure had increased. Finally, the IT board regarded it as mandatory to emphasize control mechanisms and to require conformity to those mechanisms. One IT board member stated that *"[...] [the solution is] an appraisal interview [done by two important top managers] making clear that the orders of the IT Board and the political cabinet are obligatory [...]"*. In addition, he warned that *"We must keep up the*

*pressure [...] on the people but also regarding the time line". He also reminded the other IT board members that "Now is the critical phase of the IT board, [...] now when we're doing the detailed planning".*

#### **4.1.4.3 Adaptation Episode 2: Awareness Building - Informing, Advocating, Interacting**

This episode entails the following three major characteristics. First, the state chancellor continuously affirmed the importance of the project implementation. However, differences in interpreting political directives slowed the progress. Second, the IT board put forth remarkable effort to further clarify and discuss the role of the IT board and its members during the implementation. Third, the opinion on participation within the IT board tended to be diverse, but the top managers became more aware of the fact that insufficient information and unclear communication were hindering the transformation.

The turning point for the identification of this episode included direct interaction with the operative level. Particularly, direct interaction with the project manager of one central project led to an open discussion. It revealed that different perceptions, expectations, and attitudes regarding the implementation of PIT existed on both management levels. In addition, the IT managers expressed their wish to have a direct meeting with the IT board, which the IT board set up soon after.

The joint meeting of both the IT managers and IT board members allowed for an additional exchange of perceptions and opinions. The IT managers mainly emphasized the need for clarity, coordination, and an institutionalized representation of their interests. The top management team members expressed their understanding but also asked for cooperation and acceptance from the IT managers.

The identified characteristics of this episode, differences in interpreting political directives, clarification of the role of the IT board, and the more important role of information and communication (Table 4-6) are discussed in the following.

Table 4-6: Central factors of the adaptation episode “Awareness”

Process Context	Powerful top managers emphasized that <i>quick progress</i> was needed to comply with the political directives.
Process Design	<p><i>Political directives</i> were interpreted differently (as encouraging or as harmful to their work) and led to ambiguity within the IT board. <i>Fear of failure</i> existed due to prior experiences and increasing distrust on the operative level.</p> <p><i>Powerful</i> individual actors used the opportunity to integrate project managers. They committed themselves to better approaches of communication and cooperation. Several top managers showed a more <i>proactive role</i> than before in the discussions.</p>
Practices	Actions and interactions were indirect and direct between organizational levels and enhanced the mutual understanding of different views.
Participation	In this episode, the need for more cooperation between the top management level and the operative management level became obvious. Top managers conceded higher transparency, more information, and communication.

Source: Own illustration

*Different interpretations of the political directives caused ambiguity*

With approval of the IT strategy, the political cabinet requested further specifications of the IT strategy from the IT board. The cabinet asked the IT board to conduct further analysis on the subproject desktop management. Confusion arose within the IT board as members expressed different interpretations of the political directive. Some top managers understood the task as a constraint to all tasks that were linked to this subproject. They commented that it was imperative that

the political cabinet also approve this one subproject before proceeding with specifications of associated actions: *"Desktop management will be an issue for me when the implementation starts. (...) After it has been decided, (.) then we will implement it and will be convinced more than 100%"*. Other top managers appreciated the request of the cabinet as a general declaration of consent and were eager to move on. Even though top managers proceeded with this task, the different opinions remained and led to continuous discussions.

#### *Showing support of the operative level*

After receiving the approval from the political cabinet, most IT board members still preferred directive managerial practices. Exemplarily, one member of the IT board stated that *"there is a clear division of responsibilities (.) as set by the cabinet and we have to watch that people adhere to it and incorporate the essential agreements"*. This management behavior also aimed at strongly enforcing the strategic direction with employees. For example, an IT board member stated: *"We must keep up the pressure and we must go forward now and there must be strong leadership"*. However, the IT board members recognized that distrust on the operational level prevailed. Accordingly, several top managers increasingly feared that operative forces could interfere with the strategy process and endanger the achievement of predefined deadlines and overall project goals.

At the same time, several requests for more transparency and clear information in order to realize organization-wide acceptance and trust paved the way toward more interaction between the IT board and the operative level. The top managers expressed wishes from the IT managers to *"meet with them more often again and give out information"*. In response, the IT board scheduled a joint meeting with the IT managers to *"inform them on specific topics (.) [...] everything which has been done in the last couple of months"*. Additionally, one of the members of the IT board invited the manager of his subproject to present the project status. This fact forced discussions about the participation of the IT managers in the IT board. The top manager considered it crucial to let the IT managers participate where it was meaningful and needed. He in-

vited his project manager to meetings of the IT board because *"it is helpful (.) that the project manager (.) perceives us as the main strategic authority but also (.) has the opportunity to bring forward his point of view"*. Since his project was one of the main elements of PIT, he argued, *"it is very important and it requires your support; (.) otherwise, the implementation will be difficult"*.

As a sign of respect and of the importance of a cooperative relation with the operative level, he praised the work of his project manager in front of the IT board: *"I would like to thank you (.) for the intense work you are doing. (.) We know that it is not always easy at the moment, (.) but we notice that you are engaged with passion. (.) I appreciate that. (.) Thank you"*. The strong engagement and support of the operative level was new and showed the top management team how fruitful the interaction with IT and project managers was. Even though few top managers followed his example, all IT board members began to accept the regular presence of the IT and project managers at IT board meetings.

#### *Mutual understanding through cross-level communication*

Communication between the IT board, IT managers and project managers took place in a direct and indirect way. Direct interaction between the IT and project managers and the members of the IT board such as in the special meeting or bilateral meetings enhanced a mutual understanding of the different views existing on both levels. The project and IT managers confronted the top managers with their fears, criticism, and point of view.

During the special meeting of the IT board with all IT managers and project managers, the IT managers criticized that *"the mutual trust has been disturbed"*. In order to restore the relationship and for the success of the implementation, the IT managers called for *"a new operative panel with a clear assignment"*. Individual top managers signaled their understanding. They mentioned: *"It is a change project [...] one has to cope with difficulties"* but ensured the IT managers at the same time that they would *"know exactly how you feel (.)"*.

Furthermore, one project manager from the OCI criticized the behavior of IT managers in the departments: "*IT managers have their own view about their work (.) They depend on how they do their work today, [...] (.) which is sometimes very good (.) [...] but perhaps the one next to him does it in a completely different way. (.) Maybe he also does it well. (.) But if one wants to integrate it, then everybody should do the same in the end. (.) That way you can have the greatest possible synergies*". In support of the project manager, his top manager emphasized: "*People do not want to [change] [...] and if we simply allow anything [meaning: any wish] that suits everything [meaning: any function] (.), then we will have a problem later on,*" but no standardization or integration of systems and applications.

Regarding the criticism brought forward, the top managers had to justify the situation in their departments, illustrate their IT board identity, and give reasons for the behavior of their IT managers. In addition, the top manager in charge of the projects "server centralization" and "new cantonal IT organization" tried to appease the IT and project managers. As a reply to the ambiguous situation, he stated that even though "*the role of IT managers has changed [...], a person or division responsible for IT is still needed in the departments*".

Few top managers agreed to the notion of one IT board member that the project manager "*has to be careful (.) not to be too self-righteous on the one or other side*" and that "*we are simply (.) in a transitional phase*". However, more important was, that the top managers noticed "*that the whole thing [IT strategy process] has not become second nature to the IT managers in the departments*".

Complementing the direct interaction at the special meeting, the top manager who had previously invited his project manager to the meetings addressed all of the other IT board members repeatedly. He asked them "*to show engagement and to raise (.) understanding (.) on your part*", even though he was "*sure that it exists*". He also emphasized awareness of the fact "*that it is a difficult situation in this transitional phase (.) also for the people on the operative level [...]*". In order to create awareness, he continued, it was necessary for top managers "*to approach this and talk about it, (.) preferably without prejudices*".

*Decisions for improved communication and cooperation*

The interaction with members from the operative level revealed a demand for more cooperation between both levels. Even though first meetings were confusing and new for both sides, the IT-board formulated its will to improve transparency and foster communication and cooperation. One example was that not only decisions but also additional background information should be released. The top managers acknowledged that *"it is not very [...] transparent if one can refer only to the decisions made. (.) Some of them are [now] relevant and some of them [are more relevant] for the future. (..) The idea is to have more transparency and better communication and in turn work together in a better manner"*.

Not only during the special meeting did it become obvious that the top managers were increasingly participating in IT board discussions. It was not just one top manager mediating decision-making processes; rather, most of the top managers were proactively involved in finding joint solutions. Moreover, several top managers became more considerate in their communications with the IT managers and staff. They also showed a different attitude toward the role of the IT managers and the relevance of the operative level for the overall success of the IT strategy process. In the following account (5), a typical example of negotiations is illustrated, demonstrating that top managers were more cautious about their method of communication and considered possible reactions from the IT managers and staff:

TM1: *"It is a communication problem (.) that is unbelievably crucial [...]"*

TM2: *"We showed everything, (.) we showed everything to the IT employees as well"*

TM1: *"and there we said we are analyzing it..."*

TM2 (interrupts): *"Yes, that is true..."*

TM1 (interrupts): *"... and now we are saying we are implementing it (...) and are planning accordingly"*

TM2: *"OK, (.) let's say analyzing then (.) ok (.) ok"*



Transcript excerpt 5: Intense discussion on communication manners

#### 4.1.4.4 Realignment Episode 2: Controlling – Enforcing Separation

After the top managers had clarified their coordinating role, they showed increased managerial responsibility for achieving the goals of the transformation process. The top managers noticed the different opinions and fears existing in the organization due to the direct interaction with the IT and project managers. Therefore, members of the IT board were able to identify individuals who did not seem to have the necessary willingness, understanding, or capability to realize or support the organizational transformation. Incidents in one of the subprojects demonstrated typical operational burdens of the cooperation. The top managers realized that the necessary cooperation was difficult to achieve across levels and reacted with drastic measures (Table 4-7).

Table 4-7: Central factors of the realignment episode “Controlling”

Process Context	Powerful individual actors emphasized the <i>political directives</i> as guidelines for actions and a source of legitimacy.
Process Design	<i>Powerful</i> individual actors excluded project managers from further actions and implemented parallel structures. Due to earlier <i>experiences</i> , the top managers feared that the project PIT could fail.
Practices	Actions and interactions were <i>indirect and direct between organizational levels</i> . It was not clear how to communicate with the operative level because no mutual understanding existed.
Participation	In this episode, top managers emphasized political requirements in order to provide orientation to the IT board members. Participation became less im-

portant than the overall control over the project.

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*Source: Own illustration*

*Political requirements are primary*

During this episode, external time pressure was rather low. However, top management team members stressed that they "*will proceed according to the requirements from the political cabinet*". The emphasis on the political requirements reminded the team members of the objectives of the IT strategy process and the period set to achieve them.

*Clash of different perceptions during interaction*

The members of the IT board felt increasingly responsible for their PIT projects and the overall goals of the strategy process. One top manager expressed the responsibility as "*the project [PIT](...) that is our baby*". However, even though the top managers clarified their own role and acknowledged the importance of the operative level, they were unsure about the role of IT and the project managers. While the IT board members emphasized the importance of a transformation of the OCI, it became obvious that the project manager in charge of the transformation of the OCI did not acknowledge this need for organizational change. In contrast to the common understanding shared by the IT board members, he held the view that the processes and structures of the OCI did not need to be transformed in order to achieve the main objectives of the paradigm change.

The different opinions clashed because during those years cross-level cooperation between organizational levels was rather the exception than a common operative code. Consequently, an independent organizational culture had developed. In addition, the various management levels had access to different information, which caused misunderstandings and confusion within debates. The following two accounts (6, 7) serve as examples of typical discussions of this episode. Here, an external consultant, two project managers, and two top managers were involved. The project manager in charge (PM1) is confronted with a new way of doing things (here: structuring services according

to certain themes). PM1 rejects the novel approach of organizing by referring to a certain logic his illustration has and explains that it has been always done in that way.

C: *"The services are described successively?"*

PM1: *"Yes, this is it [...]"*

C: *"I put them in an order [...]"*

PM1: *"You do not have to do that [...]"*

C: *"But I found it confusing (.) I put them in an order*

*PM1: "But you do not have to do that. (.) You must not put them in an order; (.) that is a certain perspective [...]"*

PM2: *"It would be easier for readers if you would do it that way (.)"*

PM1: *"But we never wanted it that way [...]"*

*Transcript excerpt 6: Refusing changes*

In the following account (7), a top manager asks PM1 if his unit (OCI) would be affected by changes. PM1 denies major transformations for his unit even though the project is called "new cantonal IT organization".

PM: *"On the whole we will not do anything different from what we are doing now [...]"*

TM1: *"Then what is the difference in the [new] OCI?"*

PM: *"It is not different in many places [...]"*

TM2: *"But [...] service orientation meant a huge change [...] and can interfere with the technical service delivery. [...] This is something important and must be reflected accordingly"*

*Transcript excerpt 7: Contradicting transformation*

*Powerful top manager suggests consequences to the IT board*

The described conflict and the way top managers handled the challenge represent the way in which the IT board handled difficulties in

this episode. One of the top management team members was disappointed because one of his projects was not achieving its objectives. In addition, its project manager *"refused to acknowledge the future direction for a long while"*. The top manager was shocked when the project manager assumed that *"actually nothing will change"*. Therefore, he informed the top management team about the need for an adjustment.

Addressing the IT board, he reported that *"we are considering ideas for the parallel organizational development (.) of the OCI (.) and regarding this work the current project manager will not be involved any longer with project details"*. The top manager also feared that the project could fail after they had already *"invested one and a half years of work [...] produced tons of paper"*. He clearly communicated that he could *"not imagine implementing the project and achieving the strategic goals"* while this project manager is in charge of and responsible for the transformation process toward the new cantonal IT organization.

Consequently, the IT board decided to split the project into two separate tasks. The IT board assigned the project manager (PM1) with creating a catalogue of the services and products of the new cantonal IT organization. The transformational part of the project was later completed without contributions from PM1.

#### *Enforcement of separation due to fear of failure*

The decision to split the subproject was not based only on one opinion, even if that particular member of the IT board had strong influence; rather, several IT board members discussed the decision beforehand. In their discussions, the top managers agreed that it was the individual opinion of PM1 which was hindering the project. The fact that the leading project manager could not identify with the transformation was irritating to most of the top managers. Since all of the top managers feared that his behavior could lead to complete failure of the most central project, they did not question but supported the suggestion to split the project.

#### 4.1.4.5 Adaptation Episode 3: Acceptance Building - Championing, Integrating, Bargaining

Pending budgetary decisions shaped the major topics under discussion during this episode. Based on previous suggestions made by the IT managers and discussions within the IT board, the top managers decided on three different actions: First, they planned to institutionalize the exchange of information and cooperation between the IT managers and project managers in a new IT conference. Second, the new operative panel should be in charge of operative IT tasks to reduce some of the operative workload. Third, they intended to create several short-term project-related workshops between the project managers, IT managers, and top managers (Table 4-8).

With these three actions, the IT board members accepted a new role of the operative level. In the following sections, I will show the influence of time pressure and the development of the discussions that focused on the new ITC as an operative panel. Furthermore, I illustrate the higher complexity of subprojects as more actors were involved in the process. In addition, I outline the higher commitment of top managers toward the IT managers and staff and the increased engagement of the top managers in discussions and the initiation of debates.

*Table 4-8: Central factors of the adaptation episode "Acceptance"*

Process Context	<i>Time pressure</i> existed due to several topics the IT board had to finalize by the summer break.
Process Design	Powerful individual actors tried to <i>keep up the dynamics</i> and overall engagement within the IT board. The top managers engaged in permitting more transparency demanded not only by the IT managers but also by the IT staff.
Practices	Actions and interactions included <i>intense discussions</i> within the IT board and between the top managers and IT managers. Some top managers <i>bargained</i> for the institutionalization of the opera-

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tive panel. Other top managers *feared* a relapse into old patterns regarding the operative panel.

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Participation In this episode, the IT board achieved a better integration of IT and the project managers in the strategy process. The top managers integrated most opinions from IT and project managers into discussions of the IT board.

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*Source: Own illustration*

*Time pressure influenced discussions*

Finalizing the Task and Financial Plan 2009-2012 also required a detailed budget planning of expenses for IT. Due to the new regulations of the budget allowances, IT expenses had to be reduced by ten percent. By the beginning of the summer break, the IT board had to have planned and allocated the new budget. Additional major strategic issues that also had to be decided on by the IT board during the same period put immense time pressure on the top management team. As one top manager stated "*it is a hectic time before the summer break (.) decisions have to be made (.) or better: Actors want to make decisions before the break [...] and certain aspects have to be decided to keep up the dynamics*".

Therefore, the IT board postponed topics which were not time-critical such as the institutionalization of a new operative panel. "*I still have a pending issue from the last meeting*", the head of the SIO announced that "*the IT architecture group or the operative panel (.) has not been discussed until now. (.) We will try to work out the regulation next week and then present it in August*". However, several top managers appreciated a later discussion date because they wanted to discuss the topic more intensively and assumed that it might have been abandoned otherwise.

*Participation of several actors slowed down strategic change*

During this episode, a remarkably high number of operative actors participated in meetings and discussions. As a result, the complexity during negotiations increased as well as the ambiguity of how to re-

respond to it. Confronted with this new situation, the top managers reacted differently. Most of them tried to achieve a balance between varying individual concerns. Nearly all actors in the implementation projects *"always aim at a consensus"*. Consequently, overall dynamics were slowing down and the top managers were moving away from project goals. It became obvious that *"the strategic objectives [and] the medium-term goals [...] appear unrealistic"*.

One top manager warned that only *"minimum requirements are covered"*, but even the most important further steps were questioned and *"might be taken into consideration only later"*. Therefore, the IT board decided that solutions *"based on the feedback from the departments"* integrating each idea proposed in such accounts was considered unreal. Some top managers reminded their colleagues on the IT board that the overall project goals have to play a more important role in the implementation projects than individual opinions from departmental IT managers. Hence, individual top managers urged, *"we have to find a compromise"* in order to achieve the overall goals without neglecting individual concerns.

#### *High individual commitment to a new ITC*

In addition to the increased complexity, members of the IT board approached the topic of a new IT conference. Top managers wanted the new ITC to be an operative panel that could enhance cooperation between the IT managers and would be in charge of some important operative tasks regarding IT. Therefore, they were convinced of the benefit of this institution for achieving the overall objectives of PIT.

However, the IT board rejected the first draft conceptualizing the panel. Individual top managers were against the suggestion of implementing the new ITC as small operative task forces dealing with specific topics like IT architecture. These top managers even made it a requirement that if task forces were wanted, they should be part of an overall operative body or panel. Furthermore, they would *"agree to the proposal only if the group is part of a larger body representing all IT managers"*.

Since the top managers had different opinions about the specifications and the role of the panel, further discussions were necessary. Experience played an important role in the discussions of reinitializing and designing the new ITC. Some members of the IT board feared a relapse into old patterns if the operative panel did not operate in such a manner as to be advantageous to the cantonal IT. Others appreciated its expanded tasks because it would help the IT board to focus solely on strategic questions. Furthermore, the top managers discussed whether the panel should contribute to specific IT topics only or whether it should support the IT board on a more general basis. The last open questions were who should be on the new ITC and if the panel should exist only temporarily.

Finally, some IT board members proposed an initial setup: (1) the new ITC would be temporary at first, (2) members would include all IT managers, and (3) the main tasks would be the evaluation of IT topics and giving advice to the IT board. Top managers regarded the new ITC as a possibility *"to match what we know"* and *"as an opportunity (.) to achieve mutual benefits"*. Therefore, the top managers acknowledged that *"IT managers (..) should be allowed to criticize something"*; however; the new ITC should function *"not as an authority with decision-making rights but with advising responsibilities"*.

#### *Top managers' engagement to keep staff*

Calls for more participation and transparency came not only from the IT managers but also from other IT staff. Due to uncertainty about future developments and intransparent processes, many staff members thought about leaving the cantonal public administration. Once aware of this critical situation, individual top managers introduced the crucial topic to the team: *"IT managers and staff are overloaded and we have to take that into consideration (.) I realized that my project manager is involved in every project"*. The top management members understood the gravity of the situation and responded quickly.

Most of the top managers reacted by offering their full support and placing a strong personal effort on sustaining new means of commu-



nication and participation. One member of the IT board stated that he was "*interested in not only talking about the basics (.) but [...] I would like (.) to engage myself*". Another member offered to take "*all the time needed for workshops*". The top managers mentioned several reasons why they thought that they should become engaged and cooperate more closely with the operative level. One top manager "*noticed (.) that fundamental opposition is often shifted to the technical level*" and that "*the presence of a top manager can prevent this*". Another top manager pointed out that he wanted to become involved himself: "*We will take the first steps (.) as the first steps create confidence*".

Very few individuals voiced criticism of the *actionism* regarding top managers' engagement. "*After all*", one top manager recalled, "*it was a deliberate decision*" that all top managers had made more than a year before which inhibited the old ITC from "*meeting as regularly*" anymore. However, most top managers were in favor of the new ITC and new opportunities for information, transparency, and participation. The top managers had realized that "*an overall operative panel is necessary for creating transparency*". They stressed that "*it is important for the success of the projects (.) to let the ones participate who are affected*".

Since most of the top managers were convinced of the proposition, mediation was not necessary to secure a decision in favor of the new ITC and to initiate further overall communication events as well as additional workshops within the implementation projects. During this episode, some top managers started acting as idea champions. Top managers who had been acting as idea champions added authority to their role.

#### **4.1.4.6 Realignment Episode 3: Coordinating – Communication and Insistent Coordination**

Observations of workshops during this episode revealed that different perceptions existed in the departments - especially regarding the two central subprojects *server centralization* and *coordinated procurement*. Following a cooperative approach, members of the IT board together

with the IT managers attended joint workshops. In general, the IT managers tended to be more critical with regard to many topics under discussion. For the subproject *submission*, they favored a simple submission solution that did not interfere with the organization. In contrast, top managers favored a more comprehensive approach which was in line with the core objectives of efficiency, effectiveness, and cost reduction. Therefore, the top managers perceived the IT managers' attitude as a threat to the overall project PIT. However, in the following it is illustrated that the top managers did not respond with new pressure or command and control practices as in the realignment episodes *directing* and *controlling* but considered different methods of coordination (Table 4-9).

Table 4-9: Central factors of the realignment episode "Coordinating"

Process Context	Top managers used the <i>political directives</i> to remind IT managers of the original objectives of PIT.
Process Design	<i>Powerful</i> individual actors wanted to <i>force decisions</i> upon IT and project managers due to their own negative experiences but recognized that discussions were necessary.
Practices	Actions and interactions included <i>intense discussions</i> between IT board members. IT board members were frustrated from <i>workshops</i> with IT and project managers. They asked for further <i>requirements and guidelines</i> that could be given to the operative level.
Participation	In the episode, it became obvious that intense participation was not only demanding in terms of time and resources: Top managers felt challenged because the participation of the operative level also affected objectives and procedures.

Source: Own illustration

*Reminding IT managers about the original objectives of PIT*

The political cabinet approved the implementation of the suggested IT-strategy after the IT board had agreed to conduct further analysis on certain subprojects like *desktop-management*. The IT board decided to have an open analysis and consider every possible action, including reducing tasks or outsourcing services; however, the IT managers regarded comprehensive changes and especially outsourcing as a major threat. During workshops, discussions "*about what could come next realistically*" dominated. The top managers had to remind the IT managers that their "*job is an in-depth examination, regardless of whether it is held to be realistic by those who are involved*".

*Enforcing the 'right' overall decision*

Powerful top managers aiming for a better coordination of the implementation projects influenced the activities and results of this episode. "*Most important*", a member of the IT board mentioned, was to "*keep in mind the goals that we have*" and if nothing else worked, sometimes "*you have to force the right decision on somebody else*".

For the majority of IT board members, the IT strategy requirements, which the political cabinet had approved, were "*more important than anything else*". However, contrasting opinions existed on operative levels "*held by those who don't always have good intentions*". Therefore, some IT board members stated that the interests existing in different departments would not fit into a consensual overall solution. However, to achieve the overall goals, the IT board assessed a consensus across all levels and interests as inappropriate anyway. Nevertheless, members of the IT board confirmed that differing interests should be discussed first and then there should be a decision on "*which concern is more important: the one of the overall organization or the individual*". However, members of the IT board also declared, "*we have to be honest (.) to attain a consensus (.) I would not aim for that because (.) there are too many (.) different interests*".

*Arguing against an overall consensus and minimal solutions*

Discussions between the IT and top managers did not reach the point of a satisfactory solution as the IT managers accepted only those alternatives which also incorporated their opinion. Accordingly, some top managers were frustrated. After two workshops there were apparently *"experts involved [...] (.) actually the people (.) who feel offended by the project"*. For this reason, *"one tends toward minimal solutions [...]"*. Therefore, the top manager in charge addressed his team members by stating, *"it needs your support as well"* and that *"we must be careful that we do not get just a procurement solution"*.

#### *Favoring more coordination over more pressure*

The top managers understood that the situation was critical to the success of PIT and that objectives had to be enforced. However, the IT board decreased the use of top-down pressure compared to previous situations: The top managers emphasized understanding, support, coordination and cooperation during discussions with the IT and project managers. While one top manager mentioned that *"we should watch out that we (.) do not end up with political in-fighting"*, others also emphasized *"respecting that mistakes are made on both sides and that things are sometimes (.) not clear enough in terms of communication"*.

As a solution to the problem, the top managers agreed on specifying requirements and setting guidelines in cooperation with the departments. Since all of the top managers commented *"that we must come together"* to solve it, the IT board accepted that *"we can only do it in cooperation with the departments and not against them"*.

#### **4.1.4.7 Adaptation Episode 4: Recognition Building - Interacting, Collaborating, Integrating**

Close participation, cooperation, and information practices characterize this episode. Practices included, for example, direct interactions between the project and IT managers during IT board meetings, the use of workshops as project management tools to involve all levels of

the organization, and the acknowledgement of continuous overall information for cantonal employees (Table 4-10).

*Table 4-10: Central factors of the adaptation episode "Recognizing"*

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Process Context	<i>Time pressure was low and obligations predictable. Top managers would approach the political cabinet as soon as further decisions were prepared.</i>
Process Design	<i>Powerful individual actors were less prominent. All top managers agreed upon the importance of improved communication with employees and the involvement of the operative level. Top managers clarified in discussions the role of the IT board in relation to all other operative organizations.</i>
Practices	<i>Direct interaction existed between top managers as well as project and IT managers during IT board meetings. In addition, all levels of the organization cooperated in workshops.</i>
Participation	<i>In the last episode, top managers regarded information, participation, and cooperation as normal. Top managers integrated opinions of IT and project managers naturally.</i>

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*Source: Own illustration*

Cross-level communication during this episode was formal as well as informal. The top managers provided information about new developments mainly bilaterally. The IT managers used the opportunities to receive and exchange information within the new ITC. The method of communicating was highly effective and even led, for example, to postponements of formerly planned overall information events simply because most of the information had already spread throughout the organization. The information practice of the top managers were enhanced as they allowed and even asked for more open and critical communication. In the following sections, I show the promotive influ-

ence of environmental factors and the positive prevailing mood regarding participation.

*Moderate time pressure and predictable obligations*

The project members involved perceived the pressure of external factors as rather low. Regarding the financial budget and legal provisions, only preliminary considerations were necessary. As the IT board had to select facts for an upcoming presentation to the parliament, discussions focused on examinations of the best point in time to inform the political cabinet about initial results of the “coordinated procurement”. This task did not have critical relevance since *"we informed the political cabinet that we will accomplish the submission process (.) that means we do not have to present anything to the political cabinet now [...] we are approaching the cabinet when (.) the decision is ready (.) the decision for the submission."*

*Clarification and acceptance of the role of the IT board*

Because the IT board still had not specified a communication concept, the top managers communicated quite differently in terms of scope, frequency, and people addressed. Therefore, the discussion about how, when, and what to communicate to the employees became very prominent again. In addition, the IT board clarified its role, especially in relation to the OCI, the SIO, and the new operative panel. Members of the IT board stated that the IT managers *"appreciated that everything is supported now from the operative level (.) and that is actually the main issue or the main output of the (.) operative panel"*. However, it was important to explain that the IT board might have served also as an instance of escalation to solve problematic situations, e.g. *"the operative panel does not come to a solution (.) or that the OCI says (.) it is out of the question (.) but the department says (.) we need it."*

The IT board members were convinced that the involvement and participation of the IT managers and communication with employees were beneficial for the overall target achievement of the transformation project. The operational level also appreciated the communication procedure implemented and the opportunity for involvement:

Most top managers received encouraging feedback from their IT managers about the new operative panel and opportunities for participation in the strategy process. The top managers noticed that "*the cooperation [between OCI and the departments] is positive*". It was "*possible to have a constructive solution on both sides (.) or all sides*". In general, the opinion was that "*something positive got going*".

A further optimistic development was that "*the operative panel functions*". The head of the SIO commented that they had met and "*have coordinated what we want to discuss in the operative panel (.) we looked at the regulations that we decided on in the summer (.) we talked about it (.) and we already agreed on meetings for the next year*".

#### *Intense interaction and further employee orientation*

During meetings, little hierarchy was obvious since the IT and project managers integrated their opinions naturally. The example of a meeting dealing with the problem of scarce resources presents a good example of this operational mode: The following account (8) shows the involvement of a project manager with this topic during a presentation that which initiated further, fruitful discussions among the members of the IT board, which is further elaborated in the following sections.

TM1: "*I notice that we are making progress*"

PM: "*Yes (.) but sometimes there are too many things going on at the same time*"

TM1: "*I understand that as a positive remark*"

PM: "*Everything has its limits (.) if one cannot do his or her job anymore, it's no good*"

TM2: "*I continue were he [PM] left off (.) I also get warnings that the employees of the [OCI] have reached their limits (.) employees of the OCI are involved in almost every PIT project (.) we must be careful that we do not lose important people (.) daily operations may also not be neglected (.) this is information for you (.) I would like to sensitize*

*you to the issue and want us to start thinking about what we can do to approach the employees"*

*Transcript quotation 8: Integration of operational levels in the strategy process*

After addressing the problem of scarce resources, most members of the IT board added their point of view to the discussion. They criticized that *"how much time IT managers spend in cross level projects has not been quantified"*. One participant in the discussion stated that some IT managers were *"asked to work for 15 days solely for one additional project"*. All of the top managers were aware of the fact that *"first of all, we do not have the resources and, second, the IT managers already have a lot of pressure"*. The top managers agreed rather quickly about the difficulty of reducing costs while implementing organizational, process and technical innovations at the same time. Accordingly, further discussions focused on possibilities for resolving this critical situation.

The top managers made different suggestions regarding the problem of scarce resources and the overall need to keep staff. They went from *"better communication and planning"* to the articulation of a vision of *"how the future IT in the canton will look"*. Some members of the IT board also proposed rather generally that in order to *"compete with the job market (.), the attractiveness of the public administration has to be improved"*. Moreover, the top managers acknowledged that *"we have to show what will change for the employees"* because *"otherwise they will be irritated"*. *"Communication with people"*, one participant of the discussion stated, *"is important"*.

Finally, the IT board decided to approach the problem thoughtfully by including the human resource division in preparing for communication actions. The top managers chose this solution not only to involve the necessary experts, but also to resolve doubts and prevent potential distrust in the organization when informing employees about the IT strategy process.



## 4.2 Conceptualization

The turning points that represent shifts in management practice led to the identification of episodes; in turn, those episodes frame the grounding strategy and allow for comparisons to be made. Based on the analysis within and between the episodes, it became obvious that behavioral patterns changed toward a different management behavior. The first- and second-order concepts and aggregate dimensions for process context and process design factors are illustrated in the annex (Annex IV).

In Table 4-11, I present dominant factors for the identified aggregate dimensions: process context factors, process design factors, and practices. The process context factors included, in particular, political and time pressure as second-order concepts. As part of the process design factors, I identified uncertain roles, vague identity, unclear communication, and organizational power and voice as second-order concepts. Both process context and process design factors did not determine but influenced top managers' behavior and actions (Barzelay and Shvets, 2006).

*Table 4-11: Dominant process context and design factors within episodes*

			Episodes <sup>2</sup>						
			1	2	3	4	5	6	7
2nd- Context Fac- tors	Political Pressure	x			x				
	Time Pressure	x	x	x		x			

<sup>2</sup> 1 = Adaptation Episode 1: Attention Building; 2 = Realignment Episode 1: Directing; 3 = Adaptation Episode 2: Awareness Building; 4 = Realignment Episode 2: Controlling; 5 = Adaptation Episode 3: Acceptance Building; 6 = Realignment Episode 3: Coordinating; 7 = Adaptation Episode 4: Recognition Building,

		IT Complexity		x					
Design Factors		Roles and Identity	x	x	x	x			
		Experience and Prejudices	x	x	x	x	x	x	
		Communication	x	x	x	x	x	x	x
		Organizational Power	x	x	x	x	x	x	

Source: Own illustration

In Table 4-12, I illustrate only the practices that were dominant in each episode. The aggregate dimension of practices comprises three sub-aggregations: individual initiatives of top managers, cross-level interaction between the top managers, operative managers, and other employees, as well as management attitude. The latter represents top managers' individual perception of managing change and the corresponding behavior. The second practices refer to top managers' action in the IT board. The first practices, however, include individual modes of action that correspond to the whole organization. Each of the subaggregations comprises four different practices, which I show in Table 4-12 according to their strong influence in the episodes.

Table 4-12: Dominant practices within episodes

	Episodes <sup>3</sup>
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<sup>3</sup> 1 = Adaptation Episode 1: Attention Building; 2 = Realignment Episode 1: Directing; 3 = Adaptation Episode 2: Awareness Building; 4 = Realignment Episode 2: Controlling, 5 = Adaptation Episode 3: Acceptance Building; 6 = Realignment Episode 3: Coordinating; 7 = Adaptation Episode 4: Recognition Building,

		1	2	3	4	5	6	7	
Aggregations and 2nd-Order Concepts	Practices	Individual Initiative							
		Primary Information	x	x		x		x	
		Active Championing			x		x		
		Meaningful Confrontation					x		
		Situated Coping							x
		Cross-Level Interaction							
		Dialogue	x	x	x	x		x	
		Debate			x	x	x	x	
		Cooperation					x		x
		Integration							x
		Management Attitude							
		Directive	x	x		x			
		Participative			x			x	
		Collaborative					x	x	x
		Educative					x		x

*Source: Own illustration*

In the following chapters, I describe the process context, the process design, and the three practices by noting first- and second-order concepts. All three practices had the potential to interrupt and redirect the IT strategy process and thus influenced the evolution of different management practices. *Individual initiative practices* aimed at winning the support of other top management team members for more participation. These initiatives also catalyzed and supported *cross-level interaction practices*, which helped to solve ambiguity regarding the roles and identity of the top managers, IT managers, and the IT board. *Management attitude practices* illustrated what managerial patterns top managers perceived as adequate for realizing the implementation of the IT strategy process.

## 4.2.1 Process Context Factors

### 4.2.1.1 Time Pressure

The limited time available put pressure on the work of the IT board. Making sense of unforeseen situations and reducing uncertainty and ambiguity take time, especially in groups in which actors have differing beliefs and opinions. As shown in the episodes, a lack of time does not allow for constructing new perceptions through interacting (Thiry, 2001). As Dutton (1993, p.346) suggests "individuals simply 'go on automatic'" when time pressure is high. As less time remains for scanning, reflecting and analyzing information, actors turn toward a habituated issue response and practices that have worked in the past, that is, actors do what they are trained to and what makes sense to them (Tsoukas, 2010b). In the case study, top managers were familiar with managerial practices based on a command and control structure. During phases of high time pressure, a short response time was necessary and, consequently, top managers did not negotiate issues: Some top managers arbitrated and coordinated, and even inhibited upcoming discussions. This behavior was challenged when top managers perceived time pressure as low.

#### **4.2.1.2 Political Pressure**

In the adaptation episode 1 and 3 (*Attention Building* and *Acceptance Building*), political pressure was obvious. The emphasis on the need to meet political directives put additional pressure on the IT board and its members. The discussion of further specifications on the subproject desktop management, which the political cabinet had requested, caused some confusion in the IT board due to different interpretations of the political directive.

Further political requirements, e.g., detailed planning of IT expenses, were not considered to be constraining by the top managers.

However, powerful individual actors used the political directives from the approved IT strategy as a guideline for actions and as a source of legitimacy for enforcing activities. Therefore, top managers tried to gain support not only from organizational members but also from politicians since strategic change "involves a political process of developing and nurturing support from major stakeholders " (Fernandez and Rainey, 2006, p.170).

#### **4.2.1.3 IT Complexity**

Especially in the second adaptation episode, the top managers realized that due to the integrative aspect of IT, most projects of PIT were interdependent. As soon as problems arose with one project, they affected another project as well. However, it was not only that certain IT systems affected organizational processes and the organization as a whole; the challenge was also increased by the existing diverse IT structures within the departments. Over the years, the IT managers had implemented and developed most IT systems separately. Therefore, the top managers had to consider the diverse structures and acknowledge that there was a lack of information on the top management level about the existing IT systems.

## 4.2.2 Process Design Factors

### 4.2.2.1 Role Ambiguity and Identity Creation

I agree with Pandey and Wright (2006) in that my results support the fact that role ambiguity is an important determinant of organizational commitment and individual performance. Ambiguity was expressed as a lack of engagement in the process, fear of failure regarding strategic objectives, lack of consensus about how to proceed, little communication with the IT and project managers, and the state chancellor's strong decision-making.

Especially during the first episode, when top managers negotiated different positions and argued for their departmental interests, I uncovered ambiguity about the roles of the managers involved. Additionally, after the approval of the IT strategy in episode 2, my observations demonstrate that top managers had no mutual understanding of their own role nor of the role of the IT board or of the IT and project managers during the implementation. Even though the head of the SIO made several calls for engagement in the process, top managers' roles became clearer only with increasing discussions within the IT board and interactions and across organizational levels.

Toward the end of my observations, most of the top managers identified themselves with a proactive role in the transformation process and showed interest and engagement in the process. This new identity of top managers was a necessary component of the strategic change process and a requirement for meaningful sensegiving actions. Individuals construct identities interactively to maintain legitimacy in the organization and within change projects (Langley, 2007). As Corley and Gioia (2004) highlighted, strategic change triggers ambiguity in the organization and its identity. Top managers' sensegiving actions can help employees to construct a consistent organizational identity. In addition to the implementation of new labels or a new image for the organization, Maguire and Hardy (2005) emphasized that profound *identity work* is needed.

#### **4.2.2.2 Ambiguous Communication and Creative Action**

During the first episodes, the communication concept in the transformation process remained undetermined. Members of the IT board chose the mode of communication with operative managers according to the concrete situation. While the role of the top managers was unclear and time pressure was high, top managers spent very little time considering the proper and most effective manner of communication. Instead, they first relied on well-known approaches, which were based on broad information with little interaction.

In later episodes, decreasing time pressure and increasing role formalization provided room to experiment. When interruptions arose, the perceived additional ambiguity triggered creative action and improvisation on the part of the top managers. Since interactions with the operative level remained un-standardized, the top managers had the chance to examine new approaches. Actions ranged from inviting project managers to IT board meetings, to joint meetings and new forms of cooperation in workshops.

My observations support Weick's (1995) conviction that ambiguity can stimulate improvisation among actors especially in loosely coupled public sector organizations. Improvisation is understood as a process of creative action achieved through interaction (Joas, 1996). Creative action occurs in "situations or events that are complex, ambiguous, and ill defined" and attempts to make sense of the situation (Drazin et al., 1999, p.287). However, I should emphasize Weick's suggestion that an appropriate level of formalization may be helpful for organizational members to cope with ambiguous situations. Considerate formalization increases identification with change objectives and helps to reduce role uncertainty at the same time (Van de Walle and Vogelaar, 2010, Adler and Borys, 1996). In this case, the top managers' evolving identity for implementation built a frame of reference for their action and legitimized their behavior.

### **4.2.2.3 Negative Experience and Fear of Repetition**

The reactions of top managers to issues concerning a more important role of the operative level were influenced by negative experiences from former IT projects. Ashmos et al. (1998) as well as Tsoukas (2009) noted that actors usually rely on past experiences to make sense of current situations. As observed in the case study, the top managers mentioned negative experiences. The top managers feared the recurrence of unequally distributed power, a lack of coordination, and non-effective authority, which resulted in risk aversion, uncertainty, ambiguity, and hesitation. The negative effects became especially obvious during discussions about the specification of the new operative panel or, in general, about the mode of communication with the operative level: Members of the IT board emphasized several arguments that revealed the impact of prior negative experiences. The top managers worried that too much involvement of the operative level would negatively affect the success of the IT strategy and PIT. These doubts slowed down the process of changing managerial behavior and underlying practices.

### **4.2.2.4 Organizational Power and Voice**

According to Hardy (1996), power is needed to orchestrate and direct actions within strategy processes. However, powerful actors' roles in strategy processes are ambiguous: Either a powerful individual can be a strong facilitator of change or he can slow down change as well. The same is true for powerful groups within the organization (Balogun and Hailey, 2008). It became obvious that both powerful individuals as well as groups wielded power in the strategy process. The top managers together formed the IT board as the overall strategic unit. The power of individual top managers within the IT board relied on their position in the organizational hierarchy and the importance of their organizational unit within the cantonal administration. However, the overall authority of the IT board increased as the process proceeded and its role and position in the organization were established.



The operative level, especially the IT and project managers, gained influence as well due to sharing their knowledge, which was needed for the implementation of the project PIT.

The findings corroborate the ideas of Hardy (1996), who suggested that there are three dimensions of power: the power of resources, the power of processes, and the power of meaning. Using the power of resources, the IT board controlled information and condemned insufficient results or sanctioned inadequate behavior of the operative level. In one case, they even excluded one project manager from parts of the project, as he was not willing to accept the necessity for organizational modifications. In contrast, the top managers passed on more information to other IT managers and project managers who were acting in line with the IT strategy process.

Regarding the power of processes, topics to be discussed in IT board meetings were predetermined. Even though every IT board member could have made suggestions, it was mainly the head of the SIO who added or removed items from the agenda after consulting with the state chancellor. In addition, the state chancellor's function within the IT board enhanced coordinated discussions and an effective regulation of time spent for each subject. Whether or not the IT board discussed issues newly raised during a meeting depended on the power the individuals who supported a discussion of the new issue had within the top management team.

Referring to the power of meaning, individual top managers interfered in order to trigger sensemaking and shape perceptions of other top managers. This habit was crucial for the spread of participative practices. As idea champions, individual top managers encouraged other IT board members to question their management behavior and underlying practices in order to allow for participation and to give voice to the operative level.

In order to realize strategic change, Hardy (1996) calls for an integrated approach considering all three dimensions of power. Consequently, to rely solely on one dimension of power, resources, processes, or meaning, would lead to a significant lack of power and would in-

crease the risk of change failure. However, new managerial practices required legitimization not only from important individual top managers of the IT board, but it also had to be in line with political directives. Similarly, I describe the enabling context, the surrounding organizational system, its values, traditions, cultures, and structures, as a fourth 'power'.

### 4.2.3 Individual Initiative Practices

Highly recognized individuals acted as idea champions. They promoted support of the operative level, appealed for commitment to new managerial practices, and encouraged top managers to engage in the process. Actions of idea champions were constrained and promoted mutually by process context and design factors, and the influence of the context and design factors changed as the process proceeded. Gaining support for ideas and recognition as an idea champion in general was harder at the beginning of the observations than toward the end: Whereas time pressure hindered individual initiatives, especially during the first episodes, more room for creative action had developed by the last episodes.

*Table 4-13: Individual initiative practices in the case study*

Individual Initiative Practice (2 <sup>nd</sup> -order concept)	Initiative Principle (1 <sup>st</sup> -order concepts)
Primary information	Arguing for communication Alluding risks Mediating Understanding Identifying difficulties Giving information Suggesting solutions
Active championing	Demanding communication and transparency Advocating operative employees Supporting involvement of operative

	managers Improvisation
Meaningful confrontation	Bargaining for more participation Proactive engagement Creative action High commitment for operative employees Enforce solutions for participation
Situated coping	Informing Assuming participation Routinized collaboration

*Source: Own illustration*

Obviously, the top managers interpreted the process context differently between the first and last episodes even though they had to make strategic decisions in brief spans of time throughout the process. Factors like negative experiences influenced how the top managers perceived the lack of time. After the IT board had allowed for extra time for discussions, these factors were clarified or attenuated. Top managers increasingly understood participation as most important to enable strategic change, which was also due to the actions of individual IT board members who were accepted by other members as idea champions.

In the following, I will illustrate individual top manager initiatives and the four practices they include: *primary information*, *active championing*, *meaningful confrontation*, and *situated coping*. I observed *information practices* primarily in the first (attention), *meaningful confrontation* in the third (acceptance), and *situated coping* in the last adaptation episode (recognition) (Table 4-12). *Active championing* existed, in different intensities, in all adaptation episodes except the fourth (recognition) because in that episode the top managers had accepted participation as normal. During the *realignment episodes*, I observed mostly information practices.

#### **4.2.3.1 Primary Information Practices**

The first mode of action that evolved within the strategy process was that of a primary information practice. Individual top managers, idea champions, brought up feedback, which stemmed from bilateral consultation with their departmental IT managers, and raised attention to problems on the operative level. In giving feedback to the team members, they tried to convince them that the problems were worth noticing, that it was necessary to find a proper solution, and, at the same time, to examine the situation in other departments, focusing on the identified problems.

The feedback contained not only criticism and reactions from operative managers but also the reflected opinion of the top managers. For example, based on existing experience, beliefs, and knowledge, the top managers assessed the situation as critical for the strategy process at several points in time. The aim of the top managers to raise the attention of and secure support from the team often preceded the corresponding call for an appropriate response to the identified problem.

The attempt to find support for ideas from team members sharing the same interest or similar concerns was constrained by the process context and design factors. Especially in the first episode, the following factors hampered the possibility of a single voice exerting significant influence: little individual power, high time pressure, unclear team identity, top-down management concept, and lack of communication concepts. A powerful individual top manager often aligned and moderated these primary efforts by using mediation and arbitration if other powerful members did not support the effort.

#### **4.2.3.2 Active Championing Practices**

The second mode of action included active support of the operative level from individual top managers. As early as in the first episode, but especially in the second and third episodes, top managers were paying attention to the discontent of the IT managers and expressed

appreciation of their position. Since the IT managers were closer to the operative level in the departments than the top managers were, they were able to recognize and report problems and results. Therefore, the top managers rationalized beliefs to, explained statements to, and defended the positions of their IT managers to other IT board members. The top managers not only informed the members of the IT board about critical situations but also answered for and defended positions from the operative level. Hence, the top managers showed trust in the work and expertise of their IT managers as long as they acted in line with the objectives of PIT. As a result, the top managers had not only represented the IT managers' opinions regarding solving concrete problems but had also strengthened the IT managers' position in the IT board and enabled or legitimized their actions.

#### **4.2.3.3 Meaningful Confrontation Practices**

A third mode of action comprises bargaining and negotiation activities. The top managers tried to confront other team members with meaningful arguments but also triggered fear and emphasized the risks of alternative options. The objective of these activities was to confront members constructively in order to build coalitions, to convince important team members or weaken strong opinions. The IT board members expressed their criticism of managerial behavior, approaches, and perceptions while they demonstrated cooperation and personal acceptance at the same time.

Authors like Kellermanns and Floyd (2005) and Kellermanns et al. (2008) classified this behavior as constructive confrontation. It is a combination of open expression, disagreement, and, at the same time, positive social behavior such as cooperation and personal acceptance. Constructive confrontation does not rely on conflicting interests but on the actors' understanding that joint efforts are necessary in order to solve common problems.

More specifically, constructive confrontation was observed as a common practice in innovative organizations (Jelinek and Schoonhoven,

1990), in organizational cultures supportive of creativity (Martins and Terblanche, 2003), and in organizations surrounded by dynamic environments (Burgelman, 1994). In sum, meaningful confrontation practices not only express that the top managers were aware of their position, their identity, their roles, tasks, and responsibility. More importantly, their occurrence illustrates that the observed top managers employed their own sense of entrepreneurship by acting in a flexible and dynamical manner.

#### **4.2.3.4 Situated Coping Practices**

After top managers applied new participative concepts of operation, they slowly internalized these new patterns as everyday behavior. In the fourth episode, the managers did not question, criticize, or ignore a certain level of participation but accepted it as normal process mode. Therefore, the top managers became acquainted with their role and the role of the IT managers and staff. Not only a few idea champions but also most of the top managers were anxious to guarantee proper consideration of the position of the operative level during discussions and decision making. Actions that ensured the integration, consultation, and informing of the IT managers and staff were taken for granted: The top managers repeatedly invited their IT managers to IT board meetings or considered their involvement when they discussed further actions. Hence, the IT managers and staff were not only involved in the implementation of PIT but also in strategic decisions of the IT board and organizational communication routines.

However, even though participative behavior became a routine, during the last episode, the involvement of the IT managers did not occur randomly. The involvement of operative managers and staff was based on reflective practices. I define this mode of action as situated coping. Situated coping practices are different from practical coping as described in the literature (e.g. Tsoukas, 2010b, Tsoukas, 2010a, Chia and Holt, 2006): Even though top managers acted more spontaneously and without intended order, situated coping was neither

completely mindless, as stated by Chia and Holt (2006), nor was it only intuitive, as stressed by Tsoukas (2010b). Situated coping illustrates a further step toward practical coping and completely routinizing new behavior. I will explain the concept of situated coping further in chapter 4.3.1.3.

#### 4.2.4 Cross-Level Interaction Practices

Interaction practices include indirect and direct communication, joint action, and collaboration. In this study, I identify four specific interaction practices. According to their intensity in cross-level relations, I differentiated them into *dialogue*, *debate*, *cooperation*, and *integration* (Table 4-14). Even though I identified dialogue mainly in the first, debate in the second, cooperation in the third, and integration in the fourth adaptation episode, all four practices are not mutually exclusive but complement each other. During the *realignment episodes*, interaction was lower and existed mainly in the form of dialogue and debate (Table 4-12). In the following, I illustrate the four interaction practices using the sensemaking lens.

*Table 4-14: Cross-level interaction practices and interaction principles in the case study*

Cross-Level Interaction Practice (2 <sup>nd</sup> -order concept)	Interaction Principle (1 <sup>st</sup> -order concepts)
Dialogue	Bilateral talk Informal communication
Debate	Discussions Exchange of views Institutionalized communication
Cooperation	Institutionalized interactions Negotiated compromises Interplay between authorities Intense interaction between individual actors

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Integration	Collaborative working processes Concerted actions Spontaneous discussions Unplanned involvement
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Source: *Own illustration*

#### 4.2.4.1 Dialogue Interaction Practice

Dialogue is the weakest form of interaction across levels. In the first episode, direct communication existed only bilaterally between the IT managers and their top managers, who forwarded the information to the IT board. Therefore, the IT managers and staff communicated in an indirect manner with the IT board. The IT managers and staff received formalized information on IT board decisions through published newsletters or brochures. Dialogue, as a bilateral communication mode, is critical since the IT managers and staff cannot express their opinion directly to all members of the IT board. In addition, the top managers who forwarded the information from the operative level acted as brokers. They could easily manipulate the information by adding or omitting content or emphasizing certain facts.

Whether or not the concerns of the IT managers became a topic during IT board meetings depended on the personal judgment of a leading top manager, idea champion, about the importance of the topic and his individual initiative. The initiative of top managers could cause an interruption of the ongoing social setting (Weick, 1995). However, a topic and a top managers' initiative raised serious attention in a board meeting when other top managers also perceived it as important. Accordingly, if the subject became an issue for arbitration and the top managers doubted the opinion of the IT managers, the IT board dropped or invalidated the topic. Therefore, social processes were able to dominate facts and thus lead to uncertainty within the IT board about what was important.



#### **4.2.4.2 Debate Interaction Practice**

Debate is the second form of cross-level interaction practices observed in the case study. The IT board members, IT managers, and staff not only exchanged information but discussed mutual criticism, fear, doubts, opinions, values, and ideas directly. The top managers varied their behavior with the IT managers and staff according to certain goals they wanted to achieve. Depending on the situation, the top managers' mode of communication was appeasing, mindful, explicating, legitimating, anticipating, persuasive to even ironic. Accordingly, the IT managers and staff varied their talk, being in general more defensive, offensive, contributive or cooperative.

It seemed that such direct interaction through persuasion, bargaining, or confrontation not only clarified the positions and opinions the actors had but also reduced uncertainty: Through questions and criticism, the top managers became aware of the need for clarification; through discussions, they specified a topic with the help of other actors. Beyond the basic function of exchanging information, debates were an important occasion for mutual sensemaking. The top managers, as well as other actors, made sense of their position or values in relation to the position or values of other top managers and IT managers. Debates allowed the top managers to express their preferences but also their disagreement with topics. Since interactions were dynamic, specifications underwent several mutual sensemaking loops.

#### **4.2.4.3 Cooperation Interaction Practice**

Cooperation was even more intense than bilateral dialogue and exchanging opinions in debates. This interaction practice focused on the joint development of the objectives, concepts, and approaches for the implementation of PIT. Initially, cooperation focused on specific topics, but evolved rather quickly during the third episode and became an accepted practice for the top managers. In comparison with the previously described interaction practices, actors across organization-

al levels shared similar perceptions regarding the importance of the IT strategy process and recognized the relevance of cooperative practices for achieving required results. Cooperation helped to generate even further understanding and acceptance on all contributing levels.

However, as Weick (1995) indicated in his approach regarding sense-making, cooperation was not neat and tidy but more of a debative cooperation as described by Schmidt (1991) or a natural dialectic as described by Huff (1988). According to both concepts, actors are engaged in argumentation and debate to formulate implementation criteria and specifications or to develop implementation processes.

#### **4.2.4.4 Integration Interaction Practice**

The difference between cooperation and integration as modes of cross level-interaction is the implicitness of comprehensive participation. Integration included collaboration in combination with taking joint action as the next logical step. The roles were clear to the top managers as well as to the IT managers and staff. Opportunities for participation of the IT managers and staff existed in institutionalized working groups, the new ITC, and in informal and direct communication channels. The IT managers and staff made use of these opportunities through dialogues, debates, and cooperation. Top managers acknowledged the IT managers' active role and their contribution to the overall goals of the strategy process: They asked the IT managers for advice, relied on their opinion, and jointly designed the implementation of PIT.

#### **4.2.5 Management Attitude Practices**

The observation of the top managers' talk and action captured the contrasting attitudes regarding managerial behavior: Every member of the IT board had a distinct opinion about the right management behavior for the IT strategy process. Public management literature provides extensive analyses of differences in management behavior

between top managers and within top management teams. Boyne (2002), Mitchell (2001), as well as Rice (2005) discussed several factors as reasons for the variation, e.g., age, prior experience, tenure, gender, cultural backgrounds, education level, and personal style. Similarly, I detected various influences in the case study as well: During individual interviews, the top managers assumed that their management behavior differed especially according to organizational tenure, professional experience, and educational background.

Beyond the question of what caused the differences in management behavior, for this study it was more important to analyze the underlying practices and how they changed. The perceptions that the top managers had, their beliefs, preferences, and values manifested themselves in diverse behavioral patterns regarding communication, involvement, empowerment, and collaboration. I aggregated the different patterns into main principles and grouped them again according to four different management attitude practices. These four modes of managerial behavior, which became obvious in the case study, show similarities to the work of Balogun and Hailey (2008) I mentioned in the literature review.

Table 4-15 entails the classification of management attitude practices and the associated behavioral principles. In the first adaptation episode (attention), the top managers favored a different management behavior; however, a *directive* management behavior dominated. Directive management attitude dominated as well in two of the realignment episodes (directing and controlling) (Table 4-12). Over time, many of the top managers changed their views and behaviors and enacted more participative or collaborative management attitude practices. In comparison, during the fourth adaptation episode (recognition), the top managers' management behavior was still distinct but other top managers acted in a *participative* and *collaborative* manner and shared *educative* principles. The top managers' practices did not always apply to a certain management behavior; they often combined attitude practices depending on the situation.

Table 4-15: Management attitude practices and management principles in the case study

Management Attitude Practice (2 <sup>nd</sup> -order concept)	Management Principle (1 <sup>st</sup> -order concepts)
Education/Delegation	Understanding Comfort Reassurance Trust
Collaboration	Cooperation Active support Involvement
Participation	Information Communication Transparency Openness
Direction/Coercion	Enforcement of decisions Determination of topics Strict vertical task sharing Control Pressure Leadership Order

Source: Own illustration

#### 4.2.5.1 Direction and Coercion

The top managers interpreted political directives, external legitimacy or role ambiguity, including their own responsibilities, according to their management attitude: The top managers who favored a directive management attitude preferred actions such as strict vertical task sharing, enforcing outputs, control, and pressure. These top managers had little interest in the operative level and very little direct communication and interaction with the IT managers and staff; rather, they

heavily relied on external legitimacy and were eager to gain political support. The need for political legitimacy increased with high ambiguity and uncertainty about managing the IT strategy process.

The top managers who showed management attitude practices of direction or coercion, tried to prevent intense discussions on participation due to time pressure but emphasized the risk of failure and the need for pressure, imposing change, and enforcing direction. When the IT board first discussed the role of the top managers after the approval of the IT strategy, the top managers' role was called *sponsor*, with an underlying directive mode of management.

#### **4.2.5.2 Participation**

The top managers in favor of more participation expressed understanding for the criticism from the operative level. For them core elements of managing the IT strategy process were information, communication, and transparency. Therefore, they brought topics concerning participation to the fore, questioned management attitude practices, initiated discussions on participation, supported cross-level communication, and alluded to the need for more information and communication.

Especially during the first episode, ambiguity and uncertainty about how to manage change and how to communicate with operative managers and staff were high. As very few top managers had clear positions, the most powerful top managers mediated and thus moderated suggestions for more participation.

#### **4.2.5.3 Collaboration**

Collaborative management attitude practices focused on cooperation, involvement, and active support of the operative level. The top managers who favored a more collaborative management behavior took on the challenge of negotiating compromises with the operative level.

In addition, they showed a high level of engagement for the institutionalization of communication and cooperation. Those top managers even used pressure during discussions with IT board members to realize participation and involvement. They also promoted activities in order to convince the IT staff to stay in public administration. Furthermore, those top managers highlighted the need for thoughtful actions and communication used in newsletters and overall information events.

#### **4.2.5.4 Education and Delegation**

The top managers who showed management attitude practices of education and delegation wanted to improve comfort levels and trust. They built upon employees' understanding and acknowledgement. Therefore, they demanded transparency as well as clear roles and responsibilities throughout the organization. During the first three episodes of adaptation and the episodes of realignment, the top managers became actively engaged with the process in order to concretize roles, functions, methods of communication and of managing change. This engagement helped the top managers to become certain about their own identity, the identity of the IT board, and the role of the operative level.

#### **4.2.6 Summary**

In sum, the top managers institutionalized intense interaction within the IT board. As understanding for participation was shaped over time, fewer bargaining activities were necessary. Toward the end of the observation period, most of the top managers perceived employee orientation as an integral part of managing the implementation of PIT, and time pressure and political pressure, though existent, as less demanding and manageable. The positive tenor within the IT board and from the operative level proved the top managers and their approach right.

Two quotes from the same top manager at different times illustrate well the change in management attitude and its complexity. In the first citation (9), taken from the beginning of the observation, the top manager emphasized the role of the political cabinet as the legitimation of action, his contempt for the lower managerial levels, and the directive management behavior pursued:

"The subcutaneous cultures<sup>4</sup> that suddenly manifest themselves among the departmental IT managers (...) it must be coherent: (.) A clear task sharing exists (.) as the political cabinet decided (.) and we have to take care that the people act accordingly (.) and understand the most central agreements (...) it is to show you [other top managers] that we have to keep up the pressure and that we have to move forward (..) with tight leadership (...) not that people subcutaneously raise their voice against it".

*Transcript quotation 9: Top manager's management attitude at the beginning of the observation period*

The second citation (10), recorded in a late phase of the observation, emphasized the top manager's focus on the identity of the team and his attention to the organization and its members rather than to the political decision makers. In addition, it expresses more participative management attitude practices and the will to involve lower managerial levels:

"If you have a strong top management team of all general directors, like we [the IT board] are (.), then this will lead to some friction toward lower levels (.) not upper levels (...) what we have to make sure of in the future is that (.) we have to give (.) some (..) consultation rights to the [IT] experts on the lower organizational levels (.) and to promise them (.) that they have the right to give their opinion" .

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<sup>4</sup>The top manager used subcutaneous to describe the operative level: A level underneath the surface where employees act in secret and in opposition to the IT strategy.

*Transcript quotation 10: Top manager's management attitude at the end of the observation period*

The example shows that successful participative practices prevailed over time, even though major differences, including in beliefs and preferences, are often found with members of top management teams (Miller et al., 1998). From the beginning, very few top managers showed the initiative to integrate the opinion of the IT managers and collaborate with the operative level; yet, others joined in later after their doubts were alleviated. Therefore, I agree with Hambrick and Mason (1984) that managerial perceptions of top managers affect the identification of important issues and their interpretation within teams. Through individual initiative and cross-level interaction, managerial attitudes were assimilated. In turn, the adapted managerial attitude practices influenced strategic choices and the top managers' actions. During the process and toward the end of the observations, it became obvious that the top managers had not only changed their managerial practices but at the same time altered their identity as well as the overall strategy process (Stensaker and Falkenberg, 2007).

### **4.3 Theorization**

After analyzing and illustrating the findings of this study, I present in this chapter the theoretical contributions I was able to make after returning to the literature to evaluate and discuss the findings. In chapter 4.3.1., I describe the identified practices and link them to the theoretical background. After the illustration of the three practice bundles, I explain the interdependent and dynamic relations between practices and context and design factors in the concluding process model in chapter 4.3.2.. The interdependencies and dynamic relations are the basis for top managers dealing with ambiguity caused by context and design factors. Finally, based on the discussion of the results, I raise three important topics this study sheds light on: the dynamics of a sensemaking theory, the role of microscopic changes, and public entrepreneurship (chapter 4.3.3.).



### 4.3.1 Three Bundles of Practices

The preceding chapters introduced three different but complementary bundles of practices identified in the case study analysis. All three bundles showed two facets of direction. Three practices of the individual initiative practice showed characteristics of deliberate coping. In contrast to these three practices, the fourth practice (situated coping) featured spontaneity and improvisation. Cross-level interaction practices comprised not only ways of making sense of an event or action but also included sensegiving practices. These sensegiving practices served in turn as a trigger for the sensemaking activities of the organizational members and top managers. Finally, management attitude practices differed in terms of identification and differentiation. On the one hand, the top managers showed certain management attitude practices when they identified themselves with, e.g., participative or educative management behavior. On the other hand, they showed directive management attitudes in order to differentiate themselves from the operative level and shape their own role. Therefore, I bundle the practices into *situated and deliberated coping*, *reciprocal sensemaking and sensegiving*, and *identification and differentiation* (Table 4-16).

*Table 4-16: Identified aggregated dimensions, practices and bundles of practices*

Dimension	Practices	Bundles of Practices
Cross-Level Interaction	Dialogue	Reciprocal Sensemaking and Sensegiving
	Debate	
	Cooperation	
	Integration	
Management Attitude	Directive/Coercive	Identification and Differentiation
	Participative	
	Collaborative	
	Educative/Delegative	
Individual	Primary Information	Situated and

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Initiative	<u>Active Championing</u>	Deliberated Coping
	<u>Meaningful Confrontation</u>	
	<u>Situated Coping</u>	

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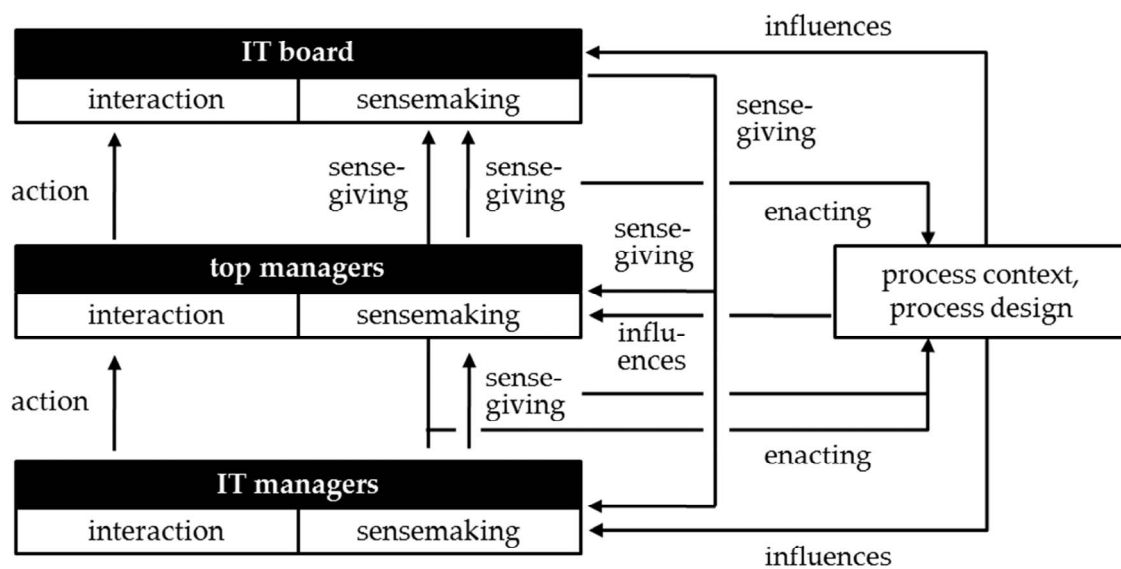
Source: Own illustration

All three bundles of practices are interrelated in the case study: An individual top manager copes reflectively with an interruption that occurred due to bottom-up criticism. At the same time, his deliberate coping practices are linked to interaction, which fosters his interpretation of the new situation and sensemaking activities by top managers. These reciprocal sensemaking and sensegiving practices within the IT board and across organizational levels are based on certain management attitude practices. However, these practices change through the new meaning that develops from coping as well as sensemaking and sensegiving practices and lead to a different identity of the top managers and the IT board. Therefore, an important link exists between identification, differentiation, coping, sensemaking, and sensegiving. Sensemaking and sensegiving practices proceed in cyclical processes stimulated by coping practices and shape identities, roles, and tasks of top managers in a reciprocal manner. In the following, I describe the three bundles of practices by referring to the theory.

#### 4.3.1.1 Interaction: Reciprocal Sensemaking and Sensegiving

Managerial perceptions of a top manager start changing when he experiences and recognizes a discrepancy, an interruption, between his expectations and reality. An interruption, according to Weick (1995), is a common antecedent of sensemaking occasions and stems from environmental factors. Similarly, I also identified interruptions in the case study, as I illustrated in Table 4-3. The discrepancy also became obvious to other top managers through individual initiative and cross-level interaction.

During the continuing process, different individual perceptions did not align within the team, but a collective cognition formed. This collective cognition can be characterized as a "form of situated cognition (i.e., cognition embedded in the context of group activity)" (Elsbach et al., 2005, p.425). It illustrates how the top managers coordinated their thoughts and opinions within a specific context. However, process context as well as process design factors, such as ambiguity, uncertainty, and organizational power, were not static: The top managers increasingly changed process context and process design factors as the strategy process proceeded.



*Figure 4-8: Interpretive practices - reciprocal sensemaking and sensegiving (own illustration)*

Due to altered individual perceptions and the developing collective cognition, the top managers interpreted process context and design differently. Figure 4-8 shows the mutual dependencies. Especially when roles, identities, and tasks were unclear, process context and design factors were enacted to legitimize top managers' actions. For example, at the beginning of the observations, the members of the IT board recognized time pressure as an increasing threat. Therefore, the top managers focused on developing the IT strategy, which was accomplished within a brief span of time and without cross-level interaction. In contrast, similarly to the observations by Weick (2001),

cross-level interaction increased as soon as the IT board no longer perceived time pressure and the political context as a threat.

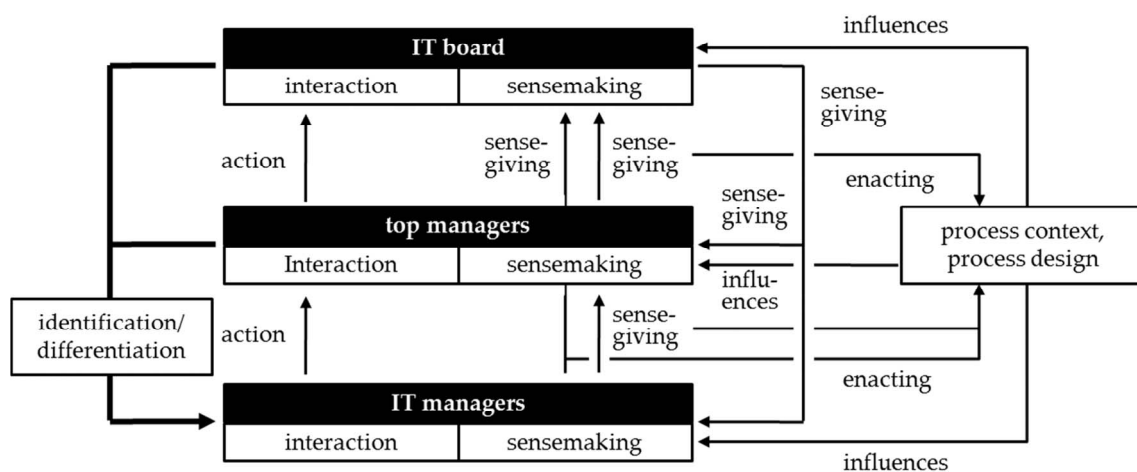
The interactive relation between individual perceptions, the collective cognition of the team, and its environment were the basis of an ongoing dynamic process (Figure 4-8): The IT managers were involved in sensemaking and sensegiving actions as a response to sensegiving actions of the IT board. The top managers, in turn, made sense of both the IT managers' sensegiving actions and process design and process context factors. The result of these sensemaking actions were again sensegiving actions of the top management team and its members. Consequently, the identities, roles, and tasks of the top managers were shaped in process cycles based on a core practice of reciprocal sensemaking and sensegiving, including top managers, organizational actors, process design, and process context factors.

#### **4.3.1.2 Management Attitude: Identification and Differentiation**

In a situation of organizational ambiguity and uncertainty, actors will develop their own strategy to gain a better understanding of the situation (Denis et al., 2009). These strategies are based on an identity actors develop to clarify "how they should think, act, and even feel in a given organizational context" (Ashforth, 1998, p.269). Identity building means *becoming* identified with a role, team or organization, "emphasizing dynamic aspects and on-going struggles around creating a sense of self and providing temporary answers to the question 'who am I' (or 'who are we') and what do I (we) stand for?" (Sveningsson and Alvesson, 2003, p.1164). To date, the literature has provided few insights into this process of identity building.

In the case study, I identified two practices of identity building: identification and differentiation. During the four adaptation episodes (attention, awareness, acceptance, and recognition), the top managers used behavioral patterns that were essential for their role in the strategy process. Discrepancies between their own expectations and reality

were again starting points for the complex and dynamic processes of identity formation. By trying out participative practices, the top managers further developed their identity and adapted their cognitive and behavioral patterns. These changes also led to different interpretations of the same interruptions based on influencing environmental factors, which, again, led to different reactions. Identification is thus an inherently open-ended process based on the actor and his interaction with situational factors (Ashforth, 1998). Figure 4-9 visualizes the mutual dependencies.



*Figure 4-9: Identity building - Identification and differentiation (own illustration)*

Interruptions not only helped top managers to develop their identity but also served the purpose of differentiation, illustrated by episodes of realignment. During realignment episodes, the top managers realized that the individual and collective identity they had constructed required an adjustment. At that point, the existing identity reached its limits for interpreting and dealing with behaviors of the actors and the given context. This caused differentiation, distinctiveness or, as Dukerich et al. (1998) call it, disidentification from the old identity and, more importantly, from the role of other actors.

The active distancing of the top managers from the IT managers' behavior, often using directive practices, helped the top managers to make sense of their own roles. Therefore, this step was important for

the individual and team-related identity formation because it enabled further shaping of characteristics so that it better fulfilled its function. These practices show the repetitive struggle of top managers to find and attain an optimal balance of inclusiveness and distinctiveness (Ashforth, 1998) within episodes of realignment and adaptation.

The formation of identities was also important for the development of identities on the operative level and thus effective interaction between actors from different organizational levels. The top managers' "identities serve as templates that enable both the focal actor and his or her observers to construct a coherent persona" (Ashforth, 1998, p. 269). Therefore, the top managers' sensemaking of their role and identity within the IT strategy process gave sense to the IT managers about the IT board and IT managers' own identity.

As described earlier, identity develops dynamically. It is the result of a complex process based on constant interaction and spontaneous individual initiatives. This spontaneity links to creativity: Top managers deliberately go beyond common acknowledged behavior and develop new practices through interaction.

While this concept is not in line with the original retrospective focus of the concept of sensemaking (Weick, 1995, Weick, 2001), it is similar to the interpretive concepts of consciousness and interaction described by scholars like Joas (1996), Mead (1965) or Blumer (1969). The authors emphasize the role of creativity, formed by reflection and shaped dynamically by interaction. This creates a challenge as well as an opportunity for top managers: knowing and exploiting the potential of creativity for becoming identified with a role, team or organization.

#### **4.3.1.3 Initiative: Situated and Deliberate Coping**

Actions and interactions form the basis for the cyclical processes of sensemaking and sensegiving that help in shaping top managers' identity. Throughout the strategy process the top managers' actions and interactions differed between and in between episodes of rea-

alignment and adaptation. This highly dynamic process with the ongoing struggles of top managers can be described as coping actions.

Chia (2004) as well as Chia and Holt (2006) described identity as arising through actions based on a *dwelling mode*. Identity in this sense is constructed through the actions top managers deploy. While Chia describes this process as a mainly unconscious development, Tsoukas (2010b) differentiates actions into detached coping, deliberate coping, and practical coping.

Practical coping describes a spontaneous and non-deliberate way of responding to a situation. Actors do what they are trained to do and in what they are experienced in. For practical coping, reasoning plays no role (Dreyfus, 2006, Tsoukas, 2010b).

Deliberate coping evolves if in an "already familiar context of practical action a breakdown occurs" (Tsoukas, 2010b, p.398) and the actor becomes a reflective observer. Similarly, existential phenomenologists like Heidegger, Merleau-Ponty, and Todes stated that reflection and conscious action stimulated by surprise and disruption dramatically change everyday *mindless* coping action (Chia and Holt, 2006, Dreyfus, 2006).

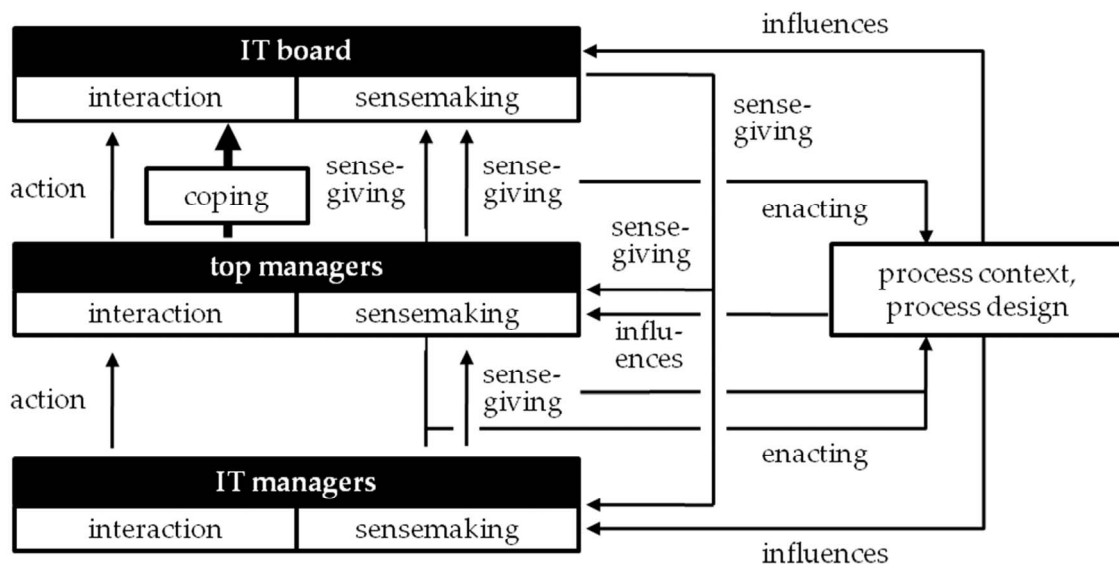


Figure 4-10: Situated and deliberate coping of top managers (own illustration)

Detached coping is the most deliberate and is based on thematic awareness. It is less about consciousness and attention and more about calculative rationality and detached analysis of the present-at-hand (Golsorkhi et al., 2010, Tsoukas, 2010b).

Tsoukas' categorization is extremely useful because it sheds light on the importance of differences in everyday actions. Of the three categories, I only recognized practical and deliberate coping within the IT strategy process. While I identified practical coping before the observation period, reflection and conscious actions as parts of deliberate coping dominated most episodes.

Coping practices were mainly individual initiatives directed toward the IT board, as visualized in Figure 4-10. Further coping practices existed regarding the IT managers and associated with the enactment of context. Based on the case study, I identified an additional category which I defined as situated coping. As I was able to observe, the two modes of reflective doing and intuitive acting do not exist as two different alternatives: An actor's behavior does not just switch from a deliberate mode of coping to practical coping.

As Dreyfus (2006, p.47) highlighted, "many forms of expertise pass through a stage in which one needs reasons to guide action, after much involved experience the learner develops a way of coping in which reasoning plays no role". Dreyfus described a process where an actor's behavior becomes increasingly routinized before he acts spontaneously. Therefore, between the two modes, a transitional mode exists which comprises characteristics of deliberate coping and practical coping: Until top managers become used to their new practices, they repeat activities, reflect their new behavioral patterns and the implications those patterns have.





Practices are understood as micro level processes and modes of acting that are accepted and deployed by top management team members. Actions and interactions are guided by these practices but practices are also constituted, changed and redirected by actions and interactions. With respect to a dynamic view of strategy, it is not only the practice bundles that are of prime interest but also the surrounding environment.

Figure 4-11 shows the interdependencies between the different practices and environmental factors. Process context as well as process design factors are elements of overall environmental factors and shape the level of ambiguity. In general, the more constraining ambiguity is regarding coping and interpretive practices, the less dynamic the evolution of identity-building practices is.

This negative effect of ambiguity resulted mainly from the lack of legitimacy of individual initiatives which existed within the top management team and the organization. A lack of legitimacy evolved through a lack of political or management support, insufficient organizational influence and power, or differences in management perceptions, attitude, and experiences. Time pressure increased these effects. The study showed that ambiguity became evident when role uncertainty, unclear tasks and responsibilities, and the non-existent management concept became a challenge to the implementation of the IT strategy process.

Since the process context and design factors interfered with individual initiatives and constrained deliberated and situated coping as well as reciprocal sensemaking and sensegiving to some extent, this finding adds to Weicks (1995) call to consider Keesing's argument. According to Keesing (1987), the interpretive perspective tends to underrate constraints obliged by context, distributed information, or differences in power or interest.

### **4.3.3 Elaboration: Evolving Principles of the Process Model**

In the following three subchapters, I discuss the basic components of strategy processes, which evolve from public managers' dealing with ambiguity. The first is the concept of *public entrepreneurship*. Ambiguity provokes and constrains, but it also enables individual initiative, enhancing improvisation, creativity, and spontaneity. Top managers, thus, shape context factors proactively through enactment and do not regard them as a given constant. As a second component of the strategy process, I discuss the *interdependent dynamics* of ongoing processes of sensemaking and sensegiving, linked through interaction. The third subchapter, *complexity of microscopic change*, relates identified concepts of this study with concepts of the strategy-as-practice approach and with sensemaking theory. In this final subchapter, I summarize the challenge of adapting managerial practices and the evolution of participative behavior over time in the public sector.

#### **4.3.3.1 Public Entrepreneurship and the Enactment of Context**

As mentioned in the literature review, public managers face new challenges and new required roles to enable "facilitation, negotiation, and conflict resolution" (Bourgon, 2007, p.21). Rainey (2009) summarized the special situation of today's public managers: The strategy processes in the public sector face higher complexity and dynamism, more intervention and interruption than private organizations due to power issues, more diverse, diffuse objectives, and political intervention and constraints. Moreover, independently from the context, strategy processes that encompass changes in structures, accountability, roles, identity, perceptions, and behavior are very complex. Therefore, in these situations managers cannot adopt highly rationalized decision-making processes. The uncertainty and ambiguity of the strategy process call for a complex and more intuitive managerial reaction.

As I mentioned in the literature review, public managers who successfully handle today's requirements have internalized an entrepreneurial management behavior. Lynn Jr and Stein Jr (2003, p.19) described these public managers as "disposed to take risk, purposeful, imaginative and intuitive, and inclined to act". Important components of public entrepreneurs' action have been identified as intuition (Bryson, 2004, Stupak, 1996), improvisation (Paarlberg and Bielefeld, 2009), and creativity (Klein et al., 2010).

The three characteristics of entrepreneurial action, intuition, improvisation, and creativity, also enhance spontaneous action (Sadler, 2000). Research has revealed the effectiveness and value of spontaneous managerial actions in the public sector: Especially, highly reliable organizations are known for their governance concepts, which allow and even enhance spontaneity (Weick et al., 1999, Rainey and Steinbauer, 1999). Nevertheless, there are certain impediments to the evolution of spontaneous action in other public administrations. The results of this study indicate that spontaneous action evolves whenever ambiguity is manageable and legitimacy of action is likely.

Based on the case study, I have also unveiled the positive aspect of ambiguity: In key moments, confusion about the top and middle managers' roles enabled individual initiatives of the top managers who promoted participation. Therefore, ambiguity can be seen as stimulating the progression of change by inspiring improvisation (Davenport and Leitch, 2005) and involvement (Weick, 1995) and allowing for managerial autonomy (Morris and Jones, 1999).

The case study has also shown the flipside of ambiguity in strategy processes if its level is beyond a certain threshold: An increased presence of ambiguous roles, objectives, and identities and an increase in actors' perception of restraint in the surrounding context and design factors led to a decrease in the likelihood of spontaneous actions. Accordingly, a certain level of formalization, clarity, and transparency was needed to be able to deal with ambiguity (Weick, 1995, Vlaar et al., 2006) and to utilize its positive effects. The conducted case study

showed the positive effect of individual initiative and cross-level interaction as successful approaches to decrease the level of ambiguity.

Especially for the public sector, where different obligations, accountabilities, and objectives exist than in the private sector, formalization, clarity, and transparency are important to ensure the legitimacy of top managers' actions. Legitimacy is gained through routines, beliefs, norms, cultural rules or ideas (March and Simon, 1993). For public managers, compliance with norms is important to maintain legitimacy with external key stakeholders, politicians, and citizens (Jas and Skelcher, 2005). Therefore, top managers in the public sector support the adoption of practices if they are legitimate and appropriate according to the institutional environment of the organization (Campbell, 2004).

In the past, legitimacy of public entrepreneurship was rare. As Bernier and Hafsi (2007) as well as Bartlett and Dibben (2002) illustrated with their international studies, nowadays public entrepreneurship is increasingly becoming a legitimate behavior of public managers. However, there are still limitations to public entrepreneurs' action in a number of countries, depending on national and cultural differences. Therefore, entrepreneurial actors still have to consider carefully their environment as a source of legitimacy in ambiguous situations.

The case study has shown how individual entrepreneurs made sense of new phenomena within existing contexts. After processing new phenomena, they acted and reflected iteratively, a process by which they constructed creative solutions (Baez and Abolafia, 2002). As ambiguity decreased through individual initiative and with cross-level interaction, collegial top managers became aware of the benefits of entrepreneurial concepts and internalized them as well. Hence, overall legitimacy increased and public entrepreneurship spread until achieving certain objectives and new behavioral patterns became routinized modes of action.

This insight from the case study analysis supports some of the results from previous research on public entrepreneurship by Bernier and Hafsi (2007). The authors propose a cyclical theory of the emergence

of public entrepreneurship, starting with a dominant individual entrepreneur whose activities finally lead to systemic entrepreneurship. The authors assume that individual entrepreneurship does not evolve in relatively stable environments but weak or new governments, when personal risks are moderate because top managers' actions are legitimate due to their position and power. Systemic entrepreneurship, which requires a high level of cooperation between different actors from diverse levels, ensures the endurance of changes initiated by individual entrepreneurs. However, the conducted case analysis for this study does not support the authors' association of systemic entrepreneurship with relatively weak governments. The findings of the study assume that independent from the government's actual strength, top managers' engagement depends on their perception of their own influence. These perceptions can change: If top managers perceive governments as strong, they might recognize political and time pressure as a threat to their engagement compared to situations where political impacts are perceived as rather low.

Public entrepreneurs try new behaviors and go beyond precedent rules and traditional expectations. In consequence of this rather risky behavior, they interpreted their environment in different manners and manipulated their context. As this study has shown, once the top managers manifested their role and clarified their responsibilities and scope of action, they became certain about their organizational legitimacy. This legitimacy enabled the top managers to act much more self-confidently, to be willing to take risks, to engage in the process, and to approach other organizational members.

In sum, the top managers felt responsible for fulfilling the overall objectives of the IT strategy process by reacting creatively and flexibly together with organizational members. The directives, guidelines or positions of the political cabinet remained the most important influencing factor. However, over time the top managers balanced their behavior differently between the political pressure and the imperative of the transformation. Their own identity helped them to enforce engagement in the implementation of PIT. Accordingly, the top manag-

ers did not accomplish political tasks and objectives in an obedient manner as they realized their own, jointly developed strategy process.

#### **4.3.3.2 The Interdependent Dynamics of Sensemaking**

Using a sensemaking lens, this study demonstrated that the adaptation of management behavior is multifaceted: The course of ongoing interpretive actions considers a multitude of different factors and evolves dynamically by shifting in direction and speed. As Maitlis (2005) states correctly, little is known to date about the dynamics of sensemaking considering complex relations between actors, activities, and structures. Levi (2006, p.5) adds that even though we can explain the effectiveness and failure of organizations, the importance of capabilities, political authorities, culture, and certain entrepreneurial behaviors, we still lack a dynamic theory, "one that endogenizes the mechanisms of transformation".

During the last several years research has put an increased emphasis on the analysis of the "connection between thinking and action in a dynamic sense" (Dijksterhuis et al., 2003, p.97). Achtenhagen et al. (2003) emphasized the dynamics of reciprocal sensemaking: Top managers and organizational members jointly shape the strategy process based on sensegiving and sensemaking within a continuing dialogue. As possible elements of a dynamic strategy process, Regnér (2008, p.567) identified "activity configurations, socio-cultural embeddedness, co-evolution, social interactions, multiple strategist's roles and co-existing strategy logics". The author described components of a theory but did not provide detail, even though he stated that the interdependent relations between actors, activities, and structures are fundamental.

Although the dynamics of sensemaking have been widely acknowledged, comprehensive studies are still lacking: Sensemaking processes have been regarded as continuous processes (Poole and Baldwin, 1996) and recurring cycles (Weick, 1995), including activities such as introducing, discussing, and deciding upon ideas. Furthermore,

sensemaking has been described as created and situated in the micro-practices of interactions, conversations and coordinated actions between people (Allard-Poesi, 2005).

Many authors have described reciprocal influences between context and sensemaking activities taking structuration theory into account (Poole and Baldwin, 1996, Weick, 1995, Samra Fredericks, 2000). Weick (2001) also emphasized the role of contexts, especially rapidly changing contexts, that trigger sensemaking dynamics and lead to new perceptions. Denis et al. (2009) did not consider strategic changes in structure as the main trigger for sensemaking but stressed that the resulting dynamics between organizing, daily management actions, and sensemaking influenced strategic change.

However, beyond the analysis of sensemaking and context and sensemaking and actions, this study highlighted their interdependencies and illustrated the dynamics between actors, activities, and structures of sensemaking. Taking the results of this study into account, boundaries between actors and context become permeable through the continuous and flexible flow of ideas, actions, and opinions. The boundaryless process carries ideas, actions, and opinions across organizational levels, hierarchies, and management models; however, there has thus far been little discussion of it.

Taking the interdependent dynamics of sensemaking into account, the objective of managing perceptions is not the generation of a mutual consensus. Since sensemaking is based on interaction, top managers need to create conditions that enable reflection and the flow of ideas, actions, and opinions (Termeer and Koppenjan, 1997). As appeared in the analysis in the case study, members from different organizational levels should have the opportunity to meet at planned events as well as spontaneously on various occasions. Information policies should allow for broad access to information and communication practices should be open and transparent. These procedures would facilitate the formation of a common ground for action, joint decision making and a beneficial flow of ideas, actions, and opinions.



### **4.3.3.3 Complexity of Microscopic Change**

As Mantere and Vaara (2008) stated, in general there is often a lack of participation during strategy processes. Even though recent reform concepts (e.g., New Public Management (NPM)) have also aimed at increased participation and involvement of employees, participative management behavior is still not a common practice in the public sector.

From a research perspective, my study results clearly support insights that a lack of participation is counterproductive (Farnham et al., 2003a) and a major impediment (O'Brien, 2002) to innovation and strategic change in the public sector and will ultimately lead to failure (Sminia and Van Nistelrooij, 2006). These insights are also reflected in the following suggestion for successful strategic processes: "staff must not simply comply with the changes, but be committed to them" (Farnham et al., 2003a, p.444).

However, participative management is challenging. Since it is not widely implemented, top managers have to be willing to introduce new practices and change the underlying premises. The identified bundles of interdependent practices illustrate that the adaptation of top managers' practices is highly complex. The management behavior changes through interpretive practices, coping practices, and identity building practices. The bundles of identified practices reflect that top managers not only make sense of their environment but also affect the others' meaning and, again, make sense of other organizational members' sensemaking and sensegiving.

In combining the concepts of sensemaking and strategy as practice, this study seeks to show how members of a top management team make sense of actions and interactions during an IT strategy process, which finally led to a change in managerial behavior.

Several studies from the strategy-as-practice community analyzed individual responses to change from a sensemaking perspective. Stensaker and Falkenberg examined individuals' interpretive responses as main elements of organizational responses to change. Rouleau (2005)

illustrated the sensemaking and sensegiving practices by which middle managers interpret and sell organizational change. Balogun and Johnson (2005, 2004), who included middle managers as well as top managers in their research, describe, similarly to Achtenhagen (2003), a reciprocal sensemaking and sensegiving process. Top managers become enablers of change and create a common ground for joint decision making and action (Termeer and Koppenjan, 1997). Denis et al. (2009) refer to sensemaking in order to compare large-scale reforms and the reciprocal dynamics between the underlying organizing and sensemaking activities of public managers.

These approaches were all fruitful and added to the work of the strategy-as-practice community in various ways: They identified the importance of human action, acknowledged the evolution of sensemaking over time, and admitted the role of interaction between organizational members. Though I concede that all three insights are correct, I should point out that all of the studies drew a link between major or large-scale organizational reforms and human action. In contrast, microscopic changes like the adaptation of managerial practices, it seems, were taken for granted or were not accessible for analysis. I agree with Tsoukas and Chia (2005) that "looking at change in organizations from within [...] is a perspective organizational scientists must take if they are determined to convey a sense of the organizational flow". This goes hand in hand with the call made by Mohrman and Lawler III (1988) to focus research on strategic change on shifting managerial behaviors as the actual change.

Microscopic change occurs incrementally, takes place by adaptation, and is heterogeneous and often surprising. These changes develop in the depths of organizations and may or may not acquire the status of formal institutions. The management behavior prevalent on an organization's top management level is enacted and becomes institutionalized over time. These institutionalized patterns as well as continuously changing human action are both features of organizations. Therefore, as has been done in this study, tracing microscopic changes within cognitive, political, and cultural dynamics creates a better under-

standing of the process of organizational becoming (Tsoukas and Chia, 2005).

The identified sets of practices demonstrate that the evolution of participative managerial behavior in terms of communication, involvement, and empowerment is multifaceted. More specifically, the different practices are the main elements of microscopic change and lead to a strategy process that is extremely dynamic and involves multiple interdependent actors. With every step toward more participation, the constellation of influencing factors changes and opens up new opportunities for top managers to shape the strategy process.

#### **4.3.4 Synopsis of the Theorization**

This chapter concludes the analysis and theorization of the case study by summarizing the retrieved findings with regard to the stated research questions of the study, presented in Figure 2-1 in chapter 2.4.

First, I turn to the main research question: How do managerial practices adapt over time during strategy processes in the public sector. The process model (chapter 4.3.2) resulting from this study illustrated the complexity of changing an established management behavior and its underlying practices. Interrelations between actors, their actions, and practices linked with process context and process design are all relevant for adapting managerial practices and have to be taken into account.

Microscopic changes, like the adaptation of managerial practices, evolve from the depth of the organization through the dynamic interaction between individual actors and groups of actors. During strategy processes, top managers face enormous challenges when they realize that the dominant management behavior and its essential managerial practices have to be adapted as they are inappropriate for successfully realizing strategic change.

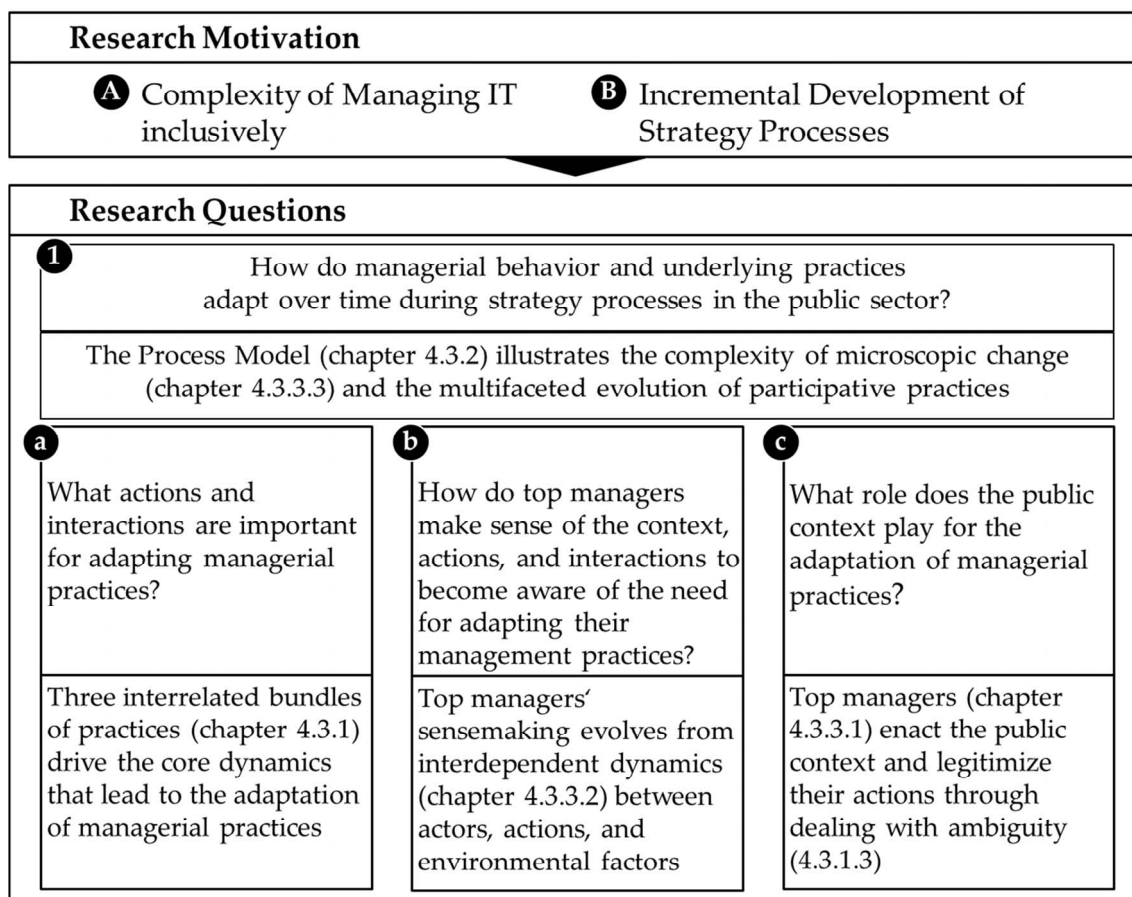


Figure 4-12: Synopsis of the theorization (own illustration)

Second, I turn to the first subquery, which links to the viewpoint from the strategy-as-practice community: *What actions and interactions are important to adapting managerial practices*. Based on the analyses of the case study, I identified three essential bundles of practices (chapter 4.3.1): coping, interpretive, and identity-building practices. These practices mutually construct each other through action and interaction. Additionally, they also interact with process context factors (time pressure, political pressure) and process design factors (differences in power and interests; ambiguous roles, tasks, and responsibilities, uncertain communication approach). In the investigated case study, the adaptation of managerial practices based on these identified factors.

Third, I answered the second subquery on *how top managers make sense of the context, actions, and interactions to become aware of the need for adapting their management practices* by highlighting the interdependent dynamics during the sensemaking process (chapter 4.3.3.2). The main

element of sensemaking is interaction: Actors interpret sensegiving behavior and conditions that interrupt the strategy process through dialogue, debate, cooperation, and integration. At the same time, process design and context factors influence top managers' sensemaking and shape the way in which top managers give sense to organizational members again.

Finally, the third subquery drew the link to the public management research field in asking *what role the public context plays for the adaptation of managerial practices*. The influence of the political cabinet existed throughout the strategy process, but the top managers perceived it differently: During the first episodes, political pressure was more often described as threatening than in later episodes when the level of ambiguity had decreased. The same was true for other factors like organizational power.

Highlighting the way in which top managers coped with ambiguity throughout the strategy process (chapter 4.3.1.3), I described the need for public entrepreneurship (chapter 4.3.3.1): The reflective construction of creative solutions through individual initiatives and improvisation. Even though the public sector differs in many aspects from the private sector, the work of public entrepreneurs is increasingly acknowledged as important for managing ambiguity during strategy processes.



## **5 Conclusion**

The final chapter links the results of the analysis to the research objectives stated at the beginning of this study. Furthermore, it shows the contributions of this study and its implications for theory and practice. It finishes with a discussion of the study's limitations as well as suggestions for future research based on the findings of this study.

### **5.1 Contribution to the Theory**

The present study was designed to research the adaptation of management behavior and underlying practices during strategy processes in the public sector. Combining the strategy-as-practice approach with the concept of sensemaking was useful in order to answer the research questions of the study at hand. This study answers the call from prior studies in that I opened the black box of microscopic change of managerial behavior in strategy processes, extracted bundles of strategy practices from the actual behavior of actors, and shed light on the complexity of cognitive processes complementing and evolving from actions and interactions. The following section highlights the most important findings of the study sequentially:

The first major finding emerging from the study is the identification of practice bundles, how they evolve and interact for making sense of the need for adapting managerial practices. Interpretive, coping, and identity building practices evolve reciprocally and are subject to ambiguity caused by process context and process design factors.

As a second finding, the study acknowledged the boundaryless dynamics of sensemaking and highlighted the complexity of realizing microscopic change using the example of the adaptation of managerial practices. By considering the interaction of different actors' sensemaking behaviors and its effects on sensemaking processes, the simultaneous and reciprocal dynamics of sensemaking and their development over time can be better understood. Furthermore, the study pre-

sented findings of a loosely coupled organization and was not conducted, as in many studies on sensemaking, within contexts that are marked by crisis or extreme circumstances such as fire fighters (Weick, 1993).

The third major finding of this study is the identification of the need for entrepreneurial public managing during processes driven by ambiguity. Public entrepreneurship in its form as creative and spontaneous actions and reactions creates new opportunities for making sense of activities, opinions, and ideas. Therefore, it helps to shape individual, team, and organizational identities. At the same time, public entrepreneurship is enabled, limited, and designed by environmental factors such as differences in power or interests.

The fourth finding includes the identified relevance of involvement and participation during strategy processes in the public sector. In the literature review, I highlighted that the beginning of strategy processes in the public sector is often accompanied by a lack of participation on the part of its actors. Having examined the ways in which managers and other organizational members make sense of and give sense to the strategy process, I shed light on the reasons why top managers initially evade participation but change their behavior over time.

To sum up, the findings of this study significantly contribute to the targeted research streams: the concept of strategy as practice as well as the concept of sensemaking in the context of public management research.

## **5.2 Implications for Practice**

The findings have several important implications for practice to achieve better planning and steering of strategy processes and, finally, more successful strategic IT projects in public administration:

First, recognizing the relevance of interpretive, coping, and identity-building practices, public managers can better prepare for the complexity and the dynamics of sensemaking during strategy processes.



Additionally, ambiguity plays an important role: On one hand, a certain degree of ambiguity may enhance creativity and trigger spontaneous action, which may result in better solutions. On the other hand, the study suggests that public managers have to diminish confusion and ignorance at the expense of clear roles or team identity. As a result, public managers have to observe the level of ambiguity carefully throughout the strategy process. By influencing environmental factors that increase ambiguity or redesigning conditions for better interaction or individual initiatives, public managers are able to regulate the level of ambiguity.

Second, this study suggests that public managers should create the conditions for improved interaction and more individual initiatives. Moreover, they have to establish a common operational mode which accepts ambiguity and allows for an appropriate way to handle it. For many top managers and politicians it is a great challenge to act in highly ambiguous situations. Ambiguity which enables public entrepreneurship also means that there is no certainty about process or the objectives. In ambiguous contexts, the source of legitimacy does not simply rely on political directives (top-down); rather, it evolves from individual experiences, interactions, and cognitive processes. Thus, the results of this study support the value of the concept of entrepreneurial behavior with regard to achieving strategic goals. Top and middle managers as well as politicians and other organizational members require appropriate guidance to become accustomed with this concept and gain the maximum benefit from future strategic projects.

Third, as outlined in the study, public managers perceive the directive mode of managing change as desirable in challenging strategy processes. However, as public organizations are seldom in situations requiring turnaround management practices, the need for a sudden and radical change is rare. Therefore, public managers may start a strategy process using order and control mechanisms. However, in order to win the hearts of the organizational members and make it a sustainable success, public managers have to involve managers from lower levels and other employees in an appropriate way.

### **5.3 Limitations of this Study**

The research conducted in this study is subject to several limitations that have to be taken into account when interpreting its results. First, the data of the study is based on a case study conducted in a canton of Switzerland. Even if the cultural background of countries others than Switzerland is seen as comparable, significant differences would exist regarding the political system, administrative structures, and public management approaches. Accordingly, the specific national context has to be acknowledged when interpreting and transferring the results.

Second, the study is based on a longitudinal single case study. In terms of generalizability, the identification of episodes allowed a within-case analysis. I argued that a longitudinal single case study is the best method for analyzing the research question and tracing developments over time. However, extrapolating findings to other cases requires a thoughtful assessment of the case-specific peculiarities.

Third, since the focus of the study is exploratory, the objective of the study was not to prove the influence of certain mechanisms, generalize ideas, or to generate a theory of the dynamics of sensemaking. Instead, the study opens the black box of strategic processes and reveals the process of adapting managerial practices on a micro level. The findings, which have highlighted the role of interdependent bundles of practices (interpretive, identity-building, coping), ambiguity, and the way these practices and ambiguity are mutually shaped, shed light on topics that require further exploration. The following chapter addresses potential future research work to complement the findings of this study.

### **5.4 Future Research Directions**

This study is based on an exploratory research design. Accordingly, an important future contribution to research lies in generalizing the

findings of this study by complementing the identified practices and dynamics through further analyses in different contexts. Furthermore, future research might focus on particular aspects of this study and deepen the understanding of actions, interactions, and behavioral patterns in strategic processes. As I identified the strategy-as-practice perspective as useful in researching the object of interest, I suggest also basing future research on the same theoretical framework. Additional research work may also establish a view of strategy which stresses the dynamic interrelationship between different identified influencing factors (e.g., organizational power, experiences, interests) at different points in times.

The strategy-as-practice community is still very young. While most researchers embrace the approach of refocusing organization studies to the actors' doing, several articles criticize this approach. Most critics aimed at improving and sharpening the research field and, therefore, helped to identify research gaps. The most frequent topics were: lack of differentiation from strategy process tradition (Whittington, 2007), terminological looseness (Chia and MacKay, 2007), an analytical focus solely on top managers (Jarzabkowski et al., 2009), and similarities to the *Power School* of strategy (McCabe, 2010).

Carter et al. (2008, p.96) went even further in insisting that strategy-as-practice research only reproduces "conventional notions that strategy concerns top management teams and their corporate ambitions", while restricting itself "to a narrow and undertheorized view of practice". Indeed, taking completely novel paths requires a new way of thinking, of doing research 'out of the box'. Therefore, the remarks critical of conventional notions and undertheorized views may seem to be an oxymoron. Striking new paths in research also means doing something without having the interpretation at hand. As Weick (1979, p.207) states: "How *can I know* what I think *until I see* what I say?"

The solution for the strategy-as-practice field, as Whittington (2007, p.1584) notes, is "to grow up by taking its place outside the immediate". There is a growing interest in communication, action, behavior

and rhetoric as fruitful perspectives for understanding the new meaning of strategizing and organizing (Whittington and Melin, 2003).

Therefore, the strategy-as-practice community will grow with every study and each insight added to its body of knowledge. There will be studies that prove and disprove results and help to further develop strategy as practice in a theoretical manner. Like this study, there will be additional efforts to close research gaps and contribute to an inclusive picture of the strategy-as-practice field. This is an important issue for future research.

Researchers are now increasingly taking into account the process-based and socially constructed character of cognition and sensemaking in organizations (Allard-Poesi, 2005). Hence, the level of analysis is shifting from individual, group or organizational levels of analysis to interactions. Research tends to focus on detailed, situated, and concrete practices and interactions. This is also accompanied by the adoption of micro or interpretivist methodological approaches such as participant observation, open interviews, conversational analysis, and interaction analysis (Allard-Poesi, 2005).

However, more research on this topic must be undertaken to reach a better understanding of the interrelations of all of the factors involved. To date, a dynamic view of strategy that "highlights the dynamic interrelationship among different factors at different times" in the strategy process is still vague (Regnér, 2008, p.574). Such a theory would emphasize the significance of inter-linkages and interdependencies between "activity configurations that involve specific combinations of certain actors, socio-cultural contexts, cognitive frames, artifacts and structural properties, besides diverse practices" (Regnér, 2008, p.574).

New research approaches, as expressed by the strategy-as-practice community, have the potential to pave the way toward a theory which helps us to understand the simultaneous or reciprocal engagement of different parties in sensemaking activities and to predict the ways in which generated accounts are aligned or not (Maitlis, 2005).

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## Annex

### Annex I: Questionnaire (German and English)

#### *Questionnaire Original Version*

##### A) Vorbereitung Interview

- Vorstellung des Interviewers
- Dank für die Bereitschaft zum Interview
- Dem Gesprächspartner wird die Möglichkeit gegeben, Fragen zum Ablauf oder zum Forschungsvorhaben zu stellen
- Versicherung, dass die Daten nur für Forschungszwecke verwendet werden
- Einverständnis zur Tonbandaufnahme

##### B) Geschlossene Erzählaufforderung

"Wie Sie wissen, schreibe ich an meiner Dissertation, die den IT Strategieprozess im Kanton CH1 untersucht. Die Interviews sollen dazu dienen, die bereits getätigten Beobachtungen zu validieren.

Deshalb möchte ich sie bitten, mir aus Ihrer Perspektive verschiedene Aspekte des IT Strategieprozesses zu erläutern. Im Fokus steht dabei die Arbeit des IT Boards im Rahmen der IT-Strategieentwicklung.

Zunächst möchte ich Sie bitten den IT-Strategieprozess aus Ihrer Perspektive zu beschreiben mit allem, was ihnen dabei als wichtig erscheint (Meilensteine, Phasen, Akteure, externe und interne Entwicklungen).

Fangen Sie am besten damit an, mir kurz zu erzählen, welche Aufgaben ihre Funktion generell umfasst und gehen sie dann über wie sich ihre Arbeit im Rahmen des IT-Boards zu Beginn anfangs 2007 und im Verlauf bis zum heutigen Tag gestaltet hat. Ich werde Sie bei Ihrer Schilderung, ausser für Verständnisfragen, nicht unterbrechen."

### C) Mögliche Nachfragen

- Gab es Entwicklungen/Ereignisse, die für Sie im Rahmen des IT-Strategieprozesses herausstanden (z.B. besonders positiv oder negativ)?
- Wie beurteilen Sie die Arbeitsweise des IT Boards, hat sich diese im Zeitverlauf verändert?
- Wie würden Sie die Rolle des IT Boards und der Mitglieder des IT Boards beschreiben?
- Wie sehen Sie die Rolle von operativen Managern und Projektleitern im Rahmen des IT-Strategieprozesses?
- Wie würden Sie das Verhältnis zwischen IT-Board, Top Managern und operativen Managern bzw. Projektleitern charakterisieren?
- Wie würden Sie den Prozess der Umsetzungsprojekte von PIT beschreiben?

### *Questionnaire Translated Version*

#### A) Interview Introduction:

- Introduce the interviewer

- Express thanks for the interviewee's willingness to conduct the interview
- Ask the interviewee whether he has questions about the structure of the interview or about the research topic before the interview starts
- Assure the interviewee that the retrieved insights from this interview are for research purposes only
- Ask for permission to record the interview

#### B) Request for uninterrupted description

"As you know, I am writing a dissertation in which I investigate the strategy process in canton CH1. The interviews which I am now conducting are for validation purposes of the already retrieved insights.

Therefore, I would like to ask you to explain certain aspects of the strategy process from your personal perspective. I would like to focus this interview on the work of the IT board in the context of the IT strategy process.

First, I would like to ask you to describe the IT strategy process from your perspective. Please mention all aspects which you think are important (milestones, phases, and actors as well as external and internal developments).

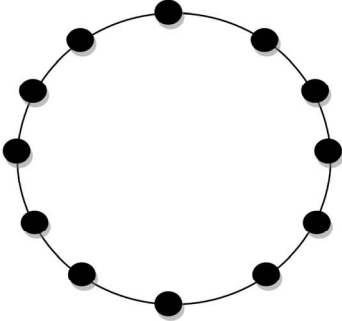
Please start with a brief introduction of the responsibilities of your function and proceed with a description of your contribution to the IT board from 2007 onward until today. I will only interrupt your description with questions if I do not understand an aspect of your story."

#### C) Potential questions

- Did you perceive any developments or events as outstanding or extraordinary (in a positive or negative sense) regarding its impact on the IT strategy process?
- How would you assess the working style of the IT board? Did the working style change after time?
- How would you describe the role of the IT board and the role of its members?
- How would you describe the role of the operative management and the project managers in the IT strategy process?
- How would you characterize the relationship between the IT board, top managers, and operative managers or project managers?
- How would you describe the process of the implementation projects of PIT?

## Annex II: Observation Protocol Templates

### Template for IT Board Meetings (own illustration)

Participants	Department	Seating (normal surrounding)
Top manager 1 (TM1)	SC	
Top manager 2 (TM2)	SC	
Top manager 3 (TM3)	DF	
Top manager 4 (TM4)	DI	
Top manager 5 (TM5)	DC	
Top manager 6 (TM6)	DE	
Top manager 7 (TM7)	DH	
Top manager 8 (TM8)	JA	
Top manager 9 (TM9)	SIO	
Consultant (C)	Firm A	
IT manager (IT1)	SC	
Project Manager 1 (PM1)	SIO	
Project Manager 2 (PM2)	SIO	

Meeting IT-Board

Date

Time

...

...

...

Is something striking beforehand?

(e.g. atmosphere, different surrounding, many sick notes, problematic topics on the agenda, guests)

...

How does the IT board meeting proceed?

(e.g. who says what, are topics on the agenda spared, who is involved the most, who is not involved at all, who is talking with whom the most, what is the atmosphere like during breaks, are conflicts between participants obvious, what are the most critical topics, does somebody leave before the meeting ends/does somebody come later, was the meeting finished on time)

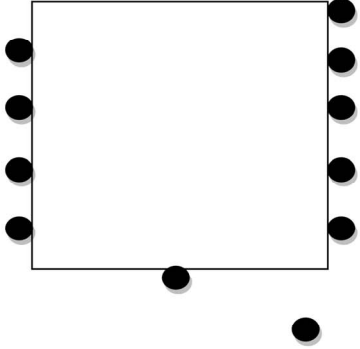
...

What is the main impression of the meeting?

(e.g. time pressure, disinterest, conflict, intense engagement of few top managers)

...

### Template for PIT Project Meetings (own illustration)

Participants	Department	Seating (normal surrounding) 
Top manager (TM1)	DF	
Top manager (TM2)	SIO	
Consultant (C)	Firm A	
Project manager (PM1)	OCI	
Project manager (PM2)	OCI	
Project manager (PM3)	DF	
IT manager (IT1)	DF	
IT manager (IT2)	DF	
IT manager (IT3)	DE	
IT manager (IT4)	DI	

PIT project meeting

Date

Time

...

Is something striking beforehand?

(e.g. atmosphere, different surrounding, many sick notes, problematic topics on the agenda, guests)

...

How does the project meeting proceed?

(e.g. who says what, are topics on the agenda spared, who is involved the most, who is not involved at all, who is talking with whom the most, what is the atmosphere like during breaks, are conflicts between participants obvious, what are the most critical topics, does somebody leave before the meeting ends/does somebody come later, was the meeting finished on time)

...

What is the main impression of the meeting?

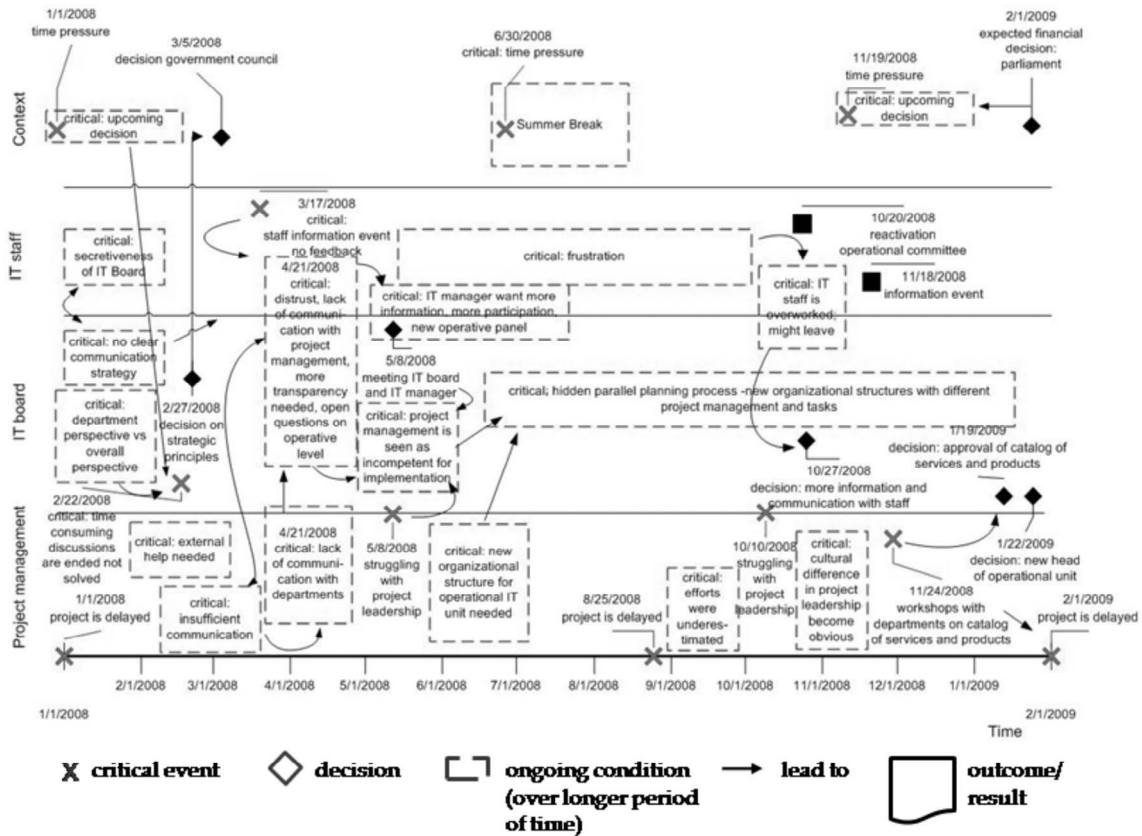
(e.g. time pressure, disinterest, conflict, intense engagement of few participants)

...



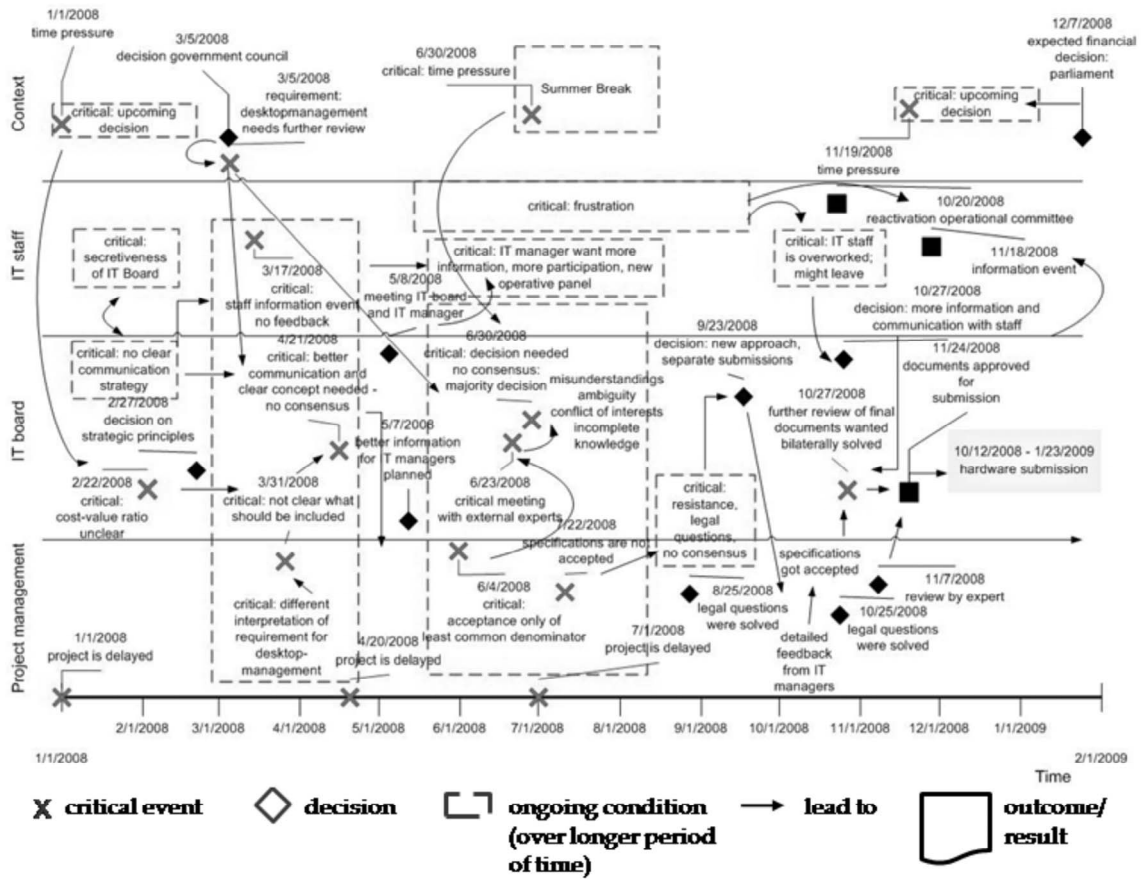
## Annex III: Visual Maps

### Strategy Process and the PIT Project New Cantonal IT Organization



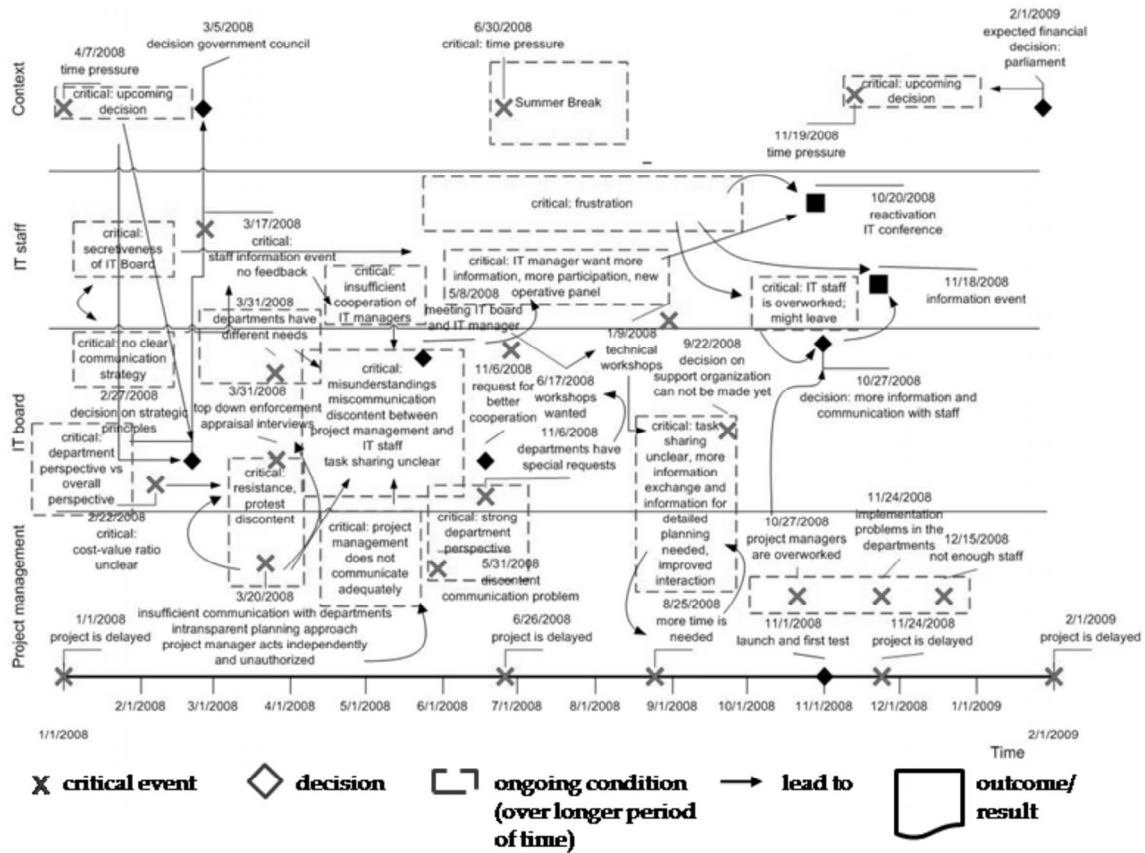
Source: Own illustration

Strategy Process and the PIT Project Coordinated Procurement



Source: Own illustration

## Strategy Process and the PIT Project Server Centralization



Source: Own illustration

## Annex IV: Comparing Data

### Process Design and Process Context

1 <sup>st</sup> -order concepts	2 <sup>nd</sup> -order concepts	Aggregate dimensions
<ul style="list-style-type: none"> <li>- Agreements and decisions in brief span of time needed</li> <li>- Enforcing decisions without further discussions</li> </ul>	Time Pressure	Process Context Factors
<ul style="list-style-type: none"> <li>- Support from political cabinet as most important/ Rejection feared</li> <li>- Legitimacy for decisions wanted</li> <li>- Financial restrictions feared</li> </ul>	Political Pressure	
<ul style="list-style-type: none"> <li>- Lack of engagement in the process</li> <li>- Fear of Failure</li> <li>- No consensus about course of action</li> <li>- Little openness and transparency</li> <li>- Interests of individual departments dominating</li> <li>- Missing coordination of projects</li> <li>- Different management perceptions</li> <li>- Strict orientation on cabinet decisions</li> <li>- Low interest in operative level</li> <li>- Unclear how to handle independent initiatives of operative managers</li> <li>- Negative experiences foster</li> </ul>	Uncertain Roles/ Ambiguous management concept	Process Design Factors

<b>1<sup>st</sup>-order concepts</b>	<b>2<sup>nd</sup>-order concepts</b>	<b>Aggregate dimensions</b>
perceived ambiguity		
<ul style="list-style-type: none"> <li>- Clarification of tasks and responsibilities</li> <li>- Exchange of views and opinions</li> <li>- Differentiation of roles between organizational members</li> </ul>	Vague Identity	
<ul style="list-style-type: none"> <li>- Undetermined communication concept</li> <li>- Unclear how to handle criticism</li> <li>- Situational and emotional responses</li> <li>- Little communication with other organizational members</li> <li>- Being somewhat impolite</li> <li>- Top-down managed change</li> <li>- Asymmetric level of information</li> <li>- No communication of unclear goals or tasks</li> </ul>	Unclear Communication	
<ul style="list-style-type: none"> <li>- Pressure and influence on other top managers</li> <li>- Asymmetric information level</li> <li>- Distrust/Misunderstandings</li> <li>- Determination of the agenda for meetings</li> <li>- Limiting discussion</li> <li>- Lack of willingness or capability to engage</li> <li>- No support or personal effort within the team</li> </ul>	Organizational Power and Voice	

<b>1<sup>st</sup>-order concepts</b>	<b>2<sup>nd</sup>-order concepts</b>	<b>Aggregate dimensions</b>
- Respected authority during negotiations and decision making		

Source: Own illustration

# Curriculum Vitae

## > Personal Data

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Name Alexandra Collm  
Date/Place of Birth October 28, 1980; Berlin, Germany  
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## > Education

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02/2006-09/2011 University of St.Gallen, Switzerland;  
PhD Candidate.  
02/2009-05/2010 Syracuse University, Syracuse, NY, USA;  
Visiting Scholar, Scholarship from the Swiss National Science Foundation.  
09/1999-08/2005 University of Potsdam, Germany;  
Graduate Student Diplom Verwaltungswissenschaft (Public Administration and Governance).

## > Professional Experience

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Since 02/2006 University of St.Gallen, St.Gallen  
Institute for Systemic Management and Public Governance (IMP), Research Associate.  
06/2003-01/2006 Institute for eGovernment (IfG.CC), Potsdam;  
Research Assistant.  
03/2004-12/2004 Gesellschaft für Technische Zusammenarbeit (GTZ), Eschborn and Loja, Ecuador; Internships:  
Trade Policy, Promotion of Trade and Investment; Regional Economic Development.  
03/2002-05/2002 Department of the Interior and Sports, Berlin,  
Commissioner for Public Management Reform;  
Internship.  
08/2001-12/2003 Kommunalwissenschaftliches Institut, Potsdam,  
Research Project *Electronic Local Government* (eLoGo); Student Research Assistant.