Unpackaging IT Governance

A study of Chief Information Officers in Large, Swedish Organizations

Johan Magnusson

Till Nils Theodor Balthazar

Acknowledgements

To show the depths of my thanks to the individuals who really have made all the difference in the writing of this thesis, I will refrain from offering thanks to everyone who has played a part in my life (and thereby this thesis) for the last couple of years. Instead, I will focus on those individuals who were directly involved and necessary for my reaching this point.

First, my sincere thanks to Professor Olov Olson and Dr. Urban Ask for not letting go of my hand during these strange years. Second, I want to thank my wife, Maria, for her understanding and support in the periods when I was far, far away from her and our family. Third, I want to thank the Söderberg Foundation for the grants that I have received during the last couple of years, allowing me for the first time since my enrollment as a PhD student in 2003 to spend time with my research. Finally, I would like to thank Professor Tero Päivärinta for his thorough review of my manuscript before my last internal seminar.

Göteborg, August 14

Johan Magnusson

In vain have I striven, / to teach my heart to bow; / In vain have I said to him

/ "There be many singers greater than thou." Ezra Pound, Praise of Ysolt 1-4

CHAPTER 1

Introduction

In this chapter I give an overview of the motivation, aim and contribution of the research presented in this thesis. After this, I outline the structure of the thesis.

Research motivation

Information Technology (IT) has during the last decades become a central tenet in the infrastructure for value-creation (Gupta, 1991; McAfee and Brynjolfsson, 2008).

To manage and successfully ensure the efficiency and effectiveness of IT as a corporate resource, organizations have turned to what is referred to as *IT Governance*.

IT Governance integrates the governance of IT in the overall corporate governance processes (Ross and Weill, 2004). This integration is intended to align IT with business, ensuring that the supply and use of IT is both efficient and effective (Schwartz and Hirschheim, 2003). Successful IT Governance will, according to its propagators, ensure increased competitive advantage and bottom line financial results (Weill, 2004; Van Grembergen and De Haes, 2009) of the organization. In other words, regardless of whether IT matters or not (Carr, 2003), IT Governance *does* matter.

Previous studies of IT Governance have suffered from what Sumbamurthy and Zmud (2000) refer to as over-simplifications and an overly normative outset.

The research has focused on the marketing of ideas and frameworks (Lukka and Granlund, 2002) for IT Governance, rather than understanding the everyday *practice* of IT Governance and its construction.

Today, IT Governance is one of the key activities related to the strategic management of Information Systems (IS, a term used to address the IT function within an organization) in large organizations (Schwartz and Hischheim, 2003). Many organizations apply the same type of "recipes" (Røvik, 2005) for IT Governance, yet at the same time, IT Governance practice is far from uniform (Ross and Weill, 2005).

One perspective that aids our understanding of this diversity in IT Governance practice is the Sociology of Translation as applied mainly by Scandinavian institutional theorists (Czarniawska and Sevon, 2005). According to this school of thought, the non-isomorphism of IT Governance practice can be explained by the metaphor of *translation*.

When a management idea (Czarniawska and Sevon, 2005) such as IT Governance, is adopted by an organization, it is translated to fit the intended organizational context. Hence, it is *adopted* as IT Governance, and yet the *content* of IT Governance may vary substantially between different adopting organizations.

Sahlin-Andersson (1996:70) highlights the need for research into this phenomenon:

> *In order to make sense of the fact that organizations simultaneously reveal a striking homogeneity and heterogeneity, we need to understand both how the 'diffusion' happens and how forms and practices are shaped and reshaped in various stages of this process.*

Czarniawska and Jorges (1997:46) present a process model for understanding the metaphor of translation. According to their model, externally produced management ideas are adopted by an organization through a process of embedding. As proposed by Erlingsdóttir and Lindberg (2005), *unpacking* is the process where the external management idea is related to the internal institutional environment of the organization. After this step, the management idea is either institutionalized or rejected (or a mix of the two).

This process of translation has been studied in numerous and various settings with the focus on different management ideas such as, for instance, Total Quality Management (Quist, 2003), Corporate Governance (Buck and Shahrim, 2005), Eco-management (Baas and Boons, 2000), Strategic plans and websites (Hwang and Suarez, 2005), IT Management (Doorewaard and van Bijsterveld, 2001) and rational myths (Zilber, 2006).

3

If we regard the process model of translation as existing in the space between a sender and a receiver of ideas, we are faced with a methodological choice of focus. We could, on the one hand, focus on the sender side of the process by targeting the materialization of ideas – their creation and sending in the overall diffusion of ideas. We could, on the other hand, focus more on the receiving-end of the process by targeting the adoption and adaptation aspects of the translation.

Researchers such as Djelic (2007), Lervik et al, (2005) and Strandgaard, Pedersen and Dobbin (2006) highlight the need to pursue the latter of these two methodological alternatives with a focus more on the personal, receiving-end in the process of translation.

In the process model that Czarniawska and Joerges (1996) present, there is a focus on the unpacking and re-embedding phases of translation. Lervik et al. (2005:356) support this focus:

> *It is important for research to focus not only on identifying which best practices are good or bad for business, but also conduct research on the process of unpacking.*

This decision to focus more on the receiver-end of the process of translation also calls for a different level of analysis than that of the traditional organizational-field level analysis (Djelic, 2008). Further exploration at the personal level may prove fruitful (Strandgaard et al., 2006).

As far as the receiver-end of the translation of IT Governance as a management idea, the person most responsible (and hence the person primarily involved) is the Chief Information Officer (CIO). This individual, defined as "*The highest ranking IS executive…*" (Grover et al., 1993:108), is seen as the primary receiver of management ideas affecting the fundamental structuring and management of IS.

Previous studies of this occupational group[1] have not focused on the role of the CIO as a receiver of new management ideas. Instead, as noted by Sambamurthy and Zmud (2000), there has been a primarily normative outset on which best practices best suit various organizational contingencies.

---

[1] At this point, the CIO is not discussed as a member of an existing profession. This point is developed later in the thesis.

Research Question

There is a need for further research into both the personal translation of management ideas in general and the personal translation of IT Governance in particular. Previous research in this tradition has focused largely on the organization and the organization set level (Powell and DiMaggio, 1991). In IT Governance, the management ideas are usually regarded as fixed structures (Sambamurthy and Zmud, 2000).

The aim of this thesis is to contribute to the understanding of the translation of IT Governance. The translation of IT Governance is studied with a particular focus on the unpacking of the management idea. In place of "unpacking," in this thesis I use the term *unpackaging* for a clearer focus on the package as such. Furthermore, the management idea is regarded as comprised of a set of norms.

I formulate my aim as the following research question:

How are IT Governance related norms unpackaged by CIOs in large organizations?

Contribution

In its contribution to theory, this thesis adds to the previous research on the travel of ideas and translation. By infusing concepts such as norms, legitimating accounts, strategies of legitimization, professionalization and marginal man, I have applied a new approach in understanding the travel of ideas and translation. This contribution is further elaborated upon in Chapter 7.

As for the contribution to practice, I have tried to delimit any claims of direct contribution. With this being an academic product directed towards mainly increasing our theoretical understanding, I have chosen not to strive for practical contribution. As a small potential contribution to practice, a general discussion of the findings in relation to the problem area is presented in Chapter 8.

Structure of the thesis

After an introduction to the thesis, the method employed is presented in Chapter 2. This is followed by a presentation of the Theoretical and Empirical Universe of Discourse in Chapters 3 and 4.

Next, Study I and Study II are presented in Chapter 5 and 6, together with a full description of the choice of method for each study along with a synthesis of findings.

After this, the analysis, conclusions and contribution to theory are presented in Chapter 7. In the final Chapter 8, a discussion of the findings in relation to the problem area, limitations of the study and future research mark the end of the thesis.

CHAPTER 2

Method and Methodology

In this chapter I give an overview of the method and methodology used in the thesis, as well as an explanation of the ways in which different theories are relevant to my research process. More detailed descriptions of my method and methodology appear in Chapters 5 and 6.

Research Design and Approach

In order to answer the research question and contribute to the theoretical development within translation studies, I have operationalized my research question through two sequential studies. These studies (Study I and II) take a starting point in a consulting study of IT Governance, targeting CIOs in 27 large, Swedish organizations[2]. Figure 1 illustrates the research process.

---

[2] The names of these organizations have been omitted from this study due to integrity issues for the respondents. Further information on the distribution of industries and general demographics can be found in Chapter 5.
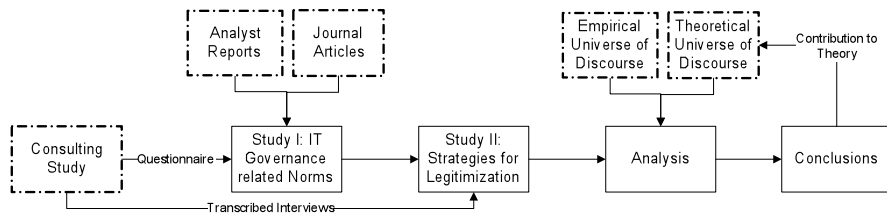
Figure 1. The research process

I choose to regard IT Governance as a management idea. In order to gain further understanding of this management idea I choose to see it as constituted of a set of *norms*.

The concept of norm has a long tradition of inquiry within deontic logic (von Wright, 1954) and many definitions. For this thesis, I choose Ross's definition (1968:82): *"...a directive which stands in a relation of correspondence to social facts".* This definition highlights the role of norms as shared and sanctioned guidelines. The management idea is hence seen as constituted of a set of norms, whereby the set of norms becomes a proxy for the management idea.

The purpose of Study I is to identify and validate IT Governance related norms by triangulating three data sources (structured consulting interview guidelines/questionnaire, research articles and professional analyst reports) using three different methodological approaches (narrative structures, content analysis and literature review). The result of this data- and method triangulation is a list of validated, IT Governance related norms to be used in Study II.

The choice in method and methodology for Study I was done with the intention of finding solid ground for Study II. Through triangulating three different actors views of IT Governance related norms, the validity of the norms identified in the consulting study could be investigated[3]. For a more detailed description of the method employed in Study I, see Chapter 5.

The purpose of Study II is to identify and describe strategies that CIOs use to legitimize their positions towards the norms of Study I. These *strategies of legitimization* are regarded as an operationalization of unpackaging. The empirical material for this study consists of transcribed and translated interviews with a selection of CIOs of large, Swedish Organizations. These

---

[3] One byproduct of this validation was the finding that the three actors supported the same IT Governance related norms. This in turn offered additional empirical support for applying Professionalization theory to the findings, which is explained in more detail later on in this chapter.

interviews were conducted during the spring of 2006, using the same questionnaire as was part of the empirical material for Study I. The result of this analysis is a cross-sectional description of how CIOs use strategies of legitimization. The CIOs are seen as representatives of the receiver-side of IT Governance.

Legitimacy has long been regarded as an anchor-point of institutional theory (Suchmann, 1995). Maintaining legitimacy involves signaling harmony with external norms and values (Ashforth and Gibbs, 1991). This highlights the necessity to be involved in *legitimating practice* in order to ascertain and uphold legitimacy, not only at the organizational but also at the personal level. From the perspective of the worker and the organization, this is commented on by Brown (1978:372):

> Like "primitive man" who must patch together (bricoler) accounts of what goes on around him… so the modern worker must make "myths" ad hoc that reconcile the actual processes of his work with the official rhetoric of the organization.

Thus, there is a symbolic aspect involved in the process of translation. According to Czarniawska and Sevon (1997, 2005), this aspect is studied through the application of elaborate ideas about imitation (Tarde, 1979) and fashion (Abrahamson, 1991). Imitation focuses on how organizations change and fashion focuses on how people involved in the imitation actually know what to imitate (Czarniawska and Sevon, 2005:9).

Applying the definition of legitimacy by Ashforth and Gibbs (1991), there are clear links between involvement in legitimating practices and signaling being in tune with fashion (i.e., being fashionable by following a set of norms). Hence, the translation of management ideas involves an element of legitimization *and* thereby also a link to the concept of "norm"[4].

The choice in method and methodology for Study II was done with the intention of finding a means for identifying variations in the use of strategies of legitimization between the different norms. Through using a cross-sectional rather than a longitudinal approach, patterns of variation could be identified. For a more detailed description of the method employed in Study II, see Chapter 6.

The analysis involves the application of assumptions derived from the Empirical and Theoretical Universe of Discourse (Chapters 3 and 4). In the Theoretical Universe of Discourse this involves three theoretical perspectives.

---

[4] This does not imply that I see legitimization as the sole motive for translation (see Røvik, 2005 for a discussion on different motives for translation).

The first is Scandinavian Institutional Theory (Czarniawska and Sevon, 2005), and more precisely the Translation perspective. The second is the Professionalization Perspective from the Sociology of Work and Occupations with Abbott's (1988) model of inter-professional conflict. The third is the theory related to the Marginal Man (Park, 1928).

The rationale for choosing these particular theories to aid in the analysis is related to the questions that are addressed by the theories themselves. As for Translation (Czarniawska and Joerges, 1996), this has devoted considerable efforts to answering the question of how organizations and individuals adopt new management ideas. With IT Governance being an example of a management idea, the theory is considered relevant.

The theory of Professionalization (as presented by Abbott, 1988) has focused on understanding how professions evolve. The management idea of IT Governance is in this thesis seen as constituted of a selection of norms. With the profession as a bearer of norms (DiMaggio and Powell, 1983), the profession itself becomes a relevant level of analysis. With the professional status of the CIO being questioned, this evolutionary perspective of the profession is considered relevant[5].

The theory of the Marginal Man (Park, 1928), attempts to answer the question of how an individual can exist in two social worlds at the same time. With the CIO existing in both her functional area (IS) and the higher cadres of management, this theory is regarded as relevant for a personal level of analysis.

Table 1 summarizes the methods and theories used in this thesis.

Study	Research objective	Empirical foundation	Methodology	Theory
I	Identify and validate IT Governance norms	Consulting questionnaire, research articles, professional analyst reports	Triangulation of narrative structures, content analysis and literature review	Luhmann's Theory of Paradoxes

---

[5] An empirical rationale for choosing the theory of Professionalization was the finding of homogeneity when concerning which norms were supported by the targeted actors in Study I. A consensus concerning which norms are valid in between different actors could indicate the existence of professional mechanisms (DiMaggio and Powell, 1983).

11

| II | Identify and describe strategies used by CIOs to legitimate their positions vis à vis these norms | Interview transcripts | Motive talk and Speech Acts | Motive Talk, Speech Act Theory, Legitimating Accounts |
| Analysis | Answer the research question | Study I and Study II | | Translation, Professionalization and Marginal Man |

Table 1. Summary of research objectives, empirical foundation, methodologies and theories

Previous studies of the process of translation (see Czarniawska and Sevon, 1997 and 2005) for an overview) have to a large extent focused on cases where the translation of a successful management idea has been studied in retrospect. In other words, studies have mainly concerned concepts that have taken the step towards institutionalization. As Sturdy (2004:171) notes:

> *Furthermore, ideas and practices that are abandoned and, in particular, those which fail to get widely disseminated and the processes through which this occurs, would provide an important and insightful corrective to the attention given to popular and sustained ideas.*

In addition to this, previous research has chiefly used ethnographically-inspired longitudinal case studies and advocated procedural understanding. Lervik et al. (2005: 356) sees this as an attempt to counter-act a methodological bias reported as predominant in traditional diffusion studies:

> *...the methodological implications call for qualitative, longitudinal studies to grasp the dynamics of implementation processes. Large-scale, cross-sectional studies of adoption and transfer are based on an 'object' ontology, seeing 'best-practices as immutable objects... Further research could aim to capture the evolving dynamics of HRD best practices as they are being taken up by recipient firms. Scandinavian institutionalism provides some case studies in this tradition... but these studies have put less emphasis on the internal implementation dynamics of recipient firms.*

This thesis takes a somewhat different approach towards the study of translation.

First, instead of focusing on one instance of translation in a longitudinal setting, I chose a cross-sectional field study approach (Lillis and Mundy, 2005). The interviews were conducted with a wide variety of large organizations in

explicit situations where the respondents were considered to be involved in the unpackaging of IT Governance. This entails that a large number of instances of one particular sub-process of the overall translation process was selected.

Second, no interest was shown to the factual practice of IT Governance in the targeted organizations. With the study's clear focus on norms and the individual legitimization, the object of analysis in my study is the individuals involved in the translation, not their organizations and their practice. This focus responds to the second call from Lervik et al. (2005) to take a clear look at the internal perspectives of the receiver-end, while at the same time taking a step away from longitudinal case studies.

Third, the vehicle used to understand the legitimization was natural language as it appeared in the accounts of the CIOs. These accounts were regarded as *legitimating accounts* (Creed, Scully and Austin, 2002), whereby the truth-value of the statements as such was irrelevant to the study. Regardless of whether there would be a vast difference between what was said and done, the focus is on what was said.

As noted, the empirical foundation for this thesis is based entirely on secondary data. While there is a strong tradition in quantitative research in the use of secondary data (often referred to as *secondary analysis*), the use in qualitative research has long been an underdeveloped area (Jick, 1979; Kirk and Miller, 1986).

There is, however, potential critique of this approach that needs to be addressed.

First, the reliability and validity of the consulting study needs to be addressed in order for the researcher to get an opinion of the potential shortcomings of the secondary material. The research design of the original study falls outside the control of the researcher, and with different standards of quality this becomes an issue for the subsequent secondary analysis.

Second, the researcher's role as a person involved with the creation of social order needs to be addressed. According to the critical research tradition, the researcher must be aware of her role as an active agent in the ongoing construction of reality (Tinker, 1991). The use of secondary material from a consulting study could, if used without reflection, lead to the cementation and validation of the views inherent in the consulting study.

On a more positive note, the use of secondary material in this thesis has given access to respondents who might otherwise have been beyond the reach of traditional research methods. As the respondents were senior executives in 27

13

of the largest organizations in Sweden, the opportunity to gain access to their accounts is regarded to be a significant strength.

Furthermore, I was personally involved as an external consultant in conducting the interviews. This position gave me certain insights into both the design and realization of the study, as well as a better position to assess the value of the empirical material. This type of subjectivity has traditionally been seen as a source of bias, but Alvesson and Kärreman (2007) consider it to be a resource for increased interpretive ability.

15

CHAPTER 3

Theoretical Universe of Discourse

In this chapter, I present the theoretical universe of discourse of the thesis. My intention is to give the reader an overview of how four separate bodies of knowledge are applied in the thesis. First I present the pre-requisites for the choices in Institutional Theory followed by sections on Translation, Professionalization, and the Marginal Man. Each section summarizes the key assumptions used in the thesis from these separate areas of inquiry. This overview provides the reader with a discussion of the theoretical choices as far as the assumptions, models, and definitions used in the thesis.

Selection

In order to answer the research question of this thesis I have selected three main theories to constitute my theoretical universe of discourse[6]. The theories are selected with the motive of further enhancing and enriching my analysis. This process is explained in more detail in the Chapter 2.

Institutional Theory

This section summarizes three variants of Institutional Theory – Old Institutional Theory, New Institutional Theory, and Scandinavian Institutional Theory – and their separate influences on this thesis. On a general level, these three variants of Institutional Theory help us understand different aspects of the homogeneity that exists among organizations. Whereas Old Institutional Theory and New Institutional Theory approach this homogeneity by trying to understand its mechanisms, Scandinavian Institutional Theory tries to understand the existence of paradoxical states in the process of homogenization.

Old Institutional Theory: The Structural Aspects of Homogeneity

Scott (1987, 2001, 2003) describes how Institutional Theory (in his words, its "adolescence") has evolved since the late nineteenth century. By developing several models for communicating the multiplicity of theoretical influences on Institutional Theory (ranging from Hegel and Marx to Garfinkel and Czarniawska), Scott has enhanced our understanding of Institutional Theory, in particular its application of theoretical constructs.

The research area of Institutional Theory seems relatively heterogeneous given the fact that there are many different definitions of the central term, "institution." Table 2 lists some of these definitions along with a focus description.

Source	*Definition or focus*
Sumner (1906:53)	"an institution consists of a concept (idea, notion, doctrine, interest) and a structure"
Davis (1949:71)	"a set of interwoven folkways, mores, and laws built around one or more functions"
Hughes	"(1) a set of mores or formal rules, or both, which can

---

[6] The Universe of Discourse refers to "an inclusive class of entities that is tacitly implied or explicitly delineated as the subject of a statement, discourse, or theory". Merriam-Webster, 2009.

(1939:297)	be fulfilled only by (2) people acting collectively, in established complementary capacities of offices"
Marx (1844/1972)	Ideas and ideology
Weber (1924/1968)	Cultural rules define social structure (and behavior)
Durkheim (1893/1949)	Symbolic systems enacted through rituals
Parsons (1937)	Systems of norms stipulating relationships
Berger and Luckman (1967)	Shared knowledge and belief systems
Selznick (1957:17)	"In what is perhaps its most significant meaning, 'to institutionalize' is to infuse with value beyond the technical requirements of the task at hand."[7]
Stinchcombe (1968:107)	"a structure in which powerful people are committed to some value or interest"
Simon (1945/1997)	The individual is supplied with beliefs regarding means-end relationships

Table 2. Previous definitions and foci in Institutional Theory (adapted from Scott, 2001)

Concerning the idea that institutions instill value, researchers, notably Selznick (1949), have highlighted the use of external sources for the establishment of the collective whole. According to Scott (1987:494), instilling value promotes stability, which in turn leads to "a persistence of the structure over time." This view is also central in the writings of Weber (1924/1968) and Marx (1844/1972) who found a causal relationship between the use of structure and concepts and how value is instilled. Hence, if social reality is a shared reality (Berger and Luckman, 1967) then the elements of reality will influence the level of homogeneity among organizations. Given this view, Scott's (1987) first perspective of institutionalization as a process of instilling value establishes the homogenizing effect that institutions have on the organization in the process of supplying structure with a source of stability.

New Institutional Theory: The Cognitive Aspects of Homogeneity

The new institutionalism in organization theory and sociology comprises a rejection of rational-actor models, an interest in institutions as independent variables, a turn toward cognitive and cultural explanations, and an interest in properties of supra-individual unit of analysis that

---

[7] As Scott (1987) notes, Philip Selznick's definition of institutions varied over his entire career, so it is somewhat problematic to use one quotation as representative of his ideas.

cannot be reduced to aggregations or direct consequences of individuals' attributes or motives. (Powell and DiMaggio, 1991:8)

In two seminal works published in the late 1970's (1977), John Meyer extended the research even further by more explicitly arguing that organizations acted under strain of rationality myths. In relating the processes of isomorphism and the effort to achieve legitimacy concerning the existence of myths that influence the structure of organizations, Meyer and Rowan (1977) founded the starting point of a school of thought that is now known as Neo-Institutional Theory that argues that actors and organizations are never free to choose from an unlimited repertoire of actions. Instead, institutions envelope the actor, offering her a choice of possible actions. According to Powell and DiMaggio (1991:10):

Institutions do not just constrain options; they establish the very criteria by which people discover their preferences.

Hence, Neo-Institutional Theory displays the "cognitive turn" in organization theory in which cognitive and cultural aspects of behavior are highlighted instead of the mere functional aspects (eloquently described by Parsons, 1956).

In a much-cited article, DiMaggio and Powell (1983) described how institutions put up bars that form an "iron cage". Using terminology from Weber, they showed how to observe organizations in the same group as they become more and more alike. The iron cage metaphor portrays the *charge-de-affairs* of today's organization with its constant narrowing of the window for possible actions. Thus DiMaggio and Powell offered students of organizational theory a toolbox that could be used to understand why and how organizations change.

A number of articles have addressed change, or more precisely, *adoption of new practices,* in Neo-Institutional Theory. From Tolbert and Zucker (1983) and Zucker (1987) to Washington (2003), Neo-Institutional theorists have tried to understand the process of adoption as something other than an intentional and rational process.

According to Neo-Institutional Theory, change occurs (in the phenomena studied) as the result of a dramatic change in the surrounding and influencing institutions. As the forces on institutions are cognitive in essence, this change is often episodic.

A key to understanding Neo-Institutional Theory is to recognize that individual action is unreflective and routine. In relating this idea to ethnomethodology (Garfinkel, 1958), post-structuralism (Barthes, 1982), and the focus on common understandings and practical reason that regulate our choice of

19

actions, Neo-Institutional Theory steps away from the constructs of commitment, norms, and values used in Institutional Theory by Selznick[8] and associates. Instead, Neo-Institutional Theory incorporates the notion of scripts (Barley, 1986).

Abrahamson (1996) and Benders and Van Veen (2001) take a more nuanced view of the unreflective manager. According to Benders and Van Veen, the concept of fashion regards the manager as a passive follower of fashion. In order to overcome this shortcoming in the concept, they take inspiration from Ortmann (1995) and propose the concept of 'interpretative viability' as an integral part of the study of fashion. Thus they move one step forward towards decoupling and thereby creating a loose coupling between the labels and the content of management ideas. This step permits what Kieser (1997) refers to as a necessary ambiguity of the concept as a pre-requisite for successful diffusion. Benders and Van Veen (2001:38) explain the elements of interpretative viability that are relevant for this thesis:

> *…any concept must necessarily lend itself for various interpretations to stand a chance of broad dissemination. The interpretative viability allows that different parties can each 'recognize' their own version of the concept. These parties may thus accept and even embrace a concept because they see it as being beneficial to their interests.*

Table 3 presents Powell and DiMaggio's (1991:13) comparison of Old and New Institutional Theories.

	Institutional Theory	
	Old	*New*
Conflicts of interest	Central	Peripheral
Source of inertia	Vested interests	Legitimacy imperative
Structural emphasis	Informal structure	Symbolic role of formal structure
Organization embedded in	Local community	Field, sector or society
Nature of embeddedness	Co-optation	Constitutive
Locus of institutionalization	Organization	Field or society
Organizational dynamics	Change	Persistence
Basis of critique of utilitarianism	Theory of interest aggregation	Theory of action
Evidence for critique of	Unanticipated	Unreflective activity

---

[8] Selznick may be regarded as the bridge between institutional and Neo-Institutional Theory because of his strong focus on formal accounts (Scott, 1987; Powell and DiMaggio, 2001).

utilitarianism	consequences	
Key forms of cognition	Values, norms, attitudes	Classifications, routines, scripts, schema
Social psychology	Socialization theory	Attribution theory
Cognitive basis of order	Commitment	Habit, practical action
Goals	Displaced	Ambiguous
Agenda	Policy relevance	Disciplinary

Table 3. Old and New Institutional Theories

Neo-Institutional Theory moves away from the structural and functional aspects of institutionalization and institutional influence and towards a more explicit focus on the individual and her cognitive processes. While Neo-Institutional Theory is still concerned with the issues of homogeneity that were introduced in Institutional Theory, it uses a somewhat different focus. Whereas Institutional Theory views institutionalization as a way to supply structure with a source of stability, Neo-Institutional Theory views institutionalization as a way to give the individual a sense of meaning.

Scandinavian Institutional Theory: The Heterogeneous Aspects of Homogeneity

*The image we are evoking is as follows: guided by fashion, people imitate desires or beliefs that appear as attractive at a given time and place. This leads them to translating ideas, objects, and practices, for their own use. This translation changes what is translated and those who translate. (*Czarniawska and Sevon, 2005:10)

Building on the research of Meyer and Rowan (1977) and March (1999), among others, an alternative view of Institutional Theory evolved during the early 1990s in Scandinavia. Czarniawska and Sevon (1996), who named the theory, describe its ambiguous approach to the concept of change. In their opinion, developments in Neo-Institutional Theory (Powell and DiMaggio, 1991) did not sufficiently address this ambiguity. Czarniawska and Sevon called for a paradoxical view of organizations, or a view accepting logical parallelism. They write:

Change and stability together become an organizational norm, as the logic of appropriateness is seen as complementary to the logic of consequentiality. (Czarniawska and Sevon, 1996:5)

This approach to Institutional Theory is complemented by a more process-oriented focus on the actual institutionalization itself (e.g., Erlingsdóttir and Lindberg, 2005). In focusing on the process rather than the outcome of

21

institutionalization and on the influence of institutions in the organizational environment, Scandinavian Institutional Theory, or the Scandinavian School of Institutionalism (perhaps more accurately, the Scandinavian School of Neo-Institutionalism) takes a constructionist as well as materialistic turn[9] in it approach to studying change. The constructionist turn is evident in the use of the concept of "diffusion" as a model for social change. According to Czarniawska (2005:7):

> *Diffusion has recently been replaced by the notion of translation*.

Czarniawska (2005) believes diffusion is a simplified, mechanistic and deterministic model for understanding the travel of ideas. The "flavor of the day" is instead the notion of "translation,[10]" borrowed from Serres (1982) through the work principally of Latour (1986) and Callon (1986).

This differentiation of translation and diffusion, along with the criticism directed towards the tradition of diffusion studies, is, however, somewhat limited as it is based on a simplified version of diffusion studies (cf. Rogers, 2005). Concepts such as "re-invention" have increased the richness and complexity of diffusion theory, According to Rogers (2005:180):

> *The new idea changes and evolves during the diffusion process as it moves from adopter to adopter. Diffusion scholars now recognize the concept of re-invention, defined as the degree to which an innovation is changed or modified by a user in the process of its adoption and implementation.*

The highly politicized and power-laden concept of translation in the works of Latour (1986) and Callon (1986) are, however, de-contextualized and generalized in Scandinavian Institutional Theory in a model for understanding "little narratives" (Czarniawska and Joerges, 1996:4) that show how ideas materialize, move, and institutionalize,

Given the focus of Scandinavian Institutional Theory on change and the process of institutionalization, a great deal of research has been conducted on institutionalization, or the "idea to action" element of this model (e.g., see Czarniawska and Sevon, 2005). In these articles, there is a high representation of action/practice-oriented studies that are vividly described by Czarniawska and Jorges (1997:41):

---

[9] These turns signify differences in degree rather than direction. I do not argue that Institutional Theory or Neo-Institutional Theory are not materialistic and constructivist.

[10] Etymologically, "translation" refers to the Greek and Latin equivalent for "carrying across." In Greek there is also a differentiation between 'metaphrase' and 'paraphrase'.

The magic moment when words become deeds is the one that truly deserves to be called materialization…

Whereas Institutional Theory depicts institutionalization as the process of supplying structure with a source of stability, and Neo-Institutional Theory depicts it as a process of supplying the individual with a sense of meaning, Scandinavian Institutional Theory emancipates the individual's sense-making by stressing the heterogeneous and receiver-dependent aspects of diffusion.

Translation

…the few and popular management fads that are globally spread are to be regarded as points of departures for local management to deal with, rather than powerful tools in the hands of Top Management. (Trägårdh and Lindberg, 2004:397)

Continuing with the discussion on the break with traditional diffusion studies in the 1990s, the concept of the "travel of ideas" was introduced in Bruno Latour's (1986) seminal work, "Science in Action".[11] The basic premise of the travel of ideas is that ideas are manifestations that are able to travel in time and space, and that, at the same time, may be re-constructed upon adoption. Johnson and Hagström (2005:367) discuss this idea as it relates to the field of political science under the heading of a "constructivist translation perspective" where ideas are seen as "bearers and generators of meaning." This idea agrees with the statement by Trägårdh and Lindberg (1994) at the beginning of this section where management fads are perceived as "points of departures" rather than as ready-made scripts.

In relating their approach to Hacking (1999), Johnson and Hagström (2005) identify three focal points for the study of translation: namely, construction-as-interpretation, construction-as-product and construction-as-process. Of these focal points, construction-as-process is considered most important.

Extending the research using the process-perspective, Lervik et al. (2005) studied the implementation of Human Resource (HR) best practices in a Norwegian firm. They concluded that the implementation of a set of management ideas, such as HR best practices, should be understood as a process of "unpacking". This process relates the travel of ideas to Czarniawska and Jorges's (1996) phased model.

---

[11] Gabriel Tarde (1979) may be an alternative starting point for this line of thought, tracing it back to the late nineteenth century, as well as to the more recent French philosopher, Michel Serres.

23

According to Czarniawska and Joerges (1996), ideas travel by being disembedded, re-embedded and institutionalized. Hence, there is a sending and receiving end in the travel of ideas. Johnson and Hagström (2005) offer some interesting criticism to this model by stating that the phases are interlocked and occur simultaneously. They regard the process of translation as an activity that primarily takes place at the receiving end and as an open-ended, unfinished process, much along the lines of Callon (1986:1) who writes, "…translation is a process, never a completed accomplishment…"

See Figure 3 for Erlingsdóttir and Lindberg's (2005) interpretation of the model proposed by Czarniawska and Joerges (1996) as a four-phase process model of translation.
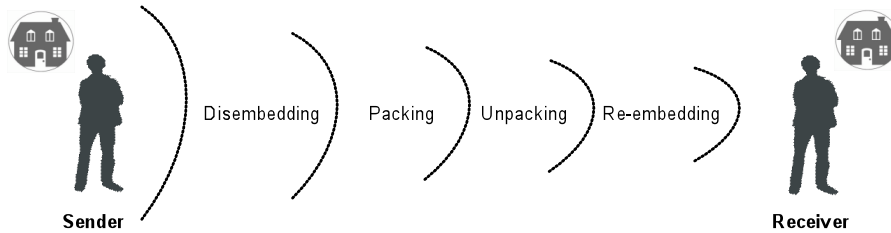

Figure 3. The process of translation (Erlingsdóttir and Lindberg, 2005)

In light of previous process models (moments) for translation, such as the one proposed by Callon (1986), it is apparent that the development of the sociology of translation primarily by theorists in Scandinavian Institutional Theory has taken a somewhat radical turn towards a materialistic interpretation.

In his study of the translation of eco-taxation in Scandinavia, Holm Pedersen (2007) takes a different approach towards the necessary focus of research conducted in the field of the "travel of ideas". In introducing the concept of "cognitive institutions" (Scott, 1995) as a means for securing a stronger focus on the personal level of analysis, Holm Pedersen discusses the process of translation as comprised of two major phases. The first phase is the idea-to-script process where an idea is institutionalized as a set of instructions or cognitive guidelines. The second phase involves the way in which policy-makers choose between different options on the menu of available scripts.

In making this distinction, Holm Pedersen attempts to fill a gap previously identified in the literature on the travel of ideas where the main focus has been on the organizational field level (see Strandgaard Pedersen and Dobbin, 2006; Zilber, 2006). At the same time, Holm Pedersen identifies divergent ontologies

and perspectives in three variants of Institutional Theory (sociological, historic, and rational) that may explain the gap.

Djelic (2007) calls for further research on the receiving end of translation in her lecture on the necessity for a temporal dimension in diffusion studies. According to Djelic, previous research in the field has focused on diffusion as epidemiology, encounters with embeddedness, or as mediation and construction. The first two research areas focus on the societal and population level of analysis, while the third implies a stronger focus on the personal level of analysis. Lervik et al. (2005) and   Strandgaard Pedersen and Dobbin (2006) support this distinction.

By contrasting the findings from organizational culture and Institutional Theory, Strandgaard Pedersen and Dobbin (2006) identify a difference between meaning as socially constructed in organizations (organizational culture) and organizations (Institutional Theory). They argue that the strong focus on legitimacy in Institutional Theory has reached a standstill where the personal level of analysis is methodologically avoided. To relieve this situation, they propose the use of the concept of "identity" (see Sturdy et al., 2006; Alvesson, Ashcraft and Thomas, 2008).

Zilber (2006) broadens this argument when he targets the translation of rational myths from the generic to the specific. After identifying a bias in the structural and practical aspects and a neglect of the more symbolic and cultural processes, he then describes the process of translation and identifies three acts in the process: namely, changes from the wide institutional environment into a local context, changes over time, and changes across institutional spheres.

In his study of rational myths, Zilber (2006) calls for a focus on societal and cultural aspects of translation as necessary to further understanding of the process. This requires a new focus in research not concerned with the organizational field level of analysis or with the structural and practical aspects prevalent in the tradition of Institutional Theory.

This brief review of the research in translation and the travel of ideas leads to a number of assumptions that form the theoretical basis of this thesis:

1. Ideas travel in time and space (Latour, 1986)
2. Ideas are points of departure for management, not ready-made scripts (Trägårdh and Lindberg, 2004)
3. Construction is a process of translation; the travel of ideas is manifested in translation (Johnson and Hagström, 2005)
4. The translation of ideas can be studied as a process involving the packaging, distribution, unpackaging, and institutionalization from a

25

sending-to-receiving line of communication (Erlingsdóttir and Lindberg, 2005; Djelic, 2008)

5. The unpacking of ideas is manifested in the implementation process (Lervik et al., 2005)
6. The study of translation can and should be studied on the personal level of analysis, making the implementation a cognitive process for the receiving end (Holm Pedersen, 2007)
7. Institutional Theory needs to be complemented by alternative approaches in order to understand the process of translation and the travel of ideas on the personal level of analysis (Zilber, 2006)

Professionalization

According to DiMaggio and Powell (1983), there is a close link between the norms that guide the behavior of organizational actors and the profession to which they belong. Hence, for a study of norms and how these are unpackaged by CIOs, the professional perspective is important for this thesis. Although I am somewhat critical of the idea that the CIO is a member of a profession (at least in the sociological sense of the word), this idea is of considerable relevance for further analysis.

The Sociology of Work and Occupations (WO) has long been devoted to understanding the role of professions and the process of professionalization. The question of whether a profession is distinguished from an occupation by a substantially higher degree of exclusiveness (Abbott, 1988) has been addressed in the study of numerous professions. For example, Samuel, Dirsmith and McElroy (2004) state that the genesis of the accounting profession was the result of a conflict with the legal profession owing to the latter's inability to explain the phenomenon of bankruptcy.

In the 1980s Abbott (1988) studied the genesis of professions by focusing on such inter-professional conflicts. His model for understanding the creation of professions is based on the effect of border-related squabbles between neighboring professions. According to the model, professions strive for jurisdictional control using a number of different mechanisms and activities.

However, given that some professions attack neighboring professions, the resulting struggle over professional territory sometimes leads to loss of territory. This situation relates to the ideas of deprofessionalization (Haug, 1977), or, as Abbott predicts, the possible decline or disappearance of a profession.

In his 1993 article, Abbott reviews the development of WO during the preceding 20 years. His initial focus is on the tradition that stems from Everett

Hughes (1939) and what is termed *industrial sociology*. Thereafter Abbott reviews the focus on careers that was introduced in the 1950s and then the increased focus on skills and gender that was popular in the 1970s. According to Abbott, the WO literature is isolated in its close relationship with sociology. This more or less single focus is detrimental to the overall aim of increasing our understanding of the subject. Abbott (1993:190) bleakly summarizes the scholarly development of the last two decades:

> *In short, the sociology of* [work and occupations] *has for the last 20 years pursued a fairly narrow range of topics. It has focused on individual behavior and its immediate contexts, looking at psychological, personal, and social antecedents and consequences of work behavior. It has largely ignored other bodies of inquiry into work. There have been few attempts at general theoretical analysis outside Marxist writings and perhaps the sociology of professions. It is a sad fact that much or most of the exciting study of work today happens outside sociology's provenance and even its interest.*

Functionalist sociologists (e.g., Parsons, 1937; Raelin, 1989) differentiate between professional and non-professional occupations. Table 4 presents Raelin's six attributes of the functionalist definition of professional occupations (1989:102):

Attribute	Description
Expertise	Engaging in prolonged specialized training in a body of abstract knowledge
Autonomy	Possessing the freedom to choose the examination of and means to solve problems
Commitment	Showing primary interest in pursuing the practice of one's chosen discipline
Identification	Identifying with the profession or with fellow professionals through formal association structures or through external referents
Ethics	Rendering service without concern for oneself or without becoming emotionally involved with the client
Standards	Committing oneself to help in policing the conduct of fellow professionals

Table 4. Attributes and descriptions of professional occupations

Rothman (1984) criticized the functionalist approach and offered a more process-oriented definition. This definition focuses more on the power-related aspects of professional control (Raelin, 1989).

Abbott (1988:8) proposed an alternative to the functionalist definitions of professions when he defined professions as "exclusive occupational groups

27

applying somewhat abstract knowledge to particular cases." Abbott also emphasized the jurisdictional control related to professions that Halpern (1992) described in a study of why certain American medical specialties were more successful than others in establishing professional control.

Theoretical Model: Inter-professional Conflict according to Abbott

Abbott (1984) presents a model in WO for the jurisdictional control of professions. The inspirations for this model are the inter-professional rivalries over jurisdiction, for example, between lawyers and accountants and between psychiatrists and neurologists.

According to Abbott (1988), the boundaries between professions are under constant dispute and reconstruction. This struggle results from the description of a profession, as previously noted, as related to an abstract body of knowledge used by its members to gain advantages over non-professionals.

In his jurisdictional control model, Abbott names three activities a profession has to control in order to maintain jurisdiction over its work – classifying (diagnosis), reasoning (inference), and remedying (treatment) of a problem. In these activities, jurisdictional control is established by legitimization, research, and instruction.

According to Abbott, a profession constantly strives to expand its territory, even if that involves infringing on neighboring professions' territories. For instance, in medicine, as described by Samuel et al. (2005), accountants gain jurisdictional control over physicians by creating bureaucratic mechanisms that govern the physicians' everyday activities.

In addition to giving researchers of professions a model to explain the current state of a profession, Abbott also distinguishes between different mechanisms, summarized in Figure 4, that are employed by a profession to gain increased jurisdictional control (and territory).
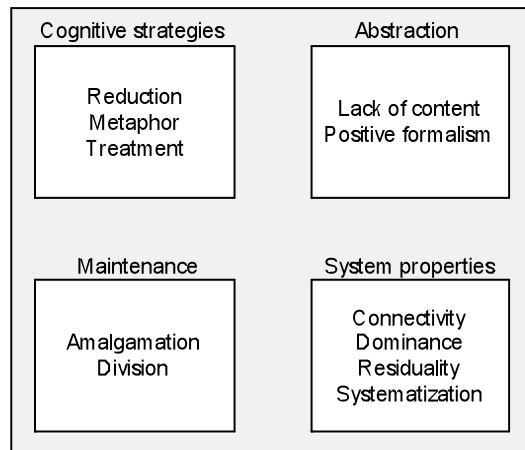
Figure 4. Mechanisms of jurisdictional control (Abbott, 1988)

Cognitive strategies, consisting of reduction, metaphor, and treatment, correspond to the stages of diagnosis, inference, and treatment in Abbott's model. According to Abbott (1988:100):

> *Reduction replaces one profession's diagnosis of a problem with another's. Metaphor extends one profession's models of inference to others. A third rhetoric of jurisdictional change contests neither diagnosis nor inference, but treatment. The attacking profession claims simply that its treatments apply to problems diagnosed by others*

Of these rhetorical means, Reduction is the most commonly used and refers to the practice of reducing tasks previously conducted by a neighboring profession to the jurisdictional control of your own profession. One example is the monetization of medicine as described by Samuel et al. (2005) where the professions of accounting and engineering transform medical care into a resource that needs to be rationed, organized, and distributed as cost efficiently as possible.

Metaphor is the export of models of analysis to encompass tasks and problems within the professional scope of a neighboring profession. This may be seen in the application of system models for analysis from systems science into other fields, such as sociology, economics, and even social work.

Treatment involves the export of a treatment prescribed in one professional field to other professional fields. An example is the expansion of the professional scope of the clergy, who since the early twentieth century have advised on treatments for mental illnesses, a field of expertise traditionally associated with the profession of psychiatry.

29

Abstraction is the second central mechanism of jurisdictional control. With this mechanism, a profession uses different means of abstracting its knowledge base in order to gain control. A profession may perform abstraction (1) by making the knowledge applicable to increasingly diverse areas (lack of form) and thus extending jurisdictional control, or (2) by appending to positive formalism and lessening the scope of its claims. The first type of abstraction has been shown to weaken a profession as a consequence of dilution; the second type may strengthen a profession if (and only if) it is done in conjunction with a treatment (in other words, with an action where the observer can judge the outcome).

Abstraction as a mechanism used to secure jurisdictional control by a profession is somewhat of a double-edged sword. Depending on the current situation for the profession, different combinations of weakening and sharpening the edges of the formal body of knowledge are optimal. Abbott (1988) acknowledges the problem by making Abstraction a separate mechanism.

Maintenance, the third central mechanism of jurisdictional control, can be either by Amalgamation or Division. Amalgamation involves joining previously separate professions into a single profession, either by including a previously separate occupational group into an existing professional group (such as the inclusion of osteopaths in medicine), or by combining separate professions into an entirely new profession. Division involves the specialization of a particular part of a profession into a separate profession. According to Abbott, examples of successful divisions are very rare, and may result in the decline or disappearance of an entire profession. An example is the Information profession described in the Background Chapter of this thesis.

The fourth central mechanism of jurisdictional control, *System properties,* consists of Connectivity, Dominance, Residuality, and Systematization.

Connectivity is the measure of inter-connectedness of the profession with its environment and hence its likelihood of being affected by disturbances in that environment. In professions where a large number of the tasks that fall under their jurisdictional control are conducted in their own environments, connectivity is high. By contrast, connectivity is low in professions with a strong tie to governmental bodies and institutions (e.g., licensing).

Dominance refers to the structural aspects (dominant organizations and structures) or the cultural aspects (dominant ideas) of other entities' power over a profession. Residuality is the measure of ambivalence of the professional scope itself, or the set of tasks that formally constitute a profession. Systematization measures the degree to which professional knowledge is systematized. The more involved in inter-professional conflicts a profession is, the more likely the degree of systematization. In order to secure

jurisdictional control, the profession falls back on a highly systematized body of knowledge, which in turn ultimately leads to a narrowing of the professional scope.

This brief review of the research into professions can be summarized by five assumptions:

1. Professions are bearers and producers of norms (DiMaggio and Powell, 1983)
2. Professions can be studied as a process of professionalization (Rothman, 1984)
3. Professionalization involves the competition of jurisdictional control by neighboring profession (Abbott, 1984)
4. Professionalization can be studied through inter-professional conflicts (Abbott, 1988)
5. Mechanisms of jurisdictional control form a theoretical model for the study of professions in the making (Abbott, 1988)

Marginal Man

Park (1928) coined the term "Marginal Man" after observations of migration as a means for progressive societal development. Migrating individuals, according to Park, possess certain distinguishing marks that cause them to change the basic structure of society by transgressing taken-for-granted societal rules and social worlds.

> *The great founders or religion, the earliest poets and philosophers, the musicians and actors of past epochs, are all great wanderers.* Carl Bucher in Park (1928:882)

By equating migration with wars and by borrowing from Simmel and his descriptions of "The Stranger", Park concludes that the mind of the Marginal Man is the battleground for constructing society.

> *It is in the mind of the Marginal Man that the conflicting cultures meet and fuse. It is, therefore, in the mind of the Marginal Man that the process of civilization is visibly going on, and it is in the mind of the Marginal Man that the process of civilization may best be studied."* (Park, 1928:881)

Everett Stonequist (1935, 1937) developed Park's idea with his focus on what today we would consider his less than politically correct "mixed-blood". Stonequist (1935) wrote about a "double consciousness" in individuals who live in two different social worlds. Hence, the Marginal Man functions as a buffer between two (or more) social worlds, with a dual (or multiple) pattern of loyalty and identification. Stonequist also developed the concept of the

31

Marginal Man with a psychological profile and a description of potential difficulties for the individual who lives in two social worlds.

> *The two cultures produce a dual pattern of identification and divided loyalty, and the attempt to maintain self-respect transforms these feelings into an ambivalent attitude.* (Stonequist, 1935:6)

Stonequist (1935) developed a stage-model of the life cycle of the Marginal Man as well as a process model for how inter-group conflicts develop over time. He concluded that the Marginal Man is *the* key personality of cultural change, and following Park (1928), concluded that the Marginal Man is also *the* study-object for cultural change from a cognitive perspective.

Park's and Stonequist's ideas on the Marginal Man are more or less focused on either discrediting or developing the theoretical concept. Goldberg (1941), however, differentiated between the Marginal Man and the member of a marginal culture, and suggested that the best place to study cultural change is with the latter. Wardwell (1952) used the definition and process descriptions from Stonequist (1935) in his study of the chiropractic profession that he believed had a marginal professional role.

On a more critical note, Green (1947) and Golovensky (1952) noted that the concept of the Marginal Man had been too uncritically accepted and, at the time they were writing, was not empirically tested. According to Golovensky (1952), there is a need to assume a certain level of cultural pluralism, which would make the conceptual discussion by Park (1928) and Stonequist (1935) problematic since it is based on an assumption of homogeneity in cultural groups.

Kerkhoff and McCormick (1955:50) called for a new definition of the Marginal Man. In their view, the Marginal Man could best be defined as ".one who used a non-membership group as a reference group." They refined this definition as follows:

> *The Marginal Man is one who has internalized the norms of a particular group (thus it is his reference group) but he is not completely recognized by others as being a legitimate member of that group.* (Kerkhoff and McCormick, 1955:50)

This definition, despite its apparent lack of bi-directionality and consequent difficulties in internalizing the norm of institutionalization, is most relevant for this thesis.

Since the 1950s, the references to Marginal Man in the literature of sociology have steadily decreased. One reason may be the difficulties in empirically testing and operationalizing the concept (Green, 1947). Wright and Wright

(1972), while acknowledging this problem as well as some conceptual problems with the very concept of Marginal Man, conclude that the Marginal Man is an interesting approach to the study of the mental aspects of society. According to these authors, such study is best accomplished by returning to the original work of Park (1928) and Stonequist (1935) in which the short, yet intense, academic enterprise of the Marginal Man first began.

This brief review of the study of the Marginal Man can be summarized into a number of assumptions that form the theoretical basis of this thesis:

1. An individual occupying two social worlds is regarded as a Marginal Man (Stonequist, 1935)
2. The Marginal Man displays dual logics, identities and loyalties (Stonequist, 1935)
3. The Marginal Man has institutionalized the norms of his reference group (Kerkhoff and McCormick, 1955)
4. The construction of society can be studied through the Marginal Man (Park, 1928)
5. The Marginal Man can be part of a marginal profession (Wardwell, 1952)
6. The personality traits of the Marginal Man provide the opportunity to study the construction of society (Wright and Wright, 1972)

Summary of Theoretical Assumptions

To guide my future work, the following assumptions from the theoretical universe of discourse will be of particular interest:

1. Ideas are points of departure for management, not ready-made scripts (Trägårdh and Lindberg, 2004)
2. The translation of ideas can be studied as a process involving the packaging, distribution, unpackaging, and institutionalization from a sending-to-receiving line of communication (Erlingsdóttir and Lindberg, 2005; Djelic, 2008)
3. The study of translation can and should be studied on the personal level of analysis, making the implementation a cognitive process for the receiving end (Holm Pedersen, 2007)
4. Professions are bearers and producers of norms (DiMaggio and Powell, 1983)
5. Professions can be studied as a process of professionalization (Rothman, 1984)
6. Professionalization involves the competition of jurisdictional control by neighboring profession (Abbott, 1984)

33

7. Mechanisms of jurisdictional control form a theoretical model for the study of professions in the making (Abbott, 1988)
8. An individual occupying two social worlds is regarded as a Marginal Man (Stonequist, 1935)
9. The Marginal Man displays dual logics, identities and loyalties (Stonequist, 1935)
10. The Marginal Man has institutionalized the norms of his reference group (Kerkhoff and McCormick, 1955)

These assumptions together with the assumptions from the empirical universe of discourse constitute the starting point for the analysis in this thesis.

CHAPTER 4

Empirical Universe of Discourse

In this section I address the two main areas that form the empirical universe of discourse for the thesis. First, I give a brief overview of the governance of IT with a summary of some of the most dominant previous findings. After this, I present an overview of the role of the Chief Information Officer (CIO), together with a brief demography and a review of previous research on the professional status of the CIO. I conclude by summarizing the assumptions that have been made in regards to the empirical universe of discourse.

Selection

The selection of areas and issues covered in the empirical universe of discourse is based on the research question. With this being directed at how IT Governance related norms are translated by CIOs in large organizations, I have chosen to focus on IT Governance and the CIO.

IT Governance

Governance issues (see Daily, Dallon and Cannella, 2003, for a review of these issues) related to organizing IS are often portrayed as highly complex and cumbersome (Schwartz and Hirschheim, 2003). Despite this portrayal, research into the phenomena of IT Governance (differentiated from IT Management by its focus on *settings* rather than *operations*) has been relatively limited (Sambamurthy and Zmud, 2000).

On a historical note, the issues related to the necessary settings for successful management of IT have been dealt with variously as Strategic Information Systems Planning (SISP) (see Lederer and Sethi, 1988), Information Resource Management (IRM) (see Lewis, Snyder and Rainer, 1995) and IS Management (ISM) (see Brancheu, Janz and Wetherbe, 1996; Watson et al., 1997). However, to a large extent, these authors have focused on the internal efficiency of IS and the operational/tactical layers governing the IS resource (Weill, 2004). A notable exception is SISP that has a fundamentally strategic approach that does not, however, put it in direct contact and correspondence with overall corporate governance.

Apart from issues related to structure (Dearden, 1965; Agarwal and Sambamurthy, 2002) and the loci of responsibility (Schwartz and Hirschheim, 2003), more recent developments in IT Governance have turned towards organizing logic (Prahalad and Bettis, 1986), authority patterns (Sambamurthy and Zmud, 1999) and capabilities (Feeny and Willcocks, 1998; Willcocks et al., 2006).

Various researchers and organizational entities have defined the concept of IT Governance. Table 5 presents an overview of various definitions of IT Governance.

Gray, 2004	Management policies and procedures used to direct the IT function in the organization, to monitor and control the function, and to identify the risks involved in achieving the organization's strategic objectives.
Gartner Group, 2006 (Gerrard, 2006)	The processes that ensure the effective and efficient use of IT in enabling an organization to achieve its goals.
Forrester, 2006 (Symons, 2006)	The decision-making processes for IT investments.
Van Grembergen, 2002	The organizational capacity exercised by the board, executive management and IT management in order to control the formulation and implementation of IT strategy and thus ensure the fusion of business and IT.

37

ITGI, 2003	The term used to describe how those persons entrusted with governance of an entity consider IT in their supervision, monitoring, control and direction of the entity. In addition, the way IT is applied will have an immense effect on whether the entity attains its vision, mission or strategic goals.
Sambamurthy and Zmud, 2000	An organization's IT-related authority pattern.
Schwartz and Hirschheim, 2003	IT-related structures or architectures (and associated authority patterns) implemented to successfully accomplish (IT-imperative) activities in response to an enterprise's environmental and strategic imperatives.
Weill and Ross, 2004	The framework for decisions, rights and accountabilities that encourage desirable behaviour in the use of IT.

Table 5: Various definitions of IT Governance

The increased discussion of IT Governance is evidence of the growing interest in IT in the management culture. As Sohal and Fitzpatrick (2003) and Weill (2004) note, until recently the research focus was on operational decision-making. Among the areas of research are computer systems management controls (Garrity, 1963), control of information services (Olson and Chervany, 1980), IT standards (Kayworth and Sambamurthy, 2000), IT decision-making responsibilities (Boynton, Jacobs, and Zmud, 1992), IT management architecture and locus of IT decision-making (Boynton et al., 1992), IS organizational role and the location of IS responsibility (Brown and Magill, 1994).

Brown and Grant (2005) propose an approach to these various research areas in IT Governance, They recommend dividing the research into the categories of *Form* and *Contingencies*.

Research in the category of *Form* (reviewed by Schwartz and Hirschheim, 2003) has focused on centralized, decentralized and federal (or shared/hybrid) forms of governance (See also Camillus and Lederer, 1985; Main and Short, 1989; Tavakolian, 1989; Fiedler et al., 1996).

Developments in the common-sense, or the most dominant form of organizing IS, have (with changes in technology and diffusion) undergone radical changes from the centralization in the late 1960s[12] to decentralization in the late 1980s, and then back to centralization in the 1990's and decentralization in the 2000's.

---

[12] This change appears mainly because of the increased possibilities associated with main-frame computing. For a discussion on the isomorphism of IT and business organization, see Olson and Chervany (1980).

The advantages and disadvantages of the categories (centralization and decentralization) are discussed in more detail by researchers such as Cross et al. (1997), Kayworth and Sambamurthy (2000) and Lewis (2004). The clearest advantages relate to responsiveness and efficiency achieved by the centralized model (with its focus on economies of scale and control) and to customization and responsiveness by the decentralized model.

Brown and Grant's (2005) second category of research is *Contingencies.* According to Brown and Magill (1994) and Sambamurthy and Zmud (1999), this area of research has been saturated in recent years, in part because very few contingencies can actually be scientifically proven.

In an early attempt to relate single contingencies such as size, strategy and structure to the organization of IS, Ein-Dor and Segev (1978) studied 53 Israeli firms. In their findings (Ein-Dor and Segev, 1992), they concluded centralization was associated with size (defined as revenue), climate and user/implementer relationships.

In their research, Ahituv, Neumann and Zviran (1989) and Clark (1992) rule out the significance of industry as a contingency in relation to the organization of IS. Olson and Chevany (1980), Ahituv et al. (1989), Tavakolian (1989) and Clark (1992) discover no relationship between company size and the organization of the IT function, whereas Ein-Dor and Segev (1992) find a relationship with numbers of employees but not with the size of revenue.

Brown and Magill (1994) and Sambamurthy and Zmud (1999) expanded single-contingency analysis into a multiple-contingency analysis in their identification of several variables where contingency patterns are produced (see, e.g., Weill and Ross, 2004, 2005).

Sambamurthy and Zmud (2000) discuss the enormous amount of normative and highly simplified research conducted in the IT Governance area. A majority of this research is prescriptive, with a new framework, model or idea as the final product of the research. As a result, there are a number of frameworks available for IT Governance, including the following: Archetypes and IT decisions (Weill and Ross, 2005), Five Key Objectives (ITGI, 2004), Nine Core IS Capabilities (Feeny and Willcocks, 1998), Eight Imperatives for the IT Organization (Rockart, Earl and Ross, 1996), Three key IT Assets (Ross, Beath, and Goodhue, 1996), IT Portfolio Management (Jeffrey and Leliveld, 2004), Application Portfolio Scorecard (Prahalad and Krishnan, 2002), IT Investment Portfolio Management (Weill and Aral, 2006), Platform Logic (Sambamurthy and Zmud, 1999), Extended Platform Logic (Schwartz and Hirschheim, 2003), COBIT (ISACA, 2004), ITIL (ISACA, 2004), IT Balanced Scorecards (Van Grembergen, 2004) and Critical IT Capabilities (Sambamurthy and Zmud, 2000).

39

Stylized Description of IT Governance

To add to the description of the normative elements in IT Governance, I have created a stylized description of IT Governance by combining quotes from the normative statements identified in the content analysis of Study I. To show the weighted importance of these elements, my description uses the composite frequency (see Table 18 in Chapter 5) as a starting point for the balance of attention and representation. Direct references are to the Gartner identity number. Italics mark text added to make the text more accessible to the reader. The Gartner reports, which are proprietary, are available at www.gartner.com.

In the strategic alignment of the IT and Business Strategies, the CIO must develop the corresponding IT strategy for each component of the corporate strategy. (G00129538) The CIO must *also* define an IT strategy and architecture that integrates, automates and simplifies the end-to-end business processes. (G00129538)

Before an IT organization can mature its financial management and reporting capabilities, it must first understand that there is no "one size fits all" set of metrics or report standards. (G00143548) *In addition,* any IT financial management objectives and associated metrics must be based on a clear understanding of these factors, beginning with what the business actually wants, needs and values. (G00143548) To communicate value for money, the CIO must translate IT operational performance into business performance and continually show that IT delivers value for money where it counts—in improvements to business performance. (EXP CIO Signature, April 2007)

A proactive CIO must run IT as a business, sharing common corporate business objectives with other business unit heads. (G00129538) To be credible, they must *also* focus on where the business is going and require an understanding of the big picture, shaped by external forces, marketplace trends, competitors, clients, organization capabilities, future options and the business model structure. (G00144270) F*urthermore,* IT management must be "inside the envelope" of business communications and strategy development to continue to support business operations and help create business value. (G00143352) CIOs need to develop far stronger operational and change skills and must become more adept at orchestrating business rather than just IT change. (G00144270)

Effective communication between IT Leaders and Stakeholders must be structured and contextual (G00130023). IT Managers must state goals in enterprise-specific business terms (G00125787). IT professionals must stop perpetuating the myth that IT is so highly complex and misunderstood that only pure technologists can manage it. (G00137694) *Such professionals must also* erase the territorial boundaries — There are no such things as IT-only or business-only decisions in the "hyperconnected" enterprise. Everything is

interrelated. No IT professional can hope to win by reinforcing decision-making precedents at the expense of innovation and opportunity. (G00145593)

Traditional IS execution competencies include development and operations. To ensure that benefits are delivered, these must include helping the business get ready for change and addressing issues that arise from a benefits perspective. (EXP CIO Signature, December 2005) Leadership excellence must pervade the entire IT organization in a multiplicity of roles — customer relationship, financial leadership, architecture, solution development, project and portfolio management, and certainly at the team leader level — whether multidisciplined project teams, hybrid teams consisting of internal and external team members; or cross-organizational process teams. (G00138455) IT leaders must therefore plan for succession. They need to find and nurture fresh talent — multiskilled, multidisciplined and multifariously experienced — to take on new roles. (G00145593) CIOs must evaluate their existing competencies to ensure that they have the same skills often found in management consultancies. (EXP CIO Signature, October 2006) *To secure the future competence of their departments*, IT leaders must articulate and defend a budget that enables hiring for development and allows time for learning on the job. (G00136483)

Regarding IT Governance, much of the CIO's attention should be directed towards the constant level of change. To deal with such changes, organizations must develop an appropriate governance framework, understand and evaluate the different requirements within business units and geographical locations, and assess the readiness of the organization to manage such changes and transitions. (G00143869) The governance strategy must be consistent with the funding model. (G00147320)

Enterprises must build agility and sustainability to take risks and counter them, and they do so because economic and technological cycles are increasingly fast, overlapping and connected. (G00136797) IT organization must be leaner and more focused on business results by appropriately using strategic sourcing of IT services, by adopting process-based working and by using all the available financial resources. (G00144929) Delivery process standardization is a must, and it has become evident within offshore providers — followed by the traditional ones — that have built standard services, operating and quality management frameworks based on industry best-practice guidelines (such as the IT Infrastructure Library, the Capability Maturity Model Integrated, ISO 9001 and ISO 20000) as an operating and marketing mechanism. (G00143869) CIOs must use relationship management and service industrialization to manage the transformation toward globally delivered IT services. (G00143869) The disparate set of resources must seamlessly come together with a high process and methodology maturity, operating in a secure and scalable global infrastructure supported by

41

significant investments to mitigate or manage risk. (G00143869) To make these views coexist, organizational structures must evolve that avoid the pitfalls and conflicts associated with "matrix management" implementations. (G00143352) IT must reorient to support all four elements of strategic business change (infrastructure, process, organization structure and culture). (G00142196) You must lay a foundation of improvement infrastructure, align your sourcing strategy, beef up change leadership capabilities and continuously assess your process improvement practices. (EXP Premier, May 2006)

For IT-related investments and application portfolio management, the CIO must establish a "one in, one out" application policy in which one application must be retired for every new application that is added. (G00125787) The CIO must be selective. Breakthrough performance comes from getting the enterprise and IS focused on the right agility in the right places. (EXP CIO Signature, April 2005) The IT strategies must articulate the technical architectures and the IT governance for market-driven IT portfolio investment management. (G00129538)

The CIO must recognize and reposition the role of IS and IT in enterprise agility. (EXP CIO Signature, April 2005) CIOs and all leaders must manage the progression of sponsors, agents and targets through the change process. (EXP CIO Signature, October 2005) Behavioral skills, such as communications, leadership and influencing, often must be improved. (G00136797)

Although CIOs must continue to improve on the demand side, they focus too narrowly on the internal operations elements of the supply-side role, leaving themselves "out of balance" relative to managing other areas of the leadership role. (G00144929) IT Must Think Differently, Act Differently and Be Different to Drive Business Growth. (G00144215) The other area that CIOs must take full accountability for is the development of IT leadership, rather than purely technology leadership. (G00142168)The CIO must accurately assess the current level of trust and confidence in himself or herself and in IS. (G00139307) CIOs and top CDO executives must be able to assess how ready and able the organization is for an aggressive IT-enabled change management program and how successful a CIO will be as a significant change agent. (G00139307) Leadership excellence must pervade the entire IT organization in a multiplicity of roles — customer relationship, financial leadership, architecture, solution development, project and portfolio management, and certainly at the team leader level — whether multi-disciplined project teams; hybrid teams consisting of internal and external team members; or cross-organizational process teams. (G00138455)

CIOs Must Gauge Executives' Understanding of Technology. (G00128090) The CIO must still be wary of historical relationships the CEO may have with someone in his or her administration, such as a high-school friend serving in

the cabinet who may have more clout than the formal organization chart suggests. (G00127518) The CIO must bring the information management and business process automation to the board room, something quite different from the network operations. (G00129538) The CIO role must shift from reactive to strategic, and the CIO must actively participate on the front end as a key member of the corporate strategy development team. (G00129538)

The Chief Information Officer

In this section, I give a historical overview of the Information Profession with particular focus on the Chief Information Officer (CIO). In addition, I define the CIO role and review the current status of the CIO profession.

Historical Overview of the Information Profession

Abbott (1988) offers a unique overview of the historical developments in what he labels the "Information Profession". According to Abbott, this mixture of professions and occupational groups, focus their jurisdictional control on the organization and retrieval of information in all forms. Thus Abbott's label encompasses, or borders on, a variety of professions, including accounting, marketing, and engineering. As background for my discussion of the CIO profession, I briefly summarize Abbott's essay on the system of professions.

According to Abbott's model for understanding professions and inter-professional conflict, the creation of a profession always begins with a disturbance of some sort. For the information profession, this disturbance began both with the library classifications schema developed by Melvill Dewey in the late nineteenth century and with the diffusion of computer-based technology in the twentieth century.

Abbott claims that the predecessors of the information professionals were the librarians of the early seventeenth century. Owing to political developments and the introduction of more and more interventionist governments, the need for information grew rapidly during the late seventeenth century. With the increase in information, there was a need for more and more complex technologies for maintaining and organizing the contents of the libraries. Thus the profession of the librarian diversified into technical librarians as well as specialized librarians for law, science, public administration, et cetera during the 1840s.

As the professional group responsible for the ordering of information, originally in book form, gradually librarians began to deal with the handling and organizing of information in document form. This advance led to the

development of a separate professional group who specialized in compiling numbers for governmental decision-making. This group, the statisticians (who initially focused on the compilation rather than the analysis of numbers), attained professional recognition as they formed associations such as the American Statistical Association (founded in 1839) and journal such as the Annals of Mathematical Statistics (founded in 1930).

In the early twentieth century and during World War I, the introduction of computational devices facilitated the routinization of several tasks that previously were exclusively handled by the librarians and statisticians. Now the work of other professions such as Accounting, Electrical and Mechanical Engineering, Law, Journalism and even Financial Analysis involved these special information skills. This routinization also brought with it several interesting results, for example, a division of labor between bookkeepers and accountants in the accounting profession.

The increased focus on production capability during World War I followed by the increased importance of the market after World War II meant decision-making information had to be readily available and current (as close to real-time as possible). This demand led to the creation of Management Information Systems (MIS), a form of computer-based control system that has experienced wide diffusion since the 1950s.[13]

With the widespread adoption of MIS, the creation of Management Information services was next. Such services were provided by hardware vendors (e.g., IBM), independent consulting firms (e.g., Arthur D Little) as well as consulting firms specializing in accounting (e.g., Arthur Andersen).

During the 1970s, the information profession gained legitimacy when information science became part of library schools' curricula and when university and college business schools added MIS to their curricula. However, the individuals more interested in the theoretical developments in information science (the Information Scientists) and the individuals more interested in business systems increasingly went in different directions. Hence, the newcomer profession of computer specialists found it difficult to acquire professional status.

During the 1980s, where Abbott concludes his analysis, there were no real claims for jurisdiction in the area of information handling and processing by any significant group of professional actors. Instead, the bulk of computer-related training was conducted on-site with a clear focus on operations.

---

[13] This development has grown with new versions of the same basic idea behind MIS. More current versions include Material Requirement Planning (MRP), Material Resource Planning (MRPII) and Enterprise Resource Planning (ERP) Systems.

According to Abbott, this development suggested the end of an information profession that had been in the making.

The CIO

Since the start of mainstream IT adoption in the 1950s, substantial efforts have been devoted to finding the optimal organizational settings for IT (Sambamurthy and Zmud, 2000). Much of this effort deals with striking the balance between centralized and decentralized structures. Proponents of the decentralized approach have advocated a close linkage between the use and the organization of IT (Dearden, 1965). By contrast, the centralized approach in taking the position that IT can be centralized with substantial benefits (Davenport, 1998), has often argued for standardized operating procedures and economies of scale.

This conflict in ideology between centralized and decentralized IS relates directly to the CIO role. In a completely decentralized environment, it is impossible for the CIO as a centralized executive to be in charge of IT.

While Grover et al. (1993) trace the development of the CIO role to the 1960s, mainstream adoption of the concept first appeared in the beginning of the 1980s when the CIO was portrayed as the "corporate savior who was to align the worlds of business and technology" (Grover et al., 1993:108). By 1984, roughly one-third of the major corporations in the United States had an appointed CIO and that number grew to more than half of such corporations by the end of the decade. Even public organizations were appointing CIOs.

Rockart, Ball and Bullen (1982) predicted that the development of the senior executive responsible for IT (i.e., the IS Executive) would depend upon three major trends. Following developments in the business environment (remote workers, managerial emphasis on planning, capital shortage and widening of the gap between people and hardware costs) plus a rapidly changing technology (increased cost-efficiency, increased use of data communication and data bases, and an increase in competition between IT providers), the need for a new take on the CIO was necessary.

This new take would, according to Rockart et al. (1982), focus on the decrease in direct line responsibilities and the increase in staff orientation and corporate responsibility for information resource policy and strategy. This idea was further developed by Benjamin, Dickison and Rockart (1984) who studied the changing role of the CIO (in their terminology, the Corporate Information Systems Officer). .

By focusing on reporting relationships, corporate IS budgets, critical responsibilities, the importance of selected IS initiatives, and the organization

45

of IS functions and activities, Benjamin et al, (1984) supported Rockart et al.'s (1982) findings. The CIO's role, and not that of IT line management, was, in other words increasing in power and becoming more centralized with greater responsibility for the strategic aspects of IT. According to Chun and Mooney (2009), this development is set in conjunction with a split of the CIO into either the technical or the strategic realm.

In a study of managerial roles related to the CIO, Grover et al, (1993) found that the CIO, as spokesman and liaison, was taking an increasingly important role. They also found that the strategic responsibilities (within the monitoring and entrepreneurial role) had not experienced the same increase in importance in organizations that did not pursue centralization of the IS resource. Thus, they define the CIO as follows:

> *The highest ranking IS executive who typically exhibits managerial roles requiring effective communication with Top Management, a broad corporate perspective in managing information resources, influence on organizational strategy, and responsibility for the planning of IT to cope with a firm's competitive environment. Grover et al. (1993:108).*

Figure 5 illustrates this definition, combined with Mintzberg's (1971) roles, within the context of the CIO's work environment.
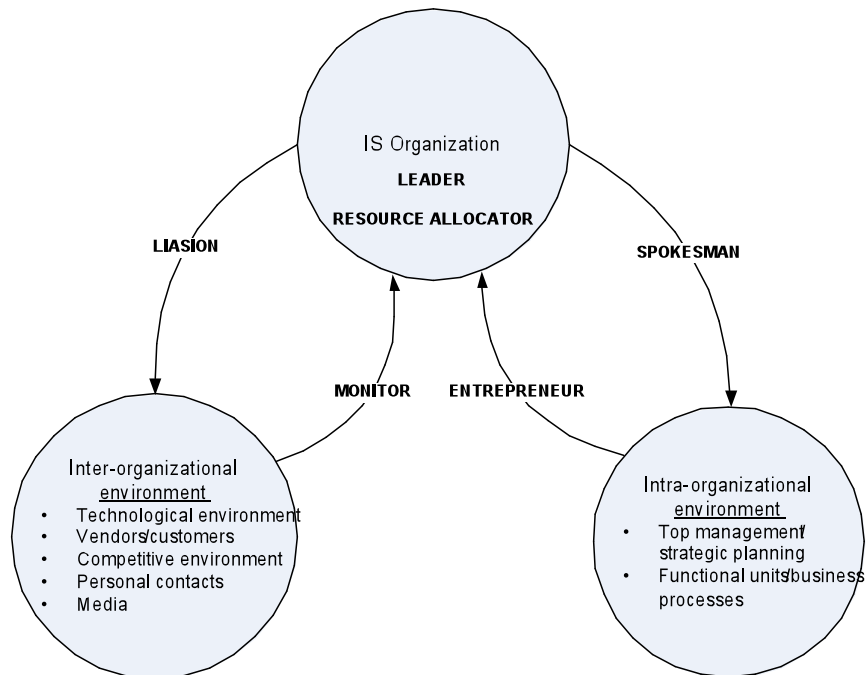

46

Figure 5. The roles and contexts of the CIO (Grover et al., 1993:113)

As Figure 1 indicates, the intra-organizational environment leads to the CIO roles of spokeswoman and entrepreneur resulting from her involvement in the dialogue between IS and other aspects of the organization, such as the functional units and Top Management.

The inter-organizational environment leads to the CIO roles of liaison and monitor. The CIO is required to understand the changes in technology and the competitive environment of the organization while at the same time interact with the players in the organization's value chain, the media and other important players.

In the role of managing IS, the CIO is the resource allocator and the leader. (Note that these functions seem to contradict Benjamin et al.'s (1984) prediction that the CIO is moving away from responsibilities beyond the IS line).

Grover et al. (1993) also showed that CIOs often fail to fulfill the roles that they specified in their definition of the CIO. With their higher-than-average dismissal rate, compared to other executives, their decrease in power and their limited participation in the overall corporate strategic planning, Grover et al. (1993) found that the CIO role could not be considered "mature".

Given that the level of the CIO's role fulfillment is low, Grover et al.'s (1993) definition may be criticized as less than exact. However, basing my decision in part on other developments since their article was published, I have decided to use their definition. For example, Gartner Group (2009) showed that 35% of CIOs report directly to the CEO (or the equivalent position) while 28% report to the CFO. Grover et al. (1993) found that only 25% of CIOs report directly to the CEO. This is a significant change during the last 15 years.

Demographics of the CIO, in Brief

For this overview of the demographics of the CIOs examined in this thesis, I use demographic data from *CIO Sweden*, a journal that focuses on Swedish CIOs (CIO Sweden, 2009). The journal's study was conducted in the spring of 2009 among 109 respondents. The study does not indicate how respondents were chosen or the response rate to requests for information.

Of the 109 respondents in the study, 84% have college or university education. When promoted to CIO, their main competence was IT (65%), followed by Consulting (10%) and Business (7%). In their everyday work, the main competences they use are Business (48%) and Communication and Leadership (36%), with IT at only 10%.

47

Of the 109 respondents, 45% are board members. In addition, 45% report directly to the VP or CEO while 26% report to the CFO and 29% report to "Other." A majority (54%) of the respondents have held their current position for more than four years, with an even distribution between two to three years, one to two years, and less than one year.

The Professional Status of the CIO

The general impression in IT-related research is that IS workers constitute a professional group (Bartol and Martin, 1982; Goldstein and Rockart, 1984; Baroudi, 1985; Ahuja et al., 2007). According to Orlikowski and Baroudi (1988), IS workers, however, are not "professional" in the traditional sense of the concept. In accordance with Freidson's (1986) categorization of a profession as a separate occupational group that has achieved status and power in society, Orlikowski and Baroudi analyze IS workers and identify the following shortcomings in the claim that such workers form a profession (Table 6):

#	Elements	Shortcomings
1	Technical autonomy	IS workers are not the final evaluators of their own work. They lack the power of self-evaluation and the legitimacy for total autonomy over their work and are bound by task descriptions in bureaucracies.
2	Educational control	IS workers are not uniform in relation to formal education given the following: 1. Computer knowledge involves multiple sources and technologies; 2. The knowledge base is not predominantly abstract or theoretical but volatile; and 3. Computer knowledge is becoming more and more common.
3	Freedom from competition	IT is increasingly a commodity.
4	Control over other occupations	IS workers have little influence on corporate and strategic directions. They are mainly assigned to fulfilling user needs.

Table 6. Adapted from Orlikowski and Baroudi (1988:12)

It is clear that Orlikowski and Baroudi are unconvinced that IS workers make up a profession. Contrary to previous findings, they find no evidence that shows that IS workers constitute more than a general occupational group.

In Table 7, using Orlikowski and Baroudi framework and Freidson's categories, I present an analysis of whether CIOs are members of a profession.

#	Elements	Shortcomings
1	Technical autonomy	The CIO is evaluated based on her performance in relation to specific performance-related metrics, just as other functional managers are.
2	Educational control	The CIO's knowledge base is not strictly technical, and there is no formal education or certification requirement by higher educational institutions that directly prepare an individual for the role of CIO. The introduction of process standards, such as ITIL, COSO and COBIT, as well as professional certifications, such as CISM[14], is steadily increasing the educational control.
3	Freedom from competition	Given that IT is increasingly regarded as a cost center, the CIO is under constant pressure for cost cutting in IS operations in order to avoid outsourcing.
4	Control over other occupations	The CIO has increased her impact on the overall strategic direction of the organization and has become more involved in the business process design (or rather, choice) through IT-based best practices (i.e., ERP Systems)

Table 7. Assessment of CIO as a profession

This brief assessment of the CIO as a potential profession shows that there have been some developments since Orlikowski and Baroudi's (1988) analysis of the general IS worker. Yet there are still doubts about the CIO as member of an existing profession. Instead, I choose to see the CIO as member of a profession in transition (Abbott, 1988).

Summary of Empirical Assumptions

To guide my future work, the following assumptions from the Empirical Universe of Discourse are of particular interest:

1. IT Governance is defined as the settings for efficient and effective IT Management.
2. There is a lack of research within contextual studies of IT Governance (Sambarmurthy and Zmud, 2000).

---

[14] Abbreviations: ITIL (Information Technology Infrastructure Library), COSO (Committee Of Sponsoring Organizations of the Treadway Commission), COBIT (Control Objectives for Information and related Technology), CISM (Certified Information Security Manager).

3. IT Governance is associated with strong perceptions and prescriptions regarding best-practice.
4. The CIO is defined as the highest ranking IS executive (Grover et al., 1993:108).
5. The CIO is the principal receiver of the management idea of IT Governance.
6. The CIO is a member of a profession in transition (Abbott, 1988).

These assumptions will together with the assumptions from the Theoretical Universe of Discourse constitute the starting point for the analysis in this thesis.

51

CHAPTER 5

Study 1 - IT Governance
related norms

In this chapter, I present the first study of the thesis. After an introduction and a discussion of the methodology used, I present three sections explaining the method and results of the Sub-studies. The chapter ends with a synthesis, resulting in a list of validated IT Governance related norms.

Introduction

The purpose of Study I is to *identify and validate a selection of IT Governance related norms*. This is achieved by a triangulation in the three Sub-studies where I identify and validate these norms.

In Sub-study A, I identify the norms using interview guidelines (i.e., a questionnaire) from a consultancy study conducted in the summer of 2006. I then validate these norms using reports from professional analysts in Sub-study B and from scientific journal articles in Sub-study C.

Figure 6 presents an overview of the distribution of time-spans for the samples in the three Sub-studies.

Figure 6. Distribution of time-spans of the samples

For Sub-study A, as the interview guidelines constructed and used came from a single study in 2006, access-related criteria required the use of a single set of accounts.

For Sub-study B, I used three years of accounts by professional analysts (analyst reports) on the assumption that the three-year period would provide a valid representation of how these professional analysts discussed the norms identified in Sub-study A. Since Sub-study A was constructed and conducted in 2006, Sub-study B includes the professional analyst accounts from that year, the year before and the year after (2005-2007).

For Sub-study C, I selected accounts from the Academics (scientific journal articles) on the basis of the Academic community's response to the norms I had identified in Sub-study A. Ten years (1998-2007) was considered a relevant period for Sub-study C.

In selecting data sources (a consultancy questionnaire and analysts reports) I was inspired by Lukka and Granlund (2002) who use genre analysis in their study of scientific communication in the diffusion of Activity-Based Costing (ABC). According to these authors, the spread of scientific communication encompasses literature from the genres of consultancy research, basic research and critical research. In addition, I was inspired by Denzin and Lincoln (2005) to use alternative sources of data to add rigor, breadth, complexity, richness and depth to my study.

In using data from three sources (that are in many ways very different in essence and function) I could synthesize the views of three sets of stakeholders

53

– the Consultant, the Professional Analyst and the Academic – on IT Governance related norms.

Research Design

> *On the one hand, social phenomena cannot be understood without taking account of subjective as well as objective factors; yet, at present we have no way of capturing subjective factors that meet the requirements of science.* Blumer in Hammersley (1989)

This dilemma (in Hammersley, referred to as "Blumer's Dilemma") is central to social science research. Given the "collective folklore" (Ragin, 1987:19) of traditional science (e.g., *natural science)*, any attempt to describe social phenomena must do so in accordance with previously developed and accepted norms and guidelines. In other words, social science attempts to describe society as part of society from within society (Luhmann, 2002).

In at least one aspect, this dilemma is made more difficult by appending to it theoretical assumptions that differ from that of logical-positivism (Baronov, 2004), mainly in relation to a position taken against the existence of an objective, external reality – according to the protagonists of the more qualitative stance, a *naïve* stance (Denzin, 1978).

One way to address the difficulties inherent in the study of social phenomena is triangulation (Jick, 1979). According to Modell (2005), triangulation is used to enhance the validity of research findings. Modell also differentiates between theory-testing and theory-building perspectives.

Denzin (1978) differentiates between within-method and between-method triangulation, and also identifies three other forms of triangulation. These are data-, theory- and investigator-triangulation. This thesis uses two forms of triangulation described by Modell (2005), each of which is described below.

It may be charged that this thesis, in using two different forms of triangulation, is not sufficiently sensitive to the difference between triangulation and "layering" (Berry, Loughton, and Otley,1991; Modell, 2005). Denzin and Lincoln (2005) discuss the notion of the social scientist as bricoleur (and use a number of different analogies) in that they combine different perspectives as one.

An alternative perspective is "Synthesizing research"[15] as described by Sandelowski and Barroso (2006). This type of research utilizes previous

---

[15] Alternative notions are meta-analysis and meta-synthesis (Sandelowski and Barroso, 2006).

studies to combine disparate findings in support of the creation of new knowledge. The difference between this study's approach and that of mainstream synthesizing research is that the secondary material of this study is not limited to data reported by the scientific community.

Unlike Modell (2005), Denzin and Lincoln (2005) do not justify triangulation as an enhancement of validity.

> *Triangulation is not a tool or a strategy of validation, but an alternative to validation. The combination of multiple methodological practices, empirical materials, perspectives, and observers in a single study is best understood, then, as a strategy that adds rigor, breadth, complexity, richness, and depth to any inquiry.*

In Study I, I use the concept and method of triangulation in two different forms: Method Triangulation and Data Triangulation. See Figure 7 for a depiction of these forms that are described in more detail later in this chapter. In accordance with Denzin and Lincoln's observation (2005:5), these forms add "rigor, breadth, complexity, richness and depth" to my study.
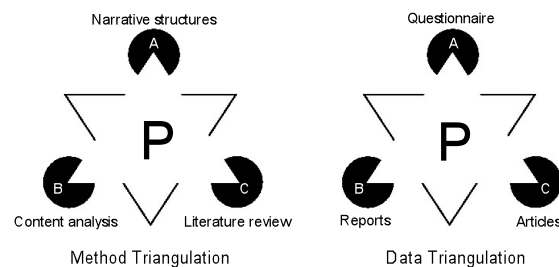

Figure 7. Two forms of triangulation used in this study.

The method triangulation in the three Sub-studies deals with narrative structures (A), content analysis (B), and literature review (C). The data triangulation deals with a consulting questionnaire (A), reports by professional analysts (B), and scientific articles (C).

Method Triangulation: Narrative Structures - Content Analysis - Literature Review

The textual analysis applied in Sub-study A involves the use of formalized texts as a basis for analyzing organized narratives (Silverman, 2005). Using inspiration from semiotics, I searched the texts for underlying structures.

In Sub-study A, these underlying structures were the theoretically induced criteria for paradox (Luhmann, 1995; Czarniawska, 2003), fixed end-points, and uniformity of scale (see Sub-study A, Method, for further details on this approach).

Sub-study B uses content analysis for the validation of the IT Governance related norms. After identifying and selecting research reports intended for the CIO (or the equivalent), I selected, categorized, and analyzed instances of "must."

Sub-study C uses literature review for the validation of the IT Governance related norms. Arksey and O'Malley (2002) differentiate between a number of alternative types of literature review on the basis of formalization and use of data. On the issue of formalization, the literature review conducted in Sub-study C was semi-structured, using keywords as starting points.

I used the conclusions and general positions of the articles rather than their empirical data in accordance with the "traditional" literature review that Arksey and O'Malley (2002) describe.

Table 8 summarizes the methods and foci of the three Sub-studies.

Sub-study	Method	Focus
A	Narrative structures	Identification of occurrences where the questions and their pre-defined answers fulfill a set of theoretically induced criteria.
B	Content analysis	Validation of previously identified norms by content analysis based on all reports directed to IT Executives in the last three years.
C	Literature review	Validation of previously identified norms through a structured literature review of six of the most prestigious journals for IT Governance.

Table 8. Summary of triangulation methods and their focus

Data Triangulation: Questionnaire – Articles – Reports

For Sub-study A, I used a questionnaire from a consulting study as the basis for my analysis. Here the questions and formulations were used as data for the study to identify IT Governance related norms. The data of Sub-study A is qualitative.

For Sub-study B, I used a number of professional analyst reports by one of the most influential commercial research firms. These reports were then used in a content analysis intended to validate the previously defined norms from Sub-study A.

In their article on the use of literature in the study of management control, Bourguignon, Mallaret, and Norreklit (2004) justify their method as a way to view professional analyst reports as examples of *direct* management literature:

> *Literature is considered a relevant source for any attempt to study the spirit of the management control methods. The management literature tells managers how to act and the way this is told reveals aspects of the ideology embedded in the models.* Bourguignon, Mallaret, and Norreklit, 2004:113

With the intent of understanding how literature "tells managers how to act", I used the professional analysts (and their reports) as important actors in the norm system. The data in Sub-study B is a combination of qualitative and quantitative.

For Sub-study C, I selected a number of articles from six journals considered most relevant and prestigious in the field of IT Governance. I then used the data and conclusions of these articles to validate the previously defined norms. The data of Sub-study C is both qualitative and quantitative with an emphasis on the qualitative.

Table 9 summarizes the data triangulation of the three Sub-studies and their foci.

Sub-study	Data	Focus
A	Questionnaire	Questionnaire used as structure for an interview-based survey in Sweden, Finland, Norway, and the Netherlands during 2006. Qualitative data.
B	Reports	Commercial research reports directed for IT Executives published by the largest commercial research firm during the last three years. Qualitative and quantitative data.
C	Articles	Scientific articles published during the last ten years in six of the most prestigious journals in the field of IT Governance. Qualitative and quantitative data with an emphasis on qualitative.

Table 9. Summary of data triangulation of the three Sub-studies

Summary of triangulation

Table 10 summarizes the two parallel triangulations in Study I.

Sub-study	Purpose	Perspective	Method	Data
A	Identify norms	Consultant	Narrative structures	Questionnaire, qualitative
B	Validate norms	Professional analyst	Content analysis	Reports, quantitative

57

				and qualitative
C	Validate norms	Academic	Literature review	Articles, quantitative and qualitative

The Credibility of the Study

According to Hammersley (1996:57), validity can be defined as *"…truth interpreted as the extent to which an account accurately represents the social phenomena it refers."* This definition of scientific validity was developed in quantitative research and has been criticized when applied to qualitative research (Silverman, 2005).

Silverman (2005) discusses three criteria for assessing validity in qualitative research. See Table 11 for an explanation of how this study meets these criteria.

Criteria	*Comments*
The impact of the researcher on the setting	With the researcher not actively taking part in the interactive aspects of the study (since it is based on secondary material), the direct impact of the researcher is minuscule. When it comes to the impact of the researcher on the research setting created in the actual study, this can be regarded as a secondary impact.
The values of the researcher	As the research approach is qualitative, the researcher and his values are an integral part of the results. If this approach is regarded as interference, a high level of formalization and documentation has been pursued throughout the entire research process.
The truth status of the respondents' accounts	With the qualitative approach and the postmodernist influence (see Theory Triangulation below), the statements of the respondents (in the form of expressions and occurrences in the secondary material) have not been considered as direct statements of truths. Instead, the quantitative aspects of the study have been used as a means to weigh what Silverman refers to as "Anecdotalism".

Table 11. Criteria of Validity in the study

Ryan, Scapens and Theobald (2002) and Modell (2005) propose three types of validity. See Table 12.

Validity	*Comments*
Construct	Measure of control over the constructs. The constructs in the study are primarily those of "norm", "IT Governance", "IT Governance related norm," and the three perspectives (Consultants, Academics, and Professional Analysts). The first three concepts are created using an inductive approach, whereas the concepts of the three groups of actors are created

	using a deductive approach.
Internal	Measure of internal control (originally of experiment, causal relationship between dependent- and independent variables). The sample of perspectives in this study was determined partly by access-related criteria, given that there was only one consultant study available. This implies that some aspects of control over the design of research lay outside the researcher's grasp. The use of strictly secondary material in the study called for a selection of samples based on accessibility rather than random selection.
External	Measure of generalizability. The selection of norms was made on the basis and outline of a conducted study (secondary material), and hence the generalizability of the study is dependent upon the representativeness of the consultant study. As the consultant study was conducted on a pan-European basis with a large number of enterprise-level companies and organizations as a *means of marketing* the services of the large consultancy firm, this particular study is representative of the consultant perspective. The data for the academic perspective is representative since it comes from the *most prestigious* journals covering IT Governance. The analyst perspective is also representative since the data used comes from the *largest* analyst firm in the field of IT Governance.

Table 12. Three types of validity in the study

Scheuerich's (1987:1) alternative view of the concept of validity indicates a *modernist bias* in research.

> *What I am suggesting here is that even though we researchers think or assume we are doing good works or creating useful knowledge or helping people of critiquing the status quo or opposing injustice, we are unknowingly enacting or being enacted by 'deep' civilizational or cultural biases, biases that are damaging to other cultures and to other people who are unable to make us hear them because they do not 'speak' our cultural 'languages'.*

To deal with this communicative inability in scientific inquiry, Scheuerich offers seven complementary forms of validity. These include Successor-, Interrogated-, Imperial-, Paralogical-, Rhizomatic-, and Voluptuous-validity. Scheuerich's ambition is to add new perspectives to what we originally regarded as validity. In this ambition, there is inspiration for researchers working with more nuanced scientific communication.

Agar (1986) offers another strong criticism of scientific credibility with his call for more intense, personal involvement in the concepts of validity and reliability.

Hammersley (1992a: 67) defines reliability as *"…the degree of consistency with which instances are assigned to the same category by different observers or by the same observer on different occasions."* Like validity, reliability is divided

59

into a number of different types, for example, Quixotic, Diachronic and Synchronic, as proposed by Kirk and Miller (1986).

Critics have also charged that reliability, as a concept, is relevant only in quantitative research. Therefore, reliability is regarded as a positivist notion. However, Silverman (2005) and others still make a case for its application in qualitative research.

Table 13 addresses the reliability of this study, following a format developed by Kirk and Miller (1986).

Criteria	*Comments*
Quixotic	Repeated uniformity of method: As the three methods applied in Study I are relatively open to interpretation and the influence of the researcher, I have tried to increase the level of formalization as much as possible. This implies, for instance, that the literature review in Sub-study C and the content analysis in Sub-study B are structured as opposed to non-structured.
Diachronic	Stability over time: Norms in the field of IT are constantly changing as the technology and organizations for which they are intended change. This means that the norms identified and validated in Study I are temporally situated and dependent upon the time-period of the study. Additionally, the three Sub-studies are temporally different from one another: the Consulting study covers a single instance in 2006, the Academic study covers the last ten years and the Analyst study covers the last three years.
Synchronic	Similarity of observations within the same time period: According to Silverman (2005), triangulation is a common means of achieving high synchronic reliability. In the three Sub-studies, three different methods are used to identify and validate the IT Governance related norms.

Table 13. Three types of reliability in the study

Sub-study A: The Consultants - Identification of IT Governance Related Norms

In this section, I identify the IT Governance related norms of Sub-study A. After an initial description of the method applied and the results, I present the selected norms and relevant keywords.
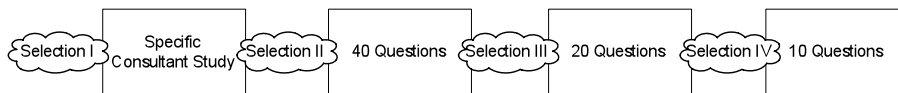
Method

Figure 9. Method of Sub-study A

With the outset of wanting to study the translation of IT Governance, the initial selection of a specific consulting study was made on the basis of access-related criteria. After having come into contact with a consulting study conducted in the summer of 2006 and having access to the transcribed interviews, this was considered a natural starting point.

The consultants constructed the study used as data for Sub-study A with the aim of measuring IT Governance maturity in large organizations. They used a questionnaire consisting of 40 questions, distributed as follows: background (10), general IT Governance (10) and more specific areas of IT Governance (20). A presentation of the demographics of this study can be found in Chapter 6.

According to the consultants (Accenture, 2006), IT Governance has seven underlying characteristics. These seven characteristics were measured by 20 questions. See Table 14.

Q	Characteristic	Question
1	Value	How do you perceive the IT budgeting principle in your company?
2		How are IT investments linked to corporate strategic directions and priorities?
3		What is the perception of top management on IT?

61

4	Leadership	Who has the responsibility of realizing added value from IT organized within the company?
5		Who determines the IT agenda within the company?
6		What processes exist for making IT decisions?
7	Alignment	How do IT and the enterprise align their objectives?
8		How does the allocation of IT budget happen within the company?
9	Performance Management	To what extent is performance measurement implemented in your company?
10		Which statement best describes the focus of performance management reports?
11	Resource Management	Which statement regarding asset utilization best describes your company's situation?
12		How is *(sic)* allocations of resources (people, financial means) determined within your company?
13		Which statement best describes the resource management process for IT in your company?
14		In what way are IT costs and efficiency registered?
15	Financial Management	What is the level of insight in both costs of IT and resulting benefits?
16		On which level are IT costs registered, and are there any checks on expenses?
17		How are IT costs allocated within your company?
18		To what extent does the company have insight in cost drivers?
19	Risk Management	Which risks are identified and addressed within your company?
20		Which situation best describes the risk management process within your company?

Table 14. Questions for measuring IT Governance characteristics (Accenture, 2006)

Selection II was made in choosing to focus on the questionnaire itself instead of f.i. the results of the questionnaire and consulting study. This selection was made with the intent of identifying norms in a selection of questions of the questionnaire.

Selection III was made through focusing on the questions that were not background or general IT Governance questions, which resulted in a list of 20 questions that were designed to investigate particular areas of IT Governance.

The last selection (IV) was made using the method as described below.

As a first step, I analyzed the questions using Luhmann's (1995) and Czarniawska's (2005) perspectives on paradox and deparadoxization. My intention was to identify narrative structures in the form of paradoxes.

For the approach of targeting paradoxes, I was influenced by Poole and Van de Ven (1989), Eisenhardt (2000), and Lewis (2000) who use paradox to understand theories of change. As Eisenhardt (2000:703) notes:

> *This duality of coexisting tensions creates an edge of chaos, not a bland halfway point between one extreme and the other. The management of this duality hinges on exploring the tension in a creative way that captures both extremes, thereby capitalizing on the inherent pluralism within the duality.*

According to Luhmann (1995) and Czarniawska (2005), paradoxes are occurrences that force the actor to switch mode from reflection to action. Hence, paradoxes offer a potential methodological approach for studying practice. In this temporary state of disharmony, the actor is forced to face parallel logics and to choose between different *strategies for deparadoxization* (Luhmann, 1995) resulting in action as opposed to observation and reflection.

By applying the concept of paradox in relation to its original meaning – *contradiction* – (Luhmann (1995) I used paradox to identify areas in Sub-study A where the respondents were forced to deal with contradictory logics (centralize/decentralize, standardize/customize, etc.). Paradox is thus used in the analytical selection to fulfill the requirements of both Study I and Study II.[16]

The questions in the consulting study are structured with five closed options available to the respondent, on a scale of maturity from 1 to 5, where the text of each option describes its level of maturity. Hence the interviewer asks the respondents to position themselves on a scale of maturity that in some cases ranges between two clearly conflicting end points. Figure 8 illustrates how the analysis differentiates between questions containing paradoxes and questions not containing paradoxes.

---

[16] Using Luhmann in this rather shallow and in some sense "tool-box-related" manner may be unwarranted, especially in light of the strong rhetorical position of Luhmann (1983) against the fragmented usage of social theory for empirical investigations. Nevertheless, there is a strong interest in contemporary social and organizational theory in using Luhmann's approach (Seidl and Becker, 2005). However, the applications within IT related research are disparate at best.

5.2	How does the allocation of IT-budget happen within the company?	*Please tick the one alternative that has the best fit*
		☐ The allocation of IT-budget is based on plans of individual IT-executives
		☐ The company strategy determines the IT-plan and as such the yearly allocation of budget to the individual plans
		☐ Business and IT managers work together during the year to divide IT-means based on operational priorities
		☐ Business managers participate in the IT planning and approve IT-priorities and allocation of means based on strategic priorities
		☐ In the executive board (highest level) priorities and plans for IT are determined and the budget and allocation of means are adjusted continuously based business value.
		Comments

6.2	Which statement best describes the focus of performance management reports?	*Please tick the one alternative that has the best fit*
		☐ Stay within budget
		☐ Budgeted versus actual costs, detailed insights
		☐ Costs of IT-, costs per unit, efficiency of IT
		☐ Effectiveness of IT (measured against standards)
		☐ Business value driven by IT
		Comments

Figure 8. Illustration of analytical selection

Q5.2 in Figure 8 presents a list of alternatives with a wide range of dimensions active at once. One dimension is the differentiation between individual managers and company strategy, and the other dimension is the differentiation between IT Executives and business managers. This is further complicated through the introduction of operational versus strategic priorities and the notion of yearly or continuous alterations of the allocation.

Q5.2 has no inherent paradox, or at least no *usable* paradox, since the full range of the four paradoxes makes it difficult to isolate and focus on only one. Hence, given the previous argument on the use of paradoxes as a way to study the translation of norms, this question is unusable.

Q6.2 in Figure 8 illustrates a clearer linear and unitary distribution of alternatives. The first alternative is Budget (represented as *costs*) followed by a steady scale through detailed insights, efficiency, effectiveness and business value. There is a clear line between the first and the last alternative (*cost – value*).

Q6.2 has an apparent paradox, and thus it is more useful in studying the legitimization in Study II.

This results in the criteria for identifying an inherent paradox in the questions being;

1. Logical contradiction between end nodes of scale (response alternatives 1 and 5)

64

2. Uniformity of scale (one single scale) among all response alternatives (response alternatives 1-5)

As the respondents are aware, since the scale represents different levels of maturity, one of the two conflicting logics is the "correct" one, normatively speaking. According to the interviewer, the "correct" alternative is the last one, and hence the inherent norm may be identified by examining the question and the last alternative. This norm is that there should be a focus on the value added of IT in performance management.

To validate the norms in Sub-study B and C, I identified keywords related to the norms by scanning the questions and response alternatives for concepts seen as value-laden, such as budget, allocation, cost, top management support, and so on.

Since the "correct" (alternative 5) response was the norm, it was problematic whether to use all response alternatives as sources for keywords. This problem was rectified by seeing the text for the question as an account of how the norm is discussed by the consultants.

Identification of Norms According to the Consultants

In the following section, I present the 20 questions selected as measures for IT Governance according to the consultants and analyze them by applying the two criteria for paradox (see above). The result is a list of norms and related keywords.

Question 1: How do you perceive the IT budgeting principle in your company?

Figure 10. Question 1 from the consulting questionnaire

For this question, the range of maturity for the IT budgeting principle ranges from a focus on cost minimization to a focus on value generation. In this way, the end points of the maturity scale support the first criterion for paradox.

65

In the middle of the scale, options such as a fixed linking of budget size and a linking to business initiatives and the prioritization process occur. This does not support the second criterion for paradox.

Given the analytical framework of this study, the question does not contain a norm.

Question 2: How are IT investments linked to corporate strategic directions and priorities?

How are IT investments linked to corporate strategic directions and priorities?	Please tick the one alternative that has the best fit
	☐ Separated -> (IT investments are not linked to corporate directions and priorities)
	☐ Ad-hoc -> (Dependent on individual decision makers experience and size of investment)
	☐ Annually -> (Major IT investments are linked once a year to corporate directions and priorities)
	☐ Continuous -> (IT investments are continuously linked to corporate directions and priorities)
	☐ Symbiosis -> (IT investment is managed on enterprise portfolio level and managed in conjunction with corporate directions and priorities)
	Comments

Figure 11. Question 2 from the consulting questionnaire

For this question, the linkage of IT investments with corporate strategic directions and priorities is described by a scale ranging from separated to symbiosis. The most mature state is that of the symbiosis between IT investments and corporate directions. This supports the first criterion for paradox.

To further specify the full range of symbiosis, the consultants use the term "enterprise portfolio." This term relates to the state of maturity with a management project keyword: portfolio management.

The middle alternatives range from ad-hoc to annually and continuously, which supports the second criterion for paradox.

The question supports the first and second criteria for paradox and therefore contains the following norm.

Norm: IT Investments should be linked to business

Keywords: Investment, Strategic, Alignment, Corporate, Portfolio

Question 3: What is the perception of top management on IT?

What is the perception of top management on IT?	Please tick the one alternative that has the best fit
	☐ Top management considers IT as a cost centre
	☐ Top management considers IT essential for operational execution of business processes
	☐ Top management uses IT not only for automation of processes, but also for decision making and management support
	☐ Top management views IT as critical to drive revenue growth
	☐ COE & Board consider IT as a strategic asset and actively sponsor IT related subjects.
	Comments

Figure 12. Question 3 from the consulting questionnaire

For this question, the consultants placed the perception of management on IT on a scale ranging from cost to strategic asset,[17] fulfilling the first criterion for paradox.

The middle alternatives range from operational execution to automation and revenue growth, which supports the second criterion for paradox.

The question supports both the first and second criteria for paradox and therefore contains a norm.

Norm: Top Management should regard IT as a strategic asset

Keywords: Strategic, Asset, Cost

Question 4: Who has the responsibility of realizing added value from IT organized within the company?

Who has the responsibility of realizing added value from IT organized within the company?	Please tick the one alternative that has the best fit
	☐ There is no responsibility defined for realizing added value from IT
	☐ IT management is responsible as a group for realizing added value from IT
	☐ Defined "decisions boards" and individual IT executives are responsible for realizing added value from IT
	☐ Business and IT managers share responsibility for realizing added value from IT
	☐ Top management enables employees of the company to take responsibility realizing added value from IT
	Comments

Figure 13. Question 4 from the consulting questionnaire

For this question, the consultants present a scale ranging from no responsibility to employees enabled by Top management.[18] This question supports the first criterion for paradox.

---

[17] COE, the last alternative in Figure 12, is treated as a typo, since the alternative intended was CEO (Chief Executive Officer).

The middle alternatives range from group responsibility through decision boards and shared responsibility among managers. This supports the second criterion for paradox.

The question supports both the first and second criteria for paradox and therefore contains a norm.

Norm: Top Management should be responsible for realizing the value of IT

Keywords: Leadership, Report, Realizing

Question 5: Who determines the IT agenda within the company?

Figure 14. Question 5 from the consulting questionnaire

For this question, the scale for maturity on the determination of the IT agenda in the company ranges from no formal IT agenda set, to active responsibility for business management. This question does not support the first criterion for paradox since the lowest level of maturity does not answer the question "Who".

The middle alternatives range from bottom-up in the form of practical construction of projects and demand to ad-hoc and business manager leadership, which supports the second criterion for paradox.

Although the question does not match the first criterion for paradox the choice of clear alternatives and the strong support for the second criterion results in the conclusion that the question contains a norm.

Norm: The IT agenda should be established top-down

Keywords: Agenda, Alignment

Question 6: What processes exist for making IT decisions?

What processes exist for making IT decisions?	Please tick the one alternative that has the best fit
	☐ No formal process
	☐ Ad-hoc processes, decision-making dependant on involved stakeholders
	☐ Decision domains are clearly defined with according decision forums and processes.
	☐ Decision domains are clearly defined with according decision forums and tool supported
	☐ Enterprise wide tool supported decision making processes with continuous business input
	Comments

Figure 15. Question 6 from the consulting questionnaire

This question presents a set of responses that range from no formal process (not regarded as the equivalent to no process whatsoever) to an enterprise-wide, tool-supported decision process. Despite the introduction of "tool-supported" in the most mature alternative, the question supports the first criterion for paradox.

The middle alternatives range from ad-hoc processes through clearly defined decision domains to tool- supported decision domains. As the question refers to a scale of formalization, the notion of "tool- supported" is a further formalization and not an additional scale.

The question supports both the first and second criteria for paradox and therefore contains a norm.

Norm: The decision process for IT Investments should be formalized[19]

Keywords: Investment

Question 7: How do IT and the enterprise align their objectives?

How do IT and the enterprise align their objectives?	Please tick the one alternative that has the best fit
	☐ Separated -> (IT has it's own set of objectives dependent on demand from existing applications and architecture)
	☐ Ad-hoc -> (dependent on individuals)
	☐ Annually -> (IT align their objectives to that of the enterprise once a year)
	☐ Continuous -> (IT continuously revise their objectives dependent on changes on enterprise level)
	☐ Symbiosis -> (IT and the enterprise share the same business aligned objectives)
	Comments

Figure 16. Question 7 from the consulting questionnaire

---

[19] This is a re-formulation of the more general notion of "IT Decision" as found in the question.

This question has a scale with end points ranging from separated to symbiosis. This scale assumes the existence of organizational objectives in IS *and* at the enterprise level. The question supports the first criterion for paradox.

The middle alternatives range from ad-hoc through annual to continuous. As the ad-hoc alternative introduces the dimension of individual stakeholders where the reset of the alternatives discusses alignment as contingent on the organization's goals and objectives, the second criterion for paradox is not supported.

Given the analytical framework of this study, the question does not contain a norm.

Question 8: How does the allocation of IT budget happen within the company?

How does the allocation of IT-budget happen within the company?	Please tick the one alternative that has the best fit
	☐ The allocation of IT-budget is based on plans of individual IT-executives
	☐ The company strategy determines the IT-plan and as such the yearly allocation of budget to the individual plans
	☐ Business and IT managers work together during the year to divide IT-means based on operational priorities
	☐ Business managers participate in the IT planning and approve IT-priorities and allocation of means based on strategic priorities
	☐ In the executive board (highest level) priorities and plans for IT are determined and the budget and allocation of means are adjusted continuously based business value.
	Comments

Figure 17. Question 8 from the consulting questionnaire

The question presents a scale of responses ranging from plans of individual IT Executives to the executive board in continuous adjustments based on business value. Since the highest level of maturity introduces new concepts that cannot be related to the lowest level of maturity, this question does not support the first criterion for paradox.

The middle alternatives range from strategy determined by business and IT managers in collaboration, to business managers who participate in IT planning. These alternatives provide another example where the consultants introduce new concepts and scales into a single question, blurring the original scale. Thus, the second criterion for paradox is not supported.

Given the analytical framework of this study, the question does not contain a norm.

Question 9: To what extent is performance measurement implemented in your company?

To what extent is performance measurement implemented in your company?	*Please tick the one alternative that has the best fit*
	☐ Only the expenditure of IT-budgets are monitored and the measured performance is whether the IT-organization can work within budget
	☐ IT budget and major programs and / or projects are monitored based on cost
	☐ (Mainly financial) performance goals exist for every IT-area and achievement of these goals are measured
	☐ Balanced scorecards are used for every level of the IT-organization with accompanying goals
	☐ IT Balanced scorecard or similar systematic IT spread measurement systems contains KPI's for business value driven by IT
	Comments

Figure 18. Question 9 from the consulting questionnaire

This question presents a set of alternative responses ranging from monitoring of expenses to full performance measurement systems with a focus on business value driven by IT. This question supports the first criterion for paradox.

The middle alternatives range from IT budget (cost) to performance (achieved goals) to balanced scorecards. Although the specific method of balanced scorecards is introduced as a possible response, the question supports the second criterion for paradox.

The question supports both the first and second criteria for paradox and therefore contains a norm.

Norm: Performance management should be formalized with a focus on business value driven by IT

Keywords: Performance, Budget, Cost, Financial, Value

Question 10: Which statement best describes the focus of performance management reports?

Which statement best describes the focus of performance management reports?	*Please tick the one alternative that has the best fit*
	☐ Stay within budget
	☐ Budgeted versus actual costs, detailed insights
	☐ Costs of IT-, costs per unit, efficiency of IT
	☐ Effectiveness of IT (measured against standards)
	☐ Business value driven by IT
	Comments

Figure 19. Question 10 from the consulting questionnaire

71

This question presents a scale ranging from budget (costs) to business value driven by IT. This question supports the first criterion for paradox.

The middle alternatives range from budgeted versus actual costs to sliced costs to effectiveness of IT (benchmarked). This supports the second criterion for paradox.

The question supports both the first and second criteria for paradox and therefore contains a norm.

Norm: There should be a focus on the value added of IT in performance management

Keywords: Performance, Benefits, Report, Cost, Budget, Value, Effectiveness

Question 11: Which statement regarding asset utilization best describes your company's situation?

Which statement regarding asset utilization best describes your company's situation?	Please tick the one alternative that has the best fit
	☐ IT-assets are not managed on utilization and are heavily underutilized
	☐ Alike IT-assets are shared and used fairly efficient
	☐ IT-assets are standardized and are used efficiently
	☐ Standard IT-assets are determined / revised periodically based on added value
	☐ Allocation to IT-assets are continuously revised and dynamically steered towards maximized added value
	Comments

Figure 20. Question 11 from the consulting questionnaire

This question presents a scale ranging from not managed and under-utilized to continuous allocation of IT assets steered towards maximized value added. As the first response (lowest maturity) displays two inherent scales (process of utilization and performance of process of utilization) and the last alternative (highest maturity) introduces notions of allocation and value added, the question does not support the first criterion for paradox.

The middle alternatives range from shared (fairly efficient usage) to standardized (efficient usage) to periodically revised, standardized assets based on value added. The second criterion for paradox is not supported.

Given the analytical framework of this study, the question does not contain a norm.

Question 12: How is (sic) allocations of resources (people, financial means) determined within the company?

Figure 21. Question 12 from the consulting questionnaire

This question presents a set of responses on a scale ranging from ad-hoc (driven by bottlenecks and fire alarms) to continuous, dynamic, fluctuating allocation based on business desires. The first criterion for paradox is not supported.

The middle alternatives range from allocation of resources based on technical priorities to business priorities in advance to potential value creation. Because the differences between business priorities and possibilities of adding value are not clearly differentiated and because of the existence of numerous inherent scales (time, functional, etc.), the second criterion for paradox is not supported.

Given the analytical framework of this study, the question does not contain a norm.

Question 13: Which statement best describes the resource management process for IT in your company?

Figure 22. Question 13 from the consulting questionnaire

This question presents responses ranging from informal ad-hoc to enterprise-wide resource pool. The question supports the first criterion for paradox.

73

The middle alternatives range from per function to per project to per portfolio. As these are clear alternatives along the same scale of size and complexity, the question supports the second criterion for paradox.

The question supports both the first and second criteria for paradox and therefore contains a norm.

Norm: Resources should be utilized[20] on an enterprise-wide basis

Keyword: Resource

Question 14: In what way are IT costs and efficiency registered?

In what way are IT-costs and efficiency registered?

Please tick the one alternative that has the best fit
- ☐ IT-costs are only registered as a total: splitting up to categories is not possible
- ☐ Infrastructure and employee costs are registered on a 'per unit basis'
- ☐ The efficiency of every category of IT-means is registered and compared to yearly targets
- ☐ The benefits of every category of IT-means is registered and compared to yearly targets
- ☐ The benefits of every category of IT-means is registered and compared to targets which can be altered dynamically

Comments

Figure 23. Question 14 from the consulting questionnaire

This question has a scale ranging from non-categorization of costs at one end point and benefits measured against dynamically altered targets at the other. The first criterion for paradox is not supported since the responses imply multiple scales of temporality, benefits versus costs, et cetera.

The middle alternatives display a similar multitude of scales, with targets, efficiency, benefits, and categories mixed in the same question. Thus, the question does not support the second criterion for paradox.

Given the analytical framework of this study the question does not contain a norm.

---

[20] Utilization is a key element of the resource management process.

Question 15: What is the level of insight in both costs of IT and resulting benefits?

What is the level of insight in both costs of IT and resulting benefits?	Please tick the one alternative that has the best fit
	☐ Total costs of IT are only approximately known
	☐ Total costs of IT are precisely known
	☐ Total costs of IT are precisely known, as well as the subdivision of these costs in operations, maintenance and investment in new initiatives
	☐ Costs of IT as well as its subdivision are precisely known and traceable to the specific benefits they generate
	☐ Costs of IT as well as its subdivision are precisely IT-means and these funds are demonstrably used for the most strategic and value creating operational initiatives
	Comments

Figure 24. Question 15 from the consulting questionnaire

This question presents a scale ranging from approximately known total costs to precisely known subdivided costs. The question supports the first criterion for paradox, even though the most mature alternative also incorporates a performance aspect for the total control over IT costs.

The middle alternatives range from precisely known total costs through subdivision precisely known, to benefits precisely known. This supports the second criterion for paradox.

The question supports both the first and second criteria for paradox and therefore contains a norm.

Norm: There should be corporate insight into the benefits of IT

Keywords: Benefits, Leadership

Question 16: On which level are IT costs registered and are there any checks on expenses?

On which level are IT costs registered and are there any checks on expenses?	Please tick the one alternative that has the best fit
	☐ IT costs are only registered on an aggregate level
	☐ IT costs are only registered per business unit and compared with budgeted costs
	☐ IT costs are only registered on unit level (per pc, server)
	☐ Systems and procedures impede unplanned costs and expenses
	☐ Both Business and IT receive incentives to optimize IT costs continuously
	Comments

Figure 25. Question 16 from the consulting questionnaire

This question shows how multiple scales are applied since the question actually consists of two questions.

The scale of alternatives ranges from IT costs only registered on an aggregate level (least mature) to business and IT receiving incentives to optimize IT costs continuously. The first criterion for paradox, given that these are not end points on the same scale, is not supported.

The middle alternatives range from business unit registration of costs (compared to budgeted costs) to registration per unit to systems and procedures impeding unplanned costs. This is seen as a clear example of multiple scales, and thus the question does not support the second criterion for paradox.

Given the analytical framework of this study, the question does not contain a norm.

Question 17: How are IT costs allocated within your company?

Figure 26. Question 17 from the consulting questionnaire

This question presents a scale of responses ranging from fixed overhead to dynamic and user-centric cost management. This is a clear example of a question supporting the first criterion for paradox.

The middle alternatives range from planning based allocation to a combination of fixed and factual usage as keys to allocation to business unit autonomy given certain units of usage. This supports the second criterion for paradox.

The question supports both the first and second criteria for paradox and therefore contains a norm.

Norm: Costs should be allocated with business unit autonomy

Keywords: Cost, Allocation, Overhead

Question 18: To what extent does the company have insight in cost drivers?

Figure 27. Question 18 from the consulting questionnaire

This question presents a range of responses from no insight into parameters to ability to control cost drivers in relation to business needs. As the most mature alternative introduces the notion of ability, the question does not support the first criterion for paradox.

The middle alternatives range from no insight into technical parameters to no insight into functional parameters to full transparency for business units. As the scale consists of technical, functional and full transparency, the question does not support the second criterion for paradox

Given the analytical framework of this study, the question does not contain a norm.

Question 19: Which risks are identified and addressed within the company?

Figure 28. Question 19 from the consulting questionnaire

This question presents a scale ranging between only risks that have resulted in accidents addressed as the least mature alternative to a pro-active identification of all risks (most mature). This question supports the first criterion for paradox.

The middle alternatives range from identifying and addressing only common IT risks to all high risks to all risks in the entire value chain. This introduces

77

the new concept of other organizations into the question. Together with a vague differentiation between common and high risks, the question does not support the second criterion for paradox.

Given the analytical framework of this study the question does not contain a norm.

Question 20: Which situation best describes the risk management process within your company?

Which situation best describes the risk management process within your company?

Please tick the one alternative that has the best fit
☐ Risks identification and elimination is driven by incidents and occurs after the fact
☐ Risk management happens ad-hoc
☐ Risk management is a periodical process
☐ Risk management is a continuous process
☐ Risk management is a continuous process and is leading for organizing business
Comments

Figure 29. Question 20 from the consulting questionnaire

This question presents a scale ranging from incident driven risk identification to continuous process leading general organizing of business. This introduces new scales in the form of leadership (over other processes) and impacts along with the temporal. Hence, the two end points are not end points of the same scale. Thus the first criterion for paradox is not supported.

The middle alternatives range from ad-hoc to periodical to continuous process of risk management, which supports the second criterion for paradox.

Given the analytical framework of this study, the question does not contain a norm.

Conclusion: Identification of Norms and Keywords

Of the 20 questions, two (#5 and #20) were not uniform in supporting or not supporting the two criteria for paradox. In these questions, one did not contain a usable norm and one did. Table 15 summarizes the norms and their respective keywords.

Norm #	Q #	Norm	Keywords
1	2	IT investments should be linked to business.	Investment, Strategic, Alignment, Corporate, portfolio
2	3	Top Management should regard IT as a strategic.	Strategic, Asset, Cost
3	4	Top management should be responsible for realizing the value of IT.	Leadership, Report, Realizing
4	5	The IT agenda should be established top-down.	Agenda, alignment
5	6	The decision process for IT investments should be formalized.	Investment
6	9	Performance management should be formalized with a focus on business value driven by IT.	Performance, Budget, Cost, Financial, Value
7	10	There should be a focus on value added of IT in performance management.	Performance, Benefits, Report, Cost, Budget, Value, Effectiveness
8	13	Resources should be utilized on an enterprise-wide basis.	Resource
9	15	There should be corporate insight into the benefits of IT.	Benefits, Leadership
10	17	Costs should be allocated with business unit autonomy.	Cost, Allocation, Overhead

Table 15. Identification of norms and corresponding keywords

These norms and keywords are used in Sub-studies B and C as a foundation for validation.

79

Sub-study B: The Professional Analysts – Validation of IT Governance Related Norms

In this section, I validate the identified norms using the perspective of the Professional Analysts. After a description of the method of the Sub-study, I present my findings and conclusions.

Method

In order to illustrate the elements in IT Governance, I conducted a content analysis of the last three years of reports on the subject by the Gartner Group. Since these reports are not available to the general public, I have used their internal references (ID numbers) as references in the thesis.

Figure 30 illustrates the method applied in Sub-study B.
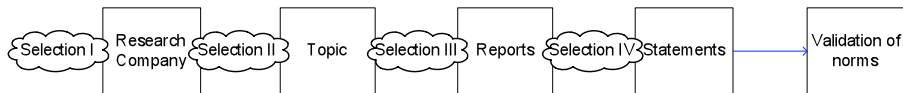
Figure 30. Method of Sub-study B

Sub-study B consisted of a content analysis of a selection of reports by a professional analyst firm working in the field of IT. I selected this firm (Selection I) working from the identification of the most influential players, using the criteria of *size* and *focus*. I determined *size* by market share and the number of professional analysts. I determined the focus by considering only analyst firms with a clear interest in IT related issues.

Among the firms I considered were Aberdeen Group, AMR, IDC, Forrester, and the Gartner Group (hereafter, referred to as Gartner). My final choice was between Gartner and Forrester based on their clear focus on IT, their size, and their market share. I chose to use Gartner's reports that are directed to the CIO and the IT Executive as data.

I selected reports (Selection III) by the browsing functionality at www.gartner.com, looking for the topic most related to CIOs and IT Executives (see Figure 1 below). I then made the choice of topic (Selection II) under IT Management – IT Workforce Strategy – IT Workforce Roles and Responsibilities – CIO and IT Leadership. This selection implies a heavy

emphasis on IT Governance, or what Sambamurthy and Zmud (1999) and Schwartz and Hirschheim (2003) refer to as the "loci of responsibility."

In choosing the topic, (Selection II), my intention was to study how the professional analysts expressed ideas about effective capability related to IT Governance. As Gartner has an overall focus on IS rather than on the general management of a company (including the functions for Corporate Governance), the CIO as IS's equivalent of the Chief Executive Officer was the natural point of interest.

I identified 436 reports by browsing for the topic of "CIO and IT Leadership". After an initial screening and grouping of these reports by publication date, I selected 126 reports – n(2005)=45, n(2006)=59,and n(2007)=22 – for further analysis from the years 2005 to 2007. I did not include reports that were specific to certain industries such as education and health care since these reports were too specific for the general concept of IT Governance. Furthermore, I excluded several reports from the analysis because they focused more on the technical aspects related to *technological choice* rather than on IT Governance related issues.

For the content analysis of the reports, I targeted the imperative word "must" in the reports (Selection IV) as a reliable proxy for identifying normative statements by the professional analysts. I then collated the reports as one PDF document and searched using Acrobat Professional's Advanced Search Function™. I found 604 occurrences of "must" in the reports: n(2005)=190; n(2006)=307; n(2007)=107. I then exported these instances to a separate Excel document for cleaning and classification. As Berg (1998) notes, frequency of occurrence can be regarded as a proxy for magnitude and importance.

I then grouped the sentences and groups of sentences[21] containing "must" by year and analyzed them using a grounded approach where categories of statements are identified by an initial analysis of the material. After a first round of analysis, I created and used categories as a foundation for analysis. See Table 16.

---

[21] In instances where the position of "must" in the sentence did not make sense in isolation, I included surrounding sentences in the selected text.

Category	Description	Percentage (Total)
Alignment	The strategic alignment of IT and Business	3,96%
Business Performance	The measurement of business effects (benefits) of IT	6,61%
Business Focus	A focus on business rather than solely on IT	9,03%
Business Value	The value of IT for business	7,05%
Communication	Communication between IT and business professionals	8,15%
Competence	Issues related to staffing and competence profiles	11,23%
Governance	Settings for the management of IT	4,85%
Organization	Imperatives for the effective organization of IT	15,64%
Investment	Project portfolio and prioritization related to IT investment	7,05%
Leadership	Leadership skills for the CIO	18,28%
Top Management	Support and relationship between IT and Top Management	8,15%

Table 16. Summary of the initial results of the content analysis

The three largest categories of statements were Leadership, Organization and Competence that accounted for more than 45% of the observations.

I next selected categories related to each norm. These categories became the basis for the final validation of norms. I then searched the relevant categories for accounts that could support the norms.

The accounts selected were normative expressions of what must be done by the CIO. I made my final selection of accounts from the professional analysts on the assumption that they expressed ways to fulfill the norms.

The norms were validated *if the discussions among the professional analysts directly supported them.*

The IT Governance related norms according to the professional analysts

In this section, I address the norms individually in relation to how they are discussed by the professional analysts. After an initial presentation of the categories that describe how the norms are discussed, I present a mind-map containing the different means for fulfilling the norm according to the professional analysts. I then use this mind-map as a foundation for a
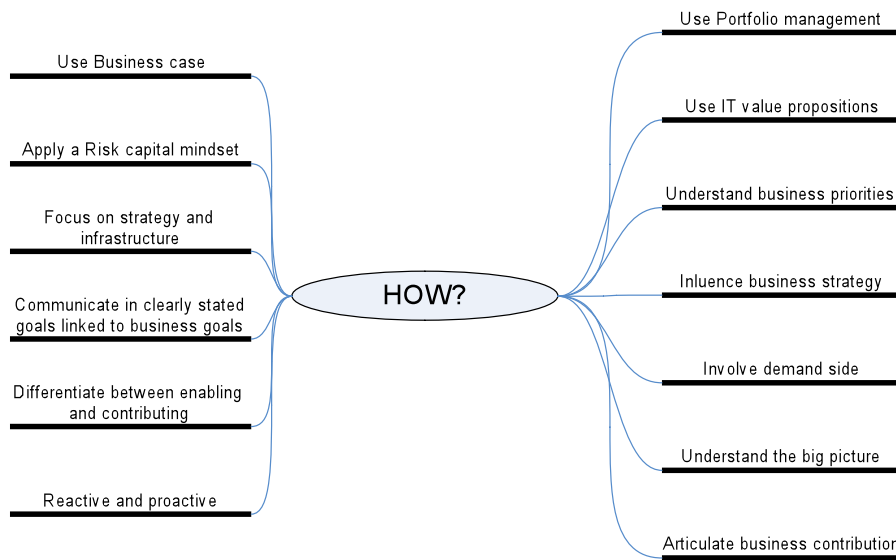
Figure 32. Ways to fulfill Norm 1

The professional analysts are consistent in stating that the IT Executive should strive to develop her own strategy (the IT strategy) in correspondence with the overall corporate strategy. The focus should be on automating, integrating, and simplifying the business processes. The business process is the key recipient of attention from the IT Executive and is thus the link between IT (and hence IT investments) and the business.

> ...the CIO must define an IT strategy and architecture that integrates, automates and simplifies the end-to-end business processes. G00129538

The professional analysts offer a number of ways to achieve alignment between business and IT. For instance, organizations are asked to work with "IT Value propositions" that are intended to form a method for linking

83

investments. Other methods and models include stating goals in enterprise-specific business terms rather than IT related terms.

Besides linking IT investments with business, the professional analysts also stress the necessity of taking into account the overall sourcing strategy. Because of the overall trend towards outsourcing of IT, as well as other supporting functions, the IT Executive must not deviate from the company's overall strategic sourcing plan.

When discussing the necessity of alignment, the professional analysts often highlight the need for agile, flexible, and dynamic settings that can support even the most non-static business. These shifting business requirements call for a more agile approach to alignment. According to one report:

> *The IT organization must become an enabler of business agility through systematization of flexible processes and the enhancement of knowledge work. G00125787*

More stress is placed on the IT Executive to fulfill the norm since she is involved in securing the infrastructure for an enterprise with ever-changing goals, objectives, and market/environmental premises. According to one report:

> *In an era of fast changing, dynamic business environments, projects must change frequently as the business evolves its solutions to respond to rapidly changing market circumstances. G00125787*

The professional analysts explain the necessity of linking IT investments to overall business as complicated by the differentiation between a proactive and reactive management approach. The professional analysts promote the idea that the IT Executive acts not only to secure the infrastructure of the company through investments in IT, but also acts proactively to support business development with technological expertise.

> *...change from an operationally focused reactive role to a strategically focused proactive role. G00129538*

Or:

> *IT organizations must decide whether to follow a path where IT evolves into a service utility or emerges as a strategic force in the enterprise. G00138455*

Related to business processes, the IT Executive is expected to work for continual improvement and to take a position as a change agent who proactively drives the business forward.

The professional analysts distinguish between the demand and the supply side of IT. The IT Executive is strongly advised to formalize the demand/supply relationship and engage the demand side more actively. This formalization is intended to encourage business managers to become more involved in the investment process while at the same time to distribute the responsibility over the realization of business benefits.

> *The CIO must position investment in IT as leading directly to improved business performance. EXP CIO Signature, April 2007*

The professional analysts consistently support the norm of the need to link IT investments to business.

Norm 2: Top Management should regard IT as a strategic asset

Related categories: Business Value, Communication, Competence, Investment, Top Management
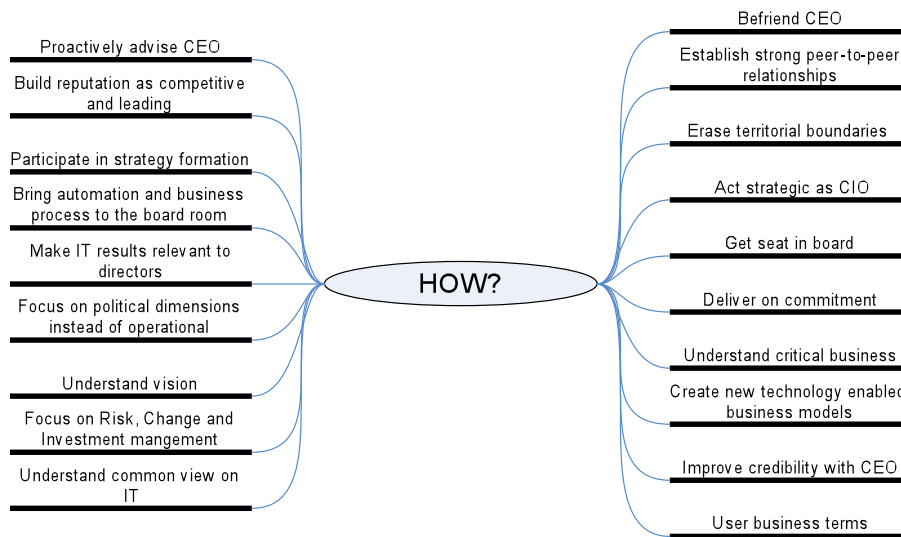
Figure 33. Ways to fulfill Norm 2

> *To achieve your company's goals, you must consider the role of IT in a strategic manner, from policy creation all the way to execution. G00136696*

For this norm, the professional analysts are consistent in stating that this needs to be a main goal of the IT Executive. Executive attention as well as executive understanding is stressed.

CIOs must gauge Executives' understanding of Technology. G00128090

As Figure 33 illustrates, the professional analysts consider the norm is fulfilled by a number of different actions by the IT Executive. This highlights the belief that the responsibility for the organization's fulfillment of the norm rests with the IT Executive.

On a general level, the professional analysts advocate a more political focus by the IT Executive that stresses the political nature of any board-related participation. Therefore, board membership and the nurture of peer-to-peer relationships are necessary for success

The professional analysts also advocate the necessity of taking other aspects of the political dimensions, such as nepotism and vaguely defined roles, into consideration.

CIOs must still be wary of historical relationships the CEO may have with someone in his or her administration, such as a high-school friend serving in the cabinet who may have more clout than the formal organization char suggests. G00127518

Besides the political dimensions of general management, the professional analysts also stress the need to switch from a reactive operations perspective to a more proactive strategic perspective. This is to be achieved by introducing new aspects of IT into the communication with the Board, or, as the next quote illustrates:

The CIO must bring the information management and business process automation to the board room, something quite different from the network operations. G00129538

By re-focusing on business processes as atoms of the organization and by showing how IT as a resource can directly improve the efficiency of these processes, the IT Executive is required to more directly link her operations to the overall business results.

To communicate value for money, the CIO must translate IT operational performance into business performance and continually show that IT delivers value for money where it counts – in improvements to business performance. EXP CIO Signature, April 2007

This leads to a need to communicate IT results in business-related terms rather than in internal IT related terms, as well as a need to apply a marketing

perspective to the management of IS. The IT Executive must make the brand of IS as strong as possible.

> CIOs must proactively build and protect their IT organization's reputation to be competitive." EXP Premier, March 2005

And even more specifically, CIOs should

> ...lead their organizations to establish a track record of creating value faster than reducing IT Costs by 2009. G00144450

This also requires understanding the current view of IT in the organization, with the directors and top management as the most important group of stakeholders.

> To succeed in interacting with the board, CIOs must understand the board's role and how the board views IT. EXP Premier, July 2006

Thus, by understanding the role of the Board and its perception of IT and by making the IT results relevant to the Board members, the professional analysts state that the IT Executive can fulfill the norm.

In conclusion, the professional analysts support the norm that IT is a strategic asset.

Norm 3: Top management should be responsible for realizing the value of IT

Related categories: Top Management, Leadership, Organization, Governance, Business Value, Business Performance
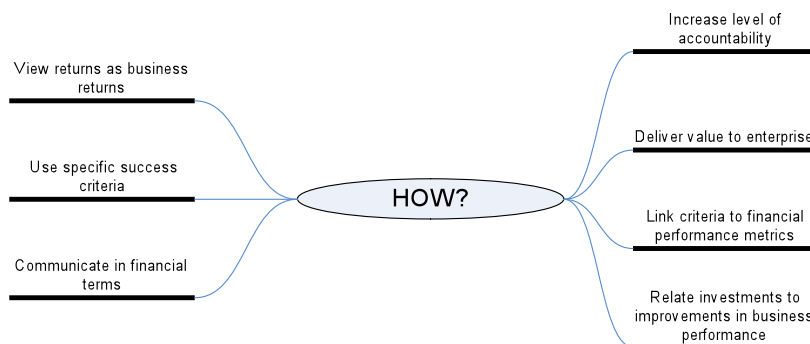
Figure 34. Ways to fulfill Norm 3

87

As Figure 34 illustrates, the professional analysts believe Top Management (strategic decision makers) need to have ample experience in the fields of both business and technology.

> *Strategic decision makers, therefore, must have experience and insight into business and technology. G00144371*

Without explicitly discussing the final responsibility for the value of IT, the analyst reports instead focus on the IT Executive. This assigns a large part of the responsibility to Top Management for the realization of the value of IT that depends on a number of pre-requisites related to the IT Executive.

These pre-requisites consist mainly of communication issues and the linking of operational issues related to IT to the financial performance metrics for the business.

> *IT organizations must be specific about success criteria before they can develop appropriate financial performance metrics. G00143548*

Or:

> *All returns from business investments are business returns and must be communicated in terms of business performance. EXP CIO Signature, April 2007*

This re-formulation is one of the main factors that enables Top Management to actually assume more responsibility.

> *To communicate value for money, the CIO must translate IT operational performance into business performance and continually show that IT delivers value for money where it counts—in improvements to business performance. EXP CIO Signature, April 2007*

In conclusion, the professional analysts are inconsistent in supporting the norm that Top Management should be responsible for realizing the value of IT.

Norm 4: The IT agenda should be established top-down

Related categories: Business Focus, Communication, Governance, Organization

Be cautious to new responsibilities

Have an IT strategy that articulates technical architecture

Sense and adapt to changes

Keep final choice over projects as business decision

Decrease Push

Strive for service industrialization

Erase territorial boundaries between IT and business

Apply a governance strategy consistent with funding model

HOW?

Assemble a team of leaders

Use IT priorities based on capabilities of IT department

Introduce new technology into the enterprise

Communicate in business terms

Increase the demand-pull relationship

Standardize and formalize

Focus on supporting business

Stop perpetuating myth of IT

Figure 35. Ways to fulfill Norm 4

This norm is expressed in the analyst reports by a movement away from ultimate responsibility by the IT Executive. The increased use of standard components, consumerized IT, and service industrialization points in a direction where IT increasingly is viewed as a commodity, as indicated by the following quotes.

> *CIOs must use relationship management and service industrialization to manage the transformation toward globally delivered IT services. G00143869*

> *CIOs must assemble a team of business and IT leaders who are committed to making consumerized IT a positive, not a negative, experience. G00148805*

89

Services and processes must be standard enough to be delivered globally in a seamless way. G00143869

This idea is also highlighted by the professional analysts' belief that IS and the IT Executive should focus more on the demand rather than the supply side of their operations. This is a common thread in many of the reports.

Although CIOs must continue to improve on the demand side, they focus too narrowly on the internal operations elements of the supply-side role, leaving them "out of balance" relative to managing other areas of the leadership role. G00146001

To be successful, IT leaders must rebalance their efforts to focus on the demand side of IT leadership and more-fully engage their business partners. " G00144929

The movement away from responsibility is the equivalent of a movement away from proactive management of IT. The professional analysts emphasize this idea when they discuss the need for IT to "adapt". However, this raises the question of whether the role of IT as a business support is incompatible to that of IT as a driving force of the business.

As business becomes more global, dynamic and competitive, IT governance must adapt. G00146563

CIOs must create adaptability in sources of competitive advantage, reduce complexity and cost and provide the enterprise with visibility through information. EXP CIO Signature, April 2005

Regarding whether IS should deliver (part of the IT Agenda), the professional analysts clearly state that IS should not assume too much responsibility or promise more than it can deliver. Or, in their own words:

IT leadership must be cautious regarding how much responsibility it's prepared to assume. G00130657

IT priorities must also be based on the capabilities of IS. G00126389

This again highlights the need for the IT Executive to distance herself from the ultimate responsibility over what is to be delivered. Instead, the focus should, as previously stated, be directed more towards the demand side.

However, the professional analysts also stress the necessity for IT to decrease the distance between itself and the business; together, they should work with the brand and the image of IT.

Erase the territorial boundaries — There are no such things as IT-only or business-only decisions in the "hyperconnected" enterprise. Everything is interrelated. G00145593

IT professionals must stop perpetuating the myth that IT is so highly complex and misunderstood that only pure technologists can manage it. G00137694

This accentuates the dichotomy between proactive and reactive management of IT where the supply and demand model advocated by the professional analysts (in its most distinct and pure form) counteracts any type of proactive management.

To summarize, the professional analysts believe the IT Executive should avoid responsibility for establishing the IT agenda and instead should take responsibility for establishing the form of its organization. While the professional analysts state that the IT agenda is the responsibility of Business, not IT, they do not explicitly state that it should be established at a top business management level. Nevertheless, in placing the responsibility on Business, instead of IT, is assumed to be a movement towards a higher level of management and not an act of empowerment.

In conclusion, the professional analysts support the norm that the IT agenda should be established top-down.

Norm 5: The decision process for IT investments should be formalized

Related categories: Investment, Governance, Organization
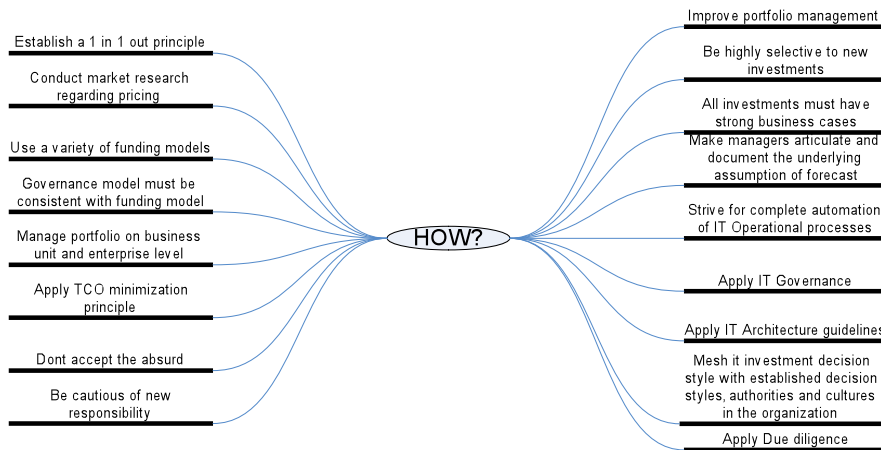
Figure 36. Ways to fulfill Norm 5

The professional analysts discuss this norm from a number of different perspectives. On a general level, the professional analysts clearly state that all investments must have both a sound foundation (secured by a business case methodology) and a clear management process after its approval.

> *All IT investments must have a strong business case and must be tightly managed. G00139845*

The professional analysts refer to the full range of services and products offered through IS as the "IT Portfolio". They also stress the need to establish the correct level of management for the portfolio.

> *The IT portfolio must be managed at the enterprise level and the BU level, with a strong emphasis on the future needs of each BU. G00147320*

This idea may reflect the effort to keep the process of investment decisions as close to the demand side as possible, or at least to keep the business managers at the BU level as involved as possible. The professional analysts stress their strong support for the idea that the IT Executive should avoid responsibility when possible.

92

IT leadership must be cautious regarding how much responsibility it's prepared to assume. G00130657

On a more technical level, the professional analysts establish a simple rule-of-thumb for the application of portfolio management:

Establish a "one in, one out" application policy in which one application must be retired for every new application that is added. G00125787

This type of simple rule-of-thumb or *principle* is also discussed in relation to IT Governance and its role in the investment decision process.

IT Governance must be diligently applied in project/investment approval, and progress tracking. At all times, the IT Architecture guidelines and TCO minimization principle must be applied to guide design decision. G00129538

The professional analysts also discuss the relationship between the general management culture and the investment process.

This is commonly lacking, however, and creating one (via 'the IT Steering committee') is often difficult because it must mesh with the organization's established decision-making style, decision authorities and management culture… G00147320

To summarize, the professional analysts discuss the formalization of the IT investment decision process mainly through a collection of principles and technical notions that refer to the use of business case methodology as sufficient formalization. The impression is that the formalization of the IT investment decision process is natural and without real alternatives.

In conclusion, the professional analysts support the norm that the decision process for IT investments should be formalized.

Norm 6: Performance management should be formalized with a focus on business value driven by IT

Related categories: Business Performance, Governance, Organization
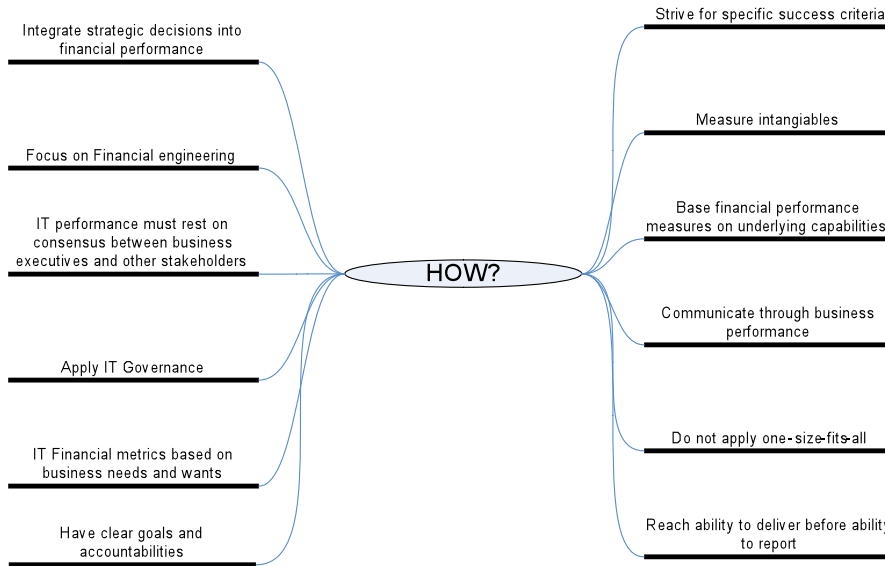
Figure 37. Ways to fulfill Norm 6

According to the professional analysts, there are a number of specific technical requirements for addressing the design of a management control system that supports performance measurement and management of IT.

For instance, the professional analysts clearly support the necessity of establishing a clear link between the IT resource and its resulting influence on financial performance. This translates to both a communication issue in relation to investments in IT as well as to a need for specificity regarding what actually constitutes success.

> All returns from business investments are business returns and must be communicated in terms of business performance. EXP CIO Signature, April 2007

94

Or:

> *IT Organizations must be specific about success criteria before they can develop appropriate performance metrics. G00143548*

The professional analysts are also very clear in stating that the management control system must be streamlined and customized to fit the organization that it supports. The following quotes reflect the need for business-oriented measurements.

> *Before an IT organization can mature its financial management and reporting capabilities, it must first understand that there is no "one size fits all" set of metrics or report standards. G00143548*

Or:

> *Any IT financial management objectives and associated metrics must be based on a clear understanding of these factors, beginning with what the business actually wants, needs and values. G00143548*

Regarding intangible metrics, the professional analysts believe there is a need to create measures and controls that reflect the use of intangibles.

> *IT leaders must work with business and functional leaders to measure the effects of intangible assets and advance methods that will improve the quality and integration of strategic decisions. G00144270*

The formalization of IT performance management is also reflected in a demand to establish controls for accountability with a particular focus on the necessary pre-requisites that protect the CIO from accountability structures.

> *Moreover, for CIOs to be held accountable to IT-specific performance measures,* business-side *executives and key stakeholders must agree on how IT success is being measured and how explicit linkages can be made to desired business-side outcomes. G00143864*

Another aspect regarding accountability is related to the shift from cost cutting to business growth as a focus for IS. According to the professional analysts, this shift entails an additional need for formalization and accountability.

> *IT leaders must demonstrate greater levels of accountability to support business growth than were required when cost cutting was the only order... G00136797*

Or:

95

CIOs must understand the difference between operations and business contribution and the new IT accountabilities that accompany a move to contribution. EXP Premier, July 2005

Another issue raised by the professional analysts is that the CIO and IS should not promise more than they can deliver.

To develop appropriate expectations for the use of IT in your organization, you must achieve consensus on business needs, strategies and endeavors, and the guiding principles or IT maxims that will inform the inevitable trade-offs. G00144929

This demand requires that the focus of IS be on securing the delivery over performance measurement and management.

Before the IT organization worries about the specific financial performance metrics and reporting methods appropriate to each profile, it must first develop the delivery and financial management capabilities required to actually meet business expectations. G00143548

Hence, the professional analysts advocate the necessity of creating the capability to deliver before implementing the management control system.

Financial performance metrics must be based on actual underlying capabilities. G00143548

Or:

Before the IT Organization can report against these dimensions, it must first have the ability to deliver against them. G00143548

Thus the professional analysts are clearly focused on creating and maintaining a management control system with a high degree of formalization. This focus is also linked to a general measurement of the level of IT Governance maturity for the organization as such, linking IT operations to the overall operations of the company.

The more closely tied IT financial performance metrics are to business metrics, the more mature IT organizations' governance, architecture and service delivery capabilities must be. G00143548

The professional analysts support the norm that IT performance management should be formalized with a focus on business value driven by IT.

Norm 7: There should be a focus on the value added of IT in performance management

Related categories: Business Performance, Business Value, Governance, Organization
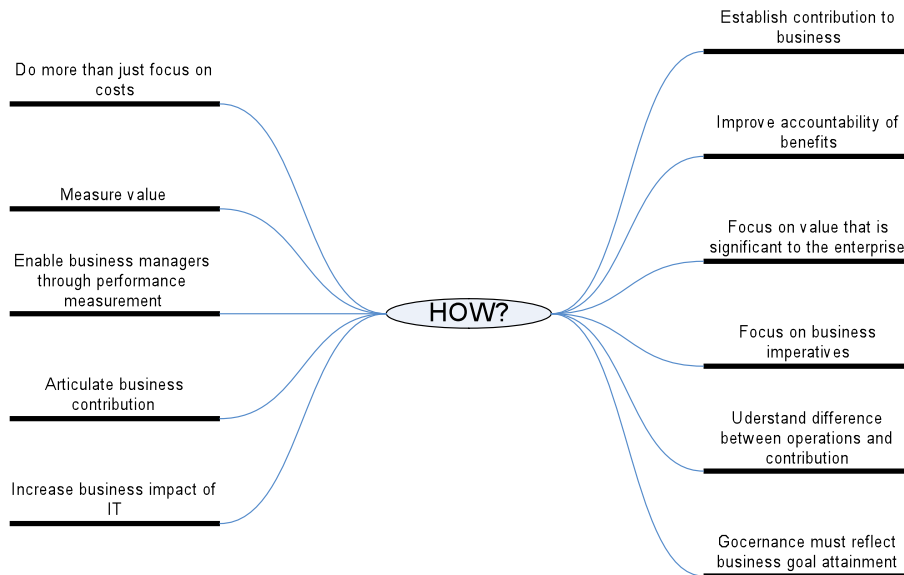
Figure 38. Ways to fulfill Norm 7

As Figure 38 illustrates, professional analysts address the role related to focusing on value-added in IT performance management in a number of different ways. As the discussion of previous norms shows, the differentiation of IS as simply a cost or as a function that can drive business value and overall performance is also evident in relation to this norm.

The professional analysts specifically state that the focus must shift from costs to performance, as the following quotes indicate.

> ...IT Executives must do more than just cut costs. G00144450

> CIOs must focus on business performance as the goal and result of investment in IT. EXP CIO Signature, April 2007

97

They must deliver a record of performance to establish their position and their contribution to the business. G00144450

However, the professional analysts believe the CIO must also see that the benefits and added value reported to the Business must be relevant. Or, in the words of the professional analysts:

They must deliver value that is measurable and of significant importance to the enterprise. G00144450

This requirements leads to the configuration of governance.

Governance must reflect how the use of IT will enable the business goals. G00147320

This focus on measuring not just business value but *relevant* business value makes the CIO dependent on communicating with other areas of the Business and understanding their imperatives and objectives.

Open the doors to new ways of measuring value by making the connection to what's important to the business. G00145593

This link to business objectives and value added of IT is also illustrated in the strong encouragement by the professional analysts to avoid outsourcing the IS function..They think this is best avoided by out-performing industry standards and external offers that circulate.

CIOs and their organizations must deliver more value than the business can buy in the marketplace, or face commoditization. EXP Premier, January 2005

At the same time, the CIO must constantly establish and communicate her contribution.

To remain relevant, the CIO and IS organization must contribute. EXP CIO Signature, June 2007

This in turn leads to new demands for the accountability of IT performance management:

CIOs must understand the difference between operations and business contribution and the new IT accountabilities that accompany a move to contribution. EXP Premier, July 2005

IT leaders must demonstrate greater levels of accountability to support business growth than were required when cost cutting was the only order. G00136797

In conclusion, the professional analysts support the norm that there should be a strong focus on value added in IT performance management.

Norm 8: Resources should be utilized on an enterprise-wide basis

Related categories: Governance, Organization, Competence
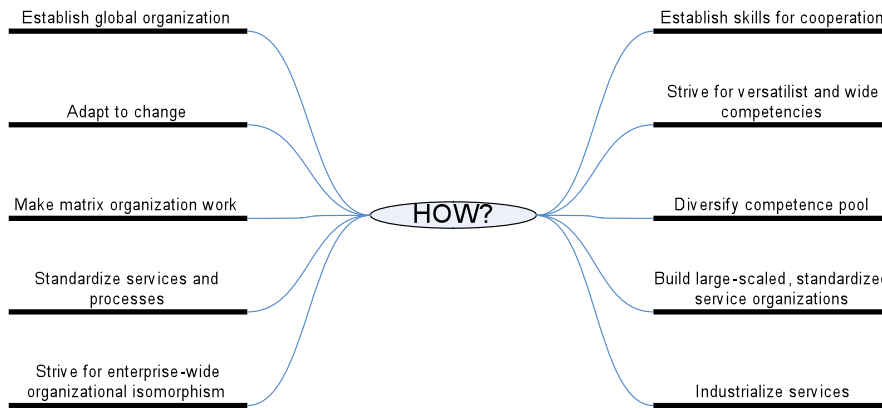
Figure 39. Ways to fulfill Norm 8

In their discussions on resource utilization as part of IT Governance, the professional analysts advocate that key is that the scope should be specified on a global level. For CIOs working in large organizations, the focus should not be limited to business units or areas in the management of resources. Instead, the focus should be on global delivery.

> *The CIO must recognize that the organization is operating globally in a different way to which it may have been and that global leadership has distinct requirements. G00144060*

The CIO then needs a new set of skills. The professional analysts affirm that the actual organization of resources needs to be based on a matrix form.

> *Global IT leaders must have an excellent understanding of how to design and make matrix organizations work. G00144060*

This also leads to specifications regarding the type of talent and competencies needed by employees. According to the professional analysts, the keyword is "multi", with a clear focus on individuals who have a number of different roles in the organization. The organization needs to:

99

…find and nurture fresh talent – multiskilled, multidiscipline and multifariously experienced. G00144215

For global service delivery, specificity of services is necessary. With a clear focus on standardization and industrialization as a way to cut costs and streamline operations, the professional analysts regard a high level of standardization as a necessity for global delivery.

Services and processes must be standard enough to be delivered globally in a seamless way. G00143869

This leads to the need to make the organization's flow of resources seamless. This is a problem that the professional analysts believe can be overcome through continued efforts for standardization. As the next quote indicates, the professional analysts use the concepts of process and methodology maturity as an equivalent for a high level of standardization.

The disparate set of resources must seamlessly come together with a high process and methodology maturity… G00143869

In conclusion, the professional analysts support the norm that resources should be utilized on an enterprise-wide basis.

Norm 9: There should be corporate insight into the benefits of IT

Related categories: Business Focus, Top Management, Leadership, Organization, Competence
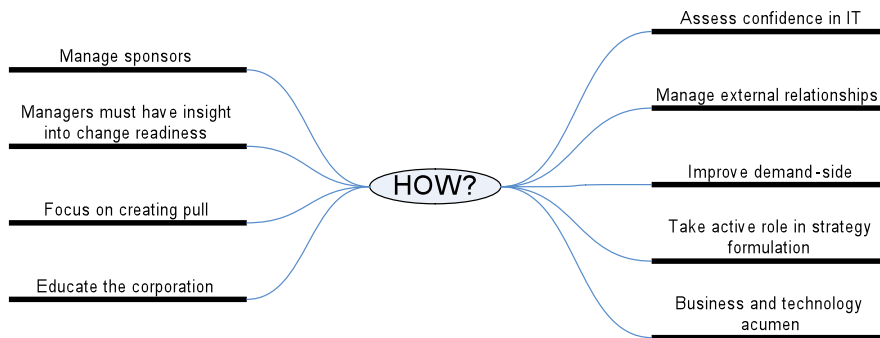
Figure 40. Ways to fulfill Norm 9

On a general level, the discussion on corporate insight into IT focuses on both the demand and the supply side of IT. On the demand side, the key element according to the professional analysts is that of understanding, where the CIOs

100

must take rather drastic measures to actually secure their understanding. This could be accomplished by a formalized statement.

> *Companies must quickly prepare a strong, unified statement on how the problems will be solved and how senior management will gain a full understanding of the current situation inside the company. G00130922*

In addition, the demand side must also be clear in its expectations of the supply side. The way to build these relevant expectations, according to the professional analysts, begins with the CIO's clear understanding of the present reputation of the IS function.

> *The CIO must accurately assess the current level of trust and confidence in IT. G00139307*

Setting the right expectations requires a clear, joint understanding of what is actually of value to the organization. This implies the need for strategically aligning the IT contribution with the overall organizational goals and objectives.

> *You must lead with your business colleagues to set expectations and to identify what is valued — the CIO's demand side. G00144929*

This also highlights the role of the CIO as a marketer of the IS function, and hence also the amount of effort she must put in to managing external relations.

> *The greater the responsibility of the IT organization, the greater the amount of time the CIO must spend managing external relationships, with a proportionately smaller amount of time managing the organization itself. G00140988*

The traditional focus of a CIO, according to the professional analysts, is to make sure that the internal operations of the IS functions run as smoothly and as cost efficiently as possible. This is, however, more and more seen as a potential risk for the overall success of the CIO. Therefore, the focus should be more external.

> *Although CIOs must continue to improve on the demand side, they focus too narrowly on the internal operations elements of the supply-side role, leaving them 'out of balance' relative to managing other areas of the leadership roles. G00146001*

Or:

> *…IT leaders must rebalance their efforts to focus on the demand side of IT leadership and more fully engage their business partners. G00144929*

101

This requires a certain level of education and enlightenment where the CIO must try to educate the organization's stakeholders.

> *..central IS must provide different levels of education and opportunities to its customers, including the heads of departments, the heads of different programs, the owners of the business processes and others responsible for innovation. G00136603*

This can be seen as a clear signal that the customer may not be aware of her own good and that the responsibility of the CIO requires changing the demand side to fit the supply side. This can also be seen in the following quote, showing that the function of the CIO must be clearly understood by senior executives and utilized accordingly.

> *...executives ranked above the CIO must become well acquainted with the position and use the CIO in the decision-making process. G00127187*

The professional analysts agree on that it is necessary for the CIO to work in close relationship with the senior executives. The reputation of the CIO communicates both business and technology insights.

> *The CIO must have strong business and technology acumen and partner with the marketing and network chiefs to create and execute the corporate strategy. G00129538*

This mix of competencies at the corporate level, according to the professional analysts, is a necessity for the overall successful governance of IT. Hence, senior level people must have an understanding of technological issues (or issues that may at first glance appear to be technological).

> *Strategic decision makers, therefore, must have experience and insight into business and technology. G00144371*

In conclusion, the professional analysts are inconsistent in their support of the norm that there should be corporate insight into the benefits of IT. They believe corporate understanding of IT should be high, and yet they do not focus explicitly on the benefits side of this understanding.

Norm 10: Costs should be allocated with business unit autonomy

Related categories: Business Performance, Business Focus, Communication, Governance, Organization
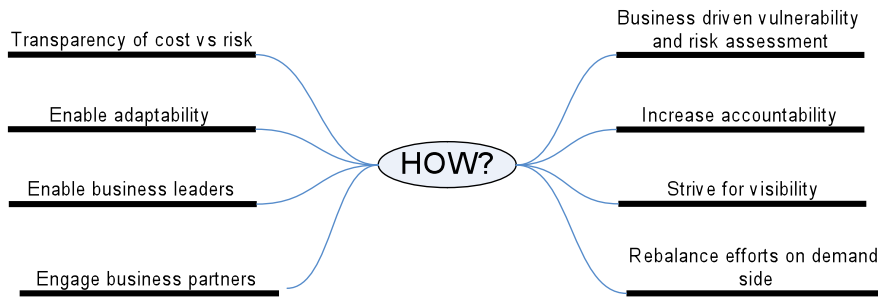
Figure 41. Ways to fulfill Norm 10

Concerning IT costs, there is a direct link to the increased control from the business side over IT related costs. This is linked to notions such as "dynamic pricing" and the effort to establish both accountability and control over IT as a resource.

It is key to the emancipation of the business side, often through the concept of "business-driven IT," that the business representatives (demand side) have the necessary means for control over the supply side.

> *Vulnerability and risk assessments must be business-driven, with greater transparency to cost-vs.-risk matters. G00137350*

Or:

> *IT leaders must augment these metrics with controls that enable business leaders. G00143430*

The professional analysts discuss this norm somewhat ambiguously. They stress the necessity of establishing business-driven IT and the possibility for the business side to actually control the supply side; yet at the same time, they see the demand side as controllable through the supply side.

> *To be successful, IT leaders must rebalance their efforts to focus on the demand side of IT leadership and more-fully engage their business partners. G00144929*

The professional analysts are inconsistent in supporting the norm that IT costs should be allocated with business unit autonomy.

103

Conclusion: Validation of norms according to the Professional Analysts

Table 17 summarizes the results of the content analysis of the reports from the professional analysts. Of the ten norms, the professional analysts found three to be invalid and one partially invalid.

Norm #	Norm	Valid/Not valid
1	IT investments should be linked to business.	Valid
2	Top Management should regard IT as a strategic asset,	Valid
3	Top management should be responsible for realizing the value of IT.	Not valid
4	The IT agenda should be established top-down.	Valid
5	The decision process for IT investments should be formalized.	Valid
6	Performance management should be formalized with a focus on business value driven by IT.	Valid
7	There should be a focus on value added of IT with performance management.	Valid
8	Resources should be utilized on an enterprise-wide basis.	Valid
9	There should be corporate insight into the benefits of IT.	Not valid
10	Costs should be allocated with business unit autonomy.	Not valid

Table 17. Summary of Sub-study B

Sub study C: The Academics - Validation of IT Governance Related Norms

In this section, I validate the identified norms taking an Academic perspective. After a presentation of the method used in this Sub-study, I present the findings from a review of the literature. The literature examined is from the last ten years of publications in six of the largest and most influential academic journals addressing IT Governance.

Method
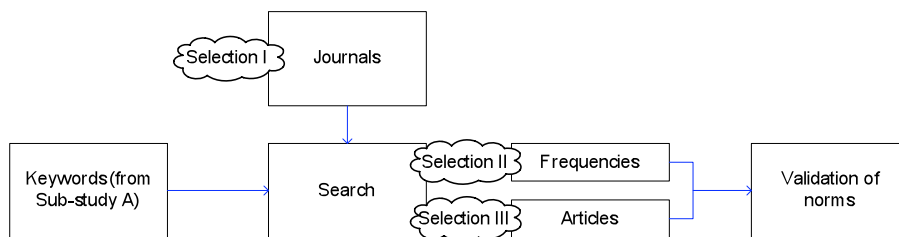
Figure 42. Method of Sub-study C

IT Governance is addressed in a number of academic journals. These journals are almost exclusively from the field of Information Technology and Information Systems. The subject is only rarely addressed by organizational or managerial journals such as *Harvard Business Review*, *MIT Sloan Management Review* and *Organizational Science.*

For the study of IT Governance according to the Academics,[22] I made a literature review of six of the main journals (Selection I) in the fall of 2007. From the years 1998-2007, I identified 2,564 occurrences of the keywords identified in Sub-study A.

I conducted my search electronically using Science Direct, Business Source Premier and Ingenta Connect. I limited my search to keywords, abstracts, and

---

[22] The literature review of academic journals covering IT Governance in this study is regarded as a proxy for the general perception of the group of actors presented as "the Academics". This entails a number of potential difficulties regarding representativeness and generalization that are discussed in more detail under the Methodology discussion in Section 2.

article titles. The occurrences (2564, Selection II) were fewer than the articles reviewed as several keywords appeared in the same articles. In Selection III, I selected 725 articles.

Based this selection of articles, I conducted a directed literature review by browsing through the articles in each category (keyword) I thought relevant for each norm. As a criterion for selection, I selected articles in which the article's title showed a relationship to the norm. This relationship to the norm could be either direct or indirect. An indirect relationship meant there was cause for further analysis by reading the article's abstract in order to evaluate the relevance of the article before reading the article.

The norms were considered validated *if the literature discussed the norm.*

The IT Governance related norms according to the Academics

In the following section, I analyze the ten norms individually using directed literature reviews. The reviews were based on the selection of articles in the categories of related keywords to each norm. For each norm, the previous research related to the norm is presented and analyzed, with the purpose of finding if the norm is discussed by the Academics.

Norm 1: IT investments should be linked to business

Related keywords: Investment, Strategic, Alignment, Corporate, Portfolio

As Lederer and Mendelow (1988) note, the coordination of business and IT is an essential element of IT investments and the IT investment process. Studies by Tallon, Kraemer, and Gurbaxani (2000), Papp (2001), Tallon and Kraemer (2003) and Trainor (2003) take the same view of the IT Executive's obligations. As Avison, et al. (2004:224) state:

> *It* [strategic alignment*] is ranked among the most important issues faced by IT Executives.*

According to Chan, Barclay, and Copeland (1997) and Hussin, King, and Cragg (2002), achieving alignment is a constant struggle for practitioners.

According to Avison et al. (2004), the linkage between investments and business has been studied under a wide variety of pseudonyms such as fit, bridge, integration, harmony, and fusion.

Previous research into the relationship between strategic alignment and business performance is, according to Byrd, Lewis, and Bryan (2006), inconclusive.

Bergeron, Raymond, and Rivard (2004) discuss the notion of strategic alignment in their introduction to the concept of *ideal patterns* of alignment and their influence on business performance.

As Avison, Cuthbertson, and Powell (1999) and Papp (2001) note, technology is often treated simply as a cost that leads to a bias in management attention. If investments in IT are to be linked to business imperatives and objectives, then this perception of IS as a cost-center is one of the main obstacles to overcome.

The benefits of linking investments in IT to business are investigated in numerous articles (Kearns and Lederer, 2000; Reich and Benbasat, 2000; Croteau and Bergeron, 2001; Cragg, King and Hussin 2002; Slaughter et al., 2006). A few studies (e.g., Slaughter et al., 2006) also present disadvantages that include reduced strategic flexibility that is an effect of too tight a linkage.

A number of studies have investigated the linkage of investments in IT to business by focusing on, for instance, organizational contingencies, different types of investments, and differing market conditions.

Thatcher and Oliver (2001) offer a further contribution in differentiating between production efficiency and product quality as measures of business performance. As their study shows, investments in technologies that reduce the firm's fixed overhead costs have no impact on product quality but do improve productivity and increase profits. Furthermore, they show that these investments also increase the total production costs and finally decrease the productivity of the firm. This approach towards focusing more on "how" rather than "if" IT investments influence business performance is also advocated by other researchers such as Quan, Hu and Hart (2004).

The literature discusses the impact of IT investments on business using several frameworks. Sircar, Turnbow and Bordoloi (2000) propose a model based on seven performance indicators and use a large empirical study that finds IT investments have significant effects on sales, assets, and equity. They do not, however find a significant relationship between IT investments and net income. Kumar (2004) proposes a model for assessing the business value of IT infrastructure.

Devaraj and Kohli (2000) introduce the notion of *time-lag* to assist in the understanding and investigation of business performance impacts. Van der Zee and De Jong (1999) present a model for assessing the impact of IT investments based on a balanced approach, with the balanced scorecard as the main influence. Quan, Hu and Hart (2004) highlight the issue of market sensitivities

107

to price and quality under duopoly conditions. Mitra (2005) focuses on the impact of IT investments on firm growth.

To summarize, the discussion supports the norm that IT investments should be linked to business, regardless of the effect of the IT investment on business performance.

Norm 2:Top Management should regard IT as a strategic asset

Related keywords: Strategic, Asset, Cost

Since the early 1980s, there has been a substantial amount of research on the strategic role of IT (Piccoli and Ives, 2005). To a large extent, this research relates to the ability of IT to create and maintain sustainable competitive advantage.

Researchers have focused on the improvement in value generation that IT as an artifact could lead to if applied correctly. Yet recent developments have questioned this conclusion. Piccoli and Ives (2005), however, criticize this position for being too focused on the technology as such, and not enough on the strategic initiatives that are made possible by the technology.

As argued by Piccoli and Ives (2005), the existence of *IT-related initiatives* such as Enterprise Resource Planning, Business Process Reengineering, e-Business, and Customer Relationship Management highlights the necessity for focusing more on the related initiatives than on the technology.

Researchers, who take the Resource Based View (RBV), as well as those who support the Resource Dependence Theory (RDT), have directed considerable interest in the perception of IT as a strategic resource (Lopes and Galetta, 1997; Powell and Dent-Micallef, 1997; Tillquist, King and Woo 2002). Wade and Hulland (2004) synthesize this research into a typology of IS resources.

According to this typology (see Figure 43), there are three types of IS resources. This corresponds to Santhanam and Hartono's (2003) call for multi-dimensional IT capability measures.
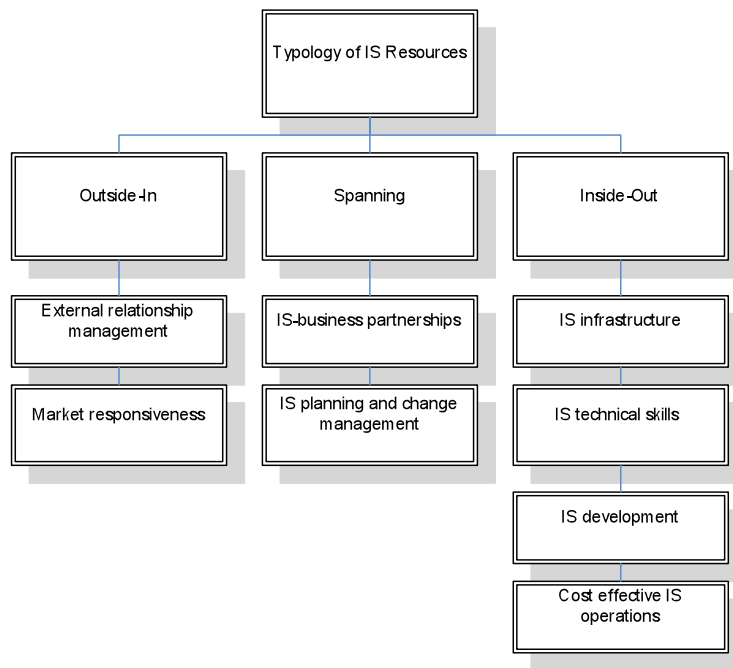
Figure 43. Typology of IS resources (adopted from Wade and Hulland, 2004:112)

IS resources are applied to either an internal (inside-out) or an external (outside-in) perspective with the category of "Spanning" as an intermediate form that makes the other applications of IS possible.

In the external perspective, IS contributes to the coordination and control of relationships through, for instance, Supplier Relationship Management and Customer Relationship Management. Hence, IS resources have become an important ingredient in any interaction between the organization and its business environment (Feeny and Willcocks, 1998).

Furthermore, IS resources help the organization to improve its responsiveness to changes in the market through strategic flexibility (Jarvenpaa and Leidner, 1998), decreased time to delivery, and an overall decreased time to respond (Bharadwaj, 2000).

Given the norm of IT as a strategic asset, research from the fields of RBV and RDT supports the strategic potential of IT, although not admitting that all IT is a strategic asset. Instead, researchers such as Wade and Hulland (2004) offer a more nuanced view of IT, without necessarily disqualifying the norm itself.

109

With business processes more and more dependent on IT in one form or another (Applegate, 2003), the link between IT expenditures and business performance has received significant interest from the academic community. With financial performance the main concern for most organizations, this relationship is relevant in an analysis of how IT as a strategic asset is discussed in Academia.

As far as the effect of IT investments on the level of productivity from a macro perspective; however, the research findings presented over the years are inconclusive. Some researchers have reported on a significant increase in productivity as the result of increased investments in IT while others have not found these benefits (Carr, 2003; Brynjolfsson & McAffe, 2008). The inability to establish a relationship between IT expenditures and increases in productivity has been discussed under the concept of "the productivity paradox", a concept that in itself may contradict the norm of IT as a strategic asset.

Pinsonneault and Rivard (1998) discuss this lack of convergent findings and conclude that it can be attributed to a combination of problems regarding measurement and level of analysis.

To summarize, discussion on the strategic value of IT as it affects competitive advantage of the organization, together with the discussion regarding the effect of IT investments on business performance, supports the norm that Top Management should regard IT as a strategic asset.

Norm 3: Top Management should be responsible for realizing the value of IT

Related keywords: Leadership, Report, Realizing

On a general level, there is much discussion about the necessity of involving top management in the overall management of IT (Wade and Hulland, 2004). When IS is depicted as having either a supporting or a transformative function in the organization (e.g., Jiang and Klein, 2000), this leads to different ideas on why top management should be involved.

There is, however, a difference between the overall call for top management involvement and the direct responsibility over benefits realization (as stated in the norm). Davern and Kauffman (2000) present results from a study of complementary assets, conversion contingencies and the role of senior managers. In this study, they find that managers seem to forget the conversion contingencies (what has to be done in order to achieve realization). For a company to be truly successful in realizing the benefits of technology, the senior managers have to be actively involved not only in the championing of projects but also in the entire realization process.

Following along the same lines, Chatfield and Yetton (2000) identify a positive relationship between the strategic pay-off of IT related investments and the level of social embeddedness of the technology as such. Using three case studies and an inter-case comparison, they show that the more involved the top manager is in the everyday use of the technology, the more active she will be and hence the more successful the investment will be.

Ross, Vitale, and Beath (1999) take a different approach in focusing on cost allocation through the chargeback mechanisms as a means for achieving successful line of sight and communication between IS and business. According to their reasoning, initiatives where IT costs that are understandable and controllable for business managers have a higher level of success than where the costs are non-controllable and hard to understand. As they found in their empirical investigation, many companies have significant deficiencies in their cost allocation practices.

Directly related to the discussion concerning the actual responsibilities of top management for benefits realization, Sohal and Ng (1998) present findings that show a lack of corporate insight and a failure to take responsibility. According to these authors, this may explain failures in IT investments. According to Jiang and Klein (2000), such failures may be explained by an over-emphasis on cost reduction by top management, indicating a perspective that sees IT as more of a cost than a possible benefit.

Lin and Pervan (2003) focus on large Australian organizations' successful work with benefits management. They identify the necessity for making top management aware of the benefits. They argue for the "Cranfield process model for benefits management". The results show that despite the fact that formalization leads to more elaborate and efficient benefits for management, there is a high degree of variety in successful benefits management.

This leads to a further linking of the discussion in the literature from alignment to that of expectation management. Staples, Wong and Seddon (2002) identify the negative aspects of involving and selling IT projects to top management in the "blowing of smoke" that comes from selling. The benefits that are communicated may be exaggerated. Thus expectation management needs to be explicit and benefits must not be exaggerated.

To summarize, the discussion supports the norm that top management should be responsible for realizing the value of IT.

Norm 4: The IT agenda should be established top-down

Related keywords: Agenda, Alignment, Strategic

111

In the review of literature on the establishment of the IT agenda, it quickly became apparent that the literature does not address this issue explicitly. None of the articles selected mentioned the IT agenda. The only expressions related to agenda were in studies focusing on enriching or changing the *research agenda.*

Therefore I made an additional search in relation to concepts such as "Strategic Information Systems Planning" and strategy formulation. This entailed a further review of *Strategic* separate from the initial restriction to *Agenda* and *Alignment.*

This new selection of constructs was made on the premise of using *IT Strategy* as a proxy for IT Agenda. As discussed by the consultants, the IT Agenda may be a set of activities planned within IT (Accenture, 2005). Given that strategy may be patterns of activities (Mintzberg, 1987), the use of IT Strategy as a proxy for IT Agenda was justified. In this second review, concepts such as IT Strategy, Information Strategy and Information Systems Strategy were seen as equal proxies for IT agenda.

The key to the literature was in articles related to the process of strategic information systems planning (SISP). Min, Suh, and Kim (1999) present an integrated model for SISP, placing it clearly in the strategic realm, governed by a body directly championed by top management. In other words, the strategic planning of IT is conducted by (or directly sanctioned and supported by) top management. Figure 44 shows the integrated model for SISP as designed by Min, Suh, and Kim (1999:).
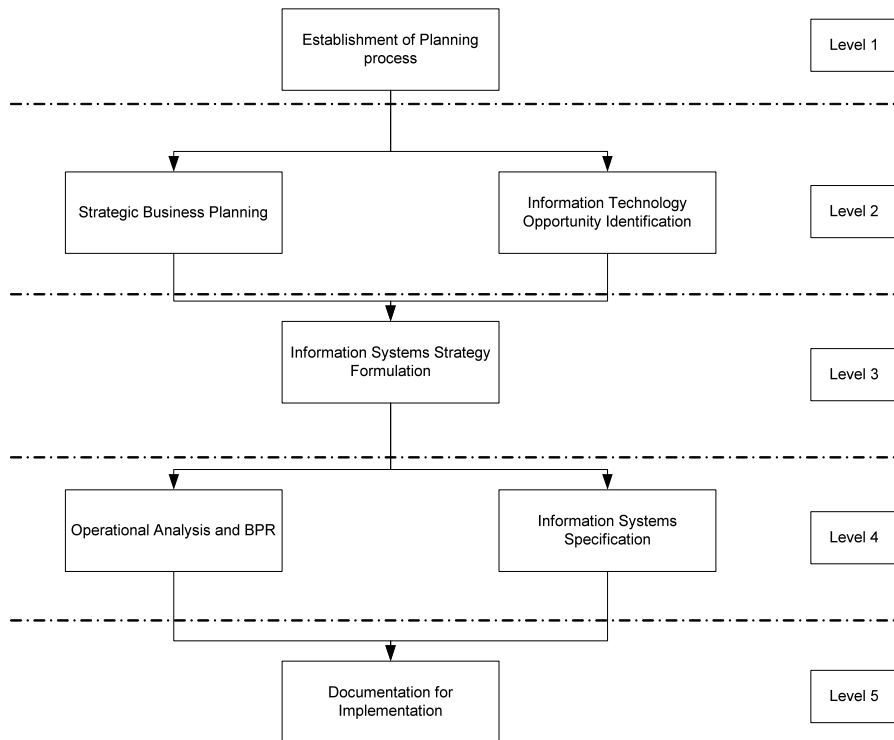
Figure 44. Overall framework of integrated SISP methodology

As Figure 44 indicates, the information systems strategy formulation is preceded by both a business and an IT side that clearly links the formulation of IT strategy to the overall business planning. This in turn highlights the necessity (according to the model) of having champions for the strategy formulation process from both sides (Business and IT).

Peppard (1999) develops a conceptual model for understanding the construction of information strategies in global corporations that takes a clear starting point in business needs. Here, the exploration of IT opportunities, as presented in the article by Min, Huh, and Kim (1999), is downplayed for a more unilateral business oriented process.

An article by Pepper and Ward (2004) presents a different perspective on who should be involved in how the SISP is presented. According to this perspective, the strategy formulation is dependent upon a set of competencies from both sides of the Business-IT spectrum. For the initial strategy formulation phase, this encompasses Business strategy, Technology innovation, Investment criteria, and Information governance.

113

Lee and Myers (2004) take a somewhat different approach to the study of IT implementation. In a critical ethnographic study of an Enterprise Resource Planning (ERP) implementation, they found that conflict regarding strategy was a serious problem. As one of their key findings, they highlight the strategic fit between IT and Business while taking an explicit starting point in the business strategy as such. Given this perspective, the CIOs of the business are seen as the primary stakeholders of the IT strategy, and hence the champions of the strategy formulation.

Newkirk, Lederer and Srinivasan (2003) present a further specification of the SISP process. These authors make a more direct reference to the overall selection and prioritization of projects as subsets of the strategy formulation phase. Newkirk and Lederer (2006) take this idea one step further when they account for the changes in IT strategies by increasingly building on the orchestration of a selection of standardized systems. This highlights the *selection strategy* as one of the most important elements of the strategy formulation phase.

Burn and Szeto (2000) stress the point that top management should be involved as strategy formulators in the strategy execution related to IT. They also found that there is no significant difference in how business and IT managers perceive the strategic alignment of IT and business, which may be a kind of consensus on how the IT strategy should be formulated. Van der Zee and De Jong (1999) support this idea in their research that finds that the CIO is not necessarily an active player in the strategy formulation, given that there is a good understanding of the role of IT by the people involved.

To summarize, the discussion supports the norm that the IT strategy (seen as a proxy for IT agenda) should be established top-down. This does not necessarily require the active participation of the IT Executives themselves but requires their thorough understanding of what role IT could and should play at the corporative level.

Norm 5: The decision process for IT investments should be formalized

Related keywords: Investment

Neirotti and Paolucci (2007) state that formalized processes for assessing IT investments are key elements in successful investments. In 50 case studies in the United States and Europe, conducted between 1998 and 2003, they found support for the theoretical assumptions that IT investments should be formalized.

Grover and Segars (2005) stress the necessity of achieving a high level of formalization in the entire SISP process, with the evaluation of IT investments as a subset of this process. See Figure 44.
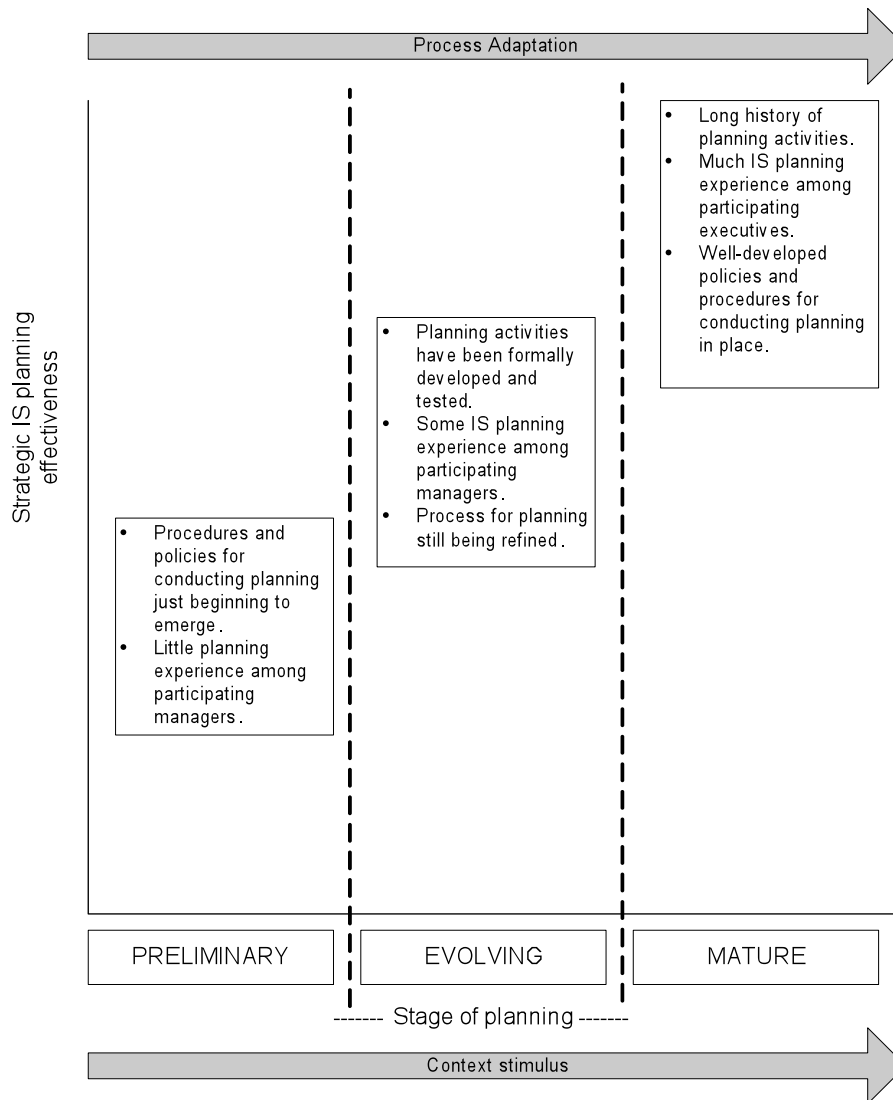
Figure 44. The SISP process (According to Grover and Segars, 2005:767)

Bannister and Remenyi (2000) take a different approach and refer to the decisions related to IT investments as "Acts of faith" rather than as a rational

process. In a comprehensive review of the literature concerning IT investments, they found that managers only use a limited selection of what they refer to as "partisan techniques" and often only use one of these.

Most decisions regarding the investment in IT can be attributed to the reductionist application of composite techniques. According to Bannister and Remenyi (2000), there is a misunderstanding of the actual decision process, which is influenced by a number of less than rational factors (e.g., personal values and the views of colleagues and co-workers).

Irani and Love (2001) take a different perspective in looking at the benefits associated with the implementation of a Material Requirements Planning (MRP) system in a UK manufacturing firm. They found that one of the most significant benefits of introducing the system was a more formalized process for IT investments as such.

In a study directed at finding hidden IT costs among a sample of 50 IT decision makers, Ryan and Harrison (2000) found that the use of formalized methods for making investment decision in relation to IT differs depending on the type of technology to be invested in. With technologies and initiatives that affected the core of the business in focus, the use of more formalized methods was predominant. At the same time, for the more peripheral processes of the business, less formal methods were employed.

To summarize, the discussion supports the norm that the decision process for IT investments should be formalized.

Norm 6: Performance management should be formalized with the focus on business value driven by IT

Related keywords: Performance, Budget, Cost, Financial, Value

There are few direct references to performance management in the literature reviewed in this study. Instead, IT is more often referred to as an enabler of business performance than to its value in the actual performance management of IT.

In a study of 304 business executives' perceptions of IT, Tallon, Kraemer and Gurbaxani (2000) test the hypothesis that companies with clearly formulated goals for IT are more successful in their IT investments. As the results of this study showed, this hypothesis was supported under the premise that an explicit system for performance measurement and management was developed and deployed.

In an attempt to operationalize and empirically test theoretical assumptions regarding the business performance impacts of strategic fit, Bergeron, Raymond and Rivard (2004) found support for the notion that a high degree of formalization increased the level of business performance. In a sample of 110 small US firms, this study showed that there was a direct relationship between a higher degree of formalization and a higher degree of business performance.

After finding limited support for formalized performance management, I conducted a further search on the premise of formalization of performance measurements related to IT. In this search, performance measurement was seen as a subset of performance management. This procedure offered more direct evidence of a discussion on the use of formalized performance management practices.

In an empirical study of the impact of IT investments on firm financial performance, Shin (2001) found that there was a direct link between IT expenditures and firm gross profit, but not on performance measures such as Return on Equity (ROE) and Return on Assets (ROA). This study entails a focus on performance management as related to return and value added of IT, using formalized methods and measures.

To summarize, the discussion supports the norm that performance management should be formalized with the focus on business value driven by IT. However, the research does not clearly specify *how* this formalization is to be achieved.

Norm 7: There should be a focus on value added of IT in performance management

Related keywords: Performance, Benefits, Report, Cost, Budget, Value, Effectiveness
The literature on the potential value of IT (and achieving that value) focuses on establishing and communicating the IT value added. This focus appears in a number of different examples, ranging from general accounts (Peppard and Ward, 1999; Shin, 2001; Sambamurthy, Bharadwaj and Grover, 2003) to more specific accounts related to Supply Chain Management (Subramani, 2004; Malhotra, Gosain and El Sawy, 2005) e-business (Barua, Konana and Winston, 2004) and Customer Relationship Management (Karahanna, Agarwal and Angst, 2006).

Lee and Bose (2002) found support for the impact of IT investments on the aggregate (accounting-based and market-based) measures of firm performance. On a decomposed level, however, the results were inconclusive,

117

showing no support for the operational linkage of, for example, non-financial and intangible measures of value added.

Through applying a resource-based view to the investigation of IT value added, Bharadwaj (2000) questions the effort to find linkages between effects on firm profitability and IT related investments. In his opinion, any attempt to find a direct link between the value added of IT and firm profitability is destined to failure.

Levy, Powell and Yetton (2001) highlight strategic focus related to IT. According to their findings from 27 case studies, there is a dichotomy between cost focus and a focus on the value added. According to these authors, IT has traditionally been implemented with a focus on cost reduction in large organizations, but during recent years this has changed towards focusing more on the value added of IT and a strong push towards performance measures not unilaterally focused on costs.

In a novel way of prioritizing IT related projects, Bardhan, Bagchi, and Sougstad (2004) present a nested real options value model that takes into account the possible interdependencies among current projects. According to the authors, this model emphasizes the value added of IT in areas where it was previously hard to assess.

To summarize, the discussion supports the norm that there should be a focus on value added of IT performance management, given that this entails the practice of accounting for IT related projects and the prioritization of projects in the investment process.

Norm 8: Resources should be utilized on an enterprise-wide basis

Related keyword: Resource

The interpretation of this norm depends on construct of Resources. According to the consultants' discussion (Accenture, 2006), to a large extent Resources consist of the human capital of the organization, particularly the people involved in the IS function.

When Resources refers to human capital, then the literature on sourcing strategies is relevant to the validation of this norm. Issues related to sourcing strategies, such as shared service centers and outsourcing, are potential avenues of support for the norm.

On the use of Application Service Providers (ASP) as a model for application outsourcing, Jayatilaka, Schwartz, and Hirschheim (2003) construct and evaluate an integrated theoretical model combining disparate views such as

the resource based view, transaction cost economics, resource-dependency and the knowledge based view of the firm. They found that knowledge utilization in particular is positively affected by the move towards an application outsourcing agreement since this creates a higher degree of flexibility and provides access to more qualified knowledge.

Despite the inclusion of research by Academics of issues related to sourcing strategies, there is insufficient support for the norm that Resources should be utilized on an enterprise-wide basis. Hence, the norm cannot be validated.

Norm 9: There should be corporate insight into the benefits of IT

Related keywords: Benefits, Leadership

In this norm "corporate" refers to the overall business management layer of the organization. Hence, the term is (in many aspects) a pseudonym for Top Management.

Using this definition of "corporate", this norm directly links to the second and third norms on understanding the strategic role of IT and top management responsibility for value realization.

Fearon and Philip (1998) develop a conceptual model to understand the operational and strategic benefits of Electronic Data Interchange (EDI). In their model, the strategic benefits of EDI are seen as an important input in the overall strategic management of the firm that needs to be understood by top management.

O'Connor and Martinsons (2006) take an accounting perspective on the management of information systems and conclude that the overall corporate management of IT should be balanced in a number of different management control systems for optimal control. This may include delegation, incentives, and performance measurement. These authors clearly state that the benefits of IT need to be understood on a corporate level.

According to Benaroch et al. (2007), there has been a substantial increase in the use of corporate finance influenced models of evaluation of IT investments. This increase coincides with more involvement by senior managers who are more accustomed to this type of financial analysis of investments. This conclusion supports the notion that there should be corporate insight into the benefits of IT.

Karimi et al. (2000) explore the function and role of Management Information Systems (MIS) steering committees on the IT management in organizations. They find that the steering committee functions as a means for aligning

119

technology with corporate objectives. This function requires insight into both the business and IT by matching the benefits of IT with the overall corporate objectives.

In a study drawing on a survey conducted with 67 senior IT Executives distributed over three continents, Van der Zee and De Jong (1999) integrate business planning with the evaluation of IT results on a corporate level. They do this by developing and testing the "Balanced Business Scorecard", a further development of the original Balanced Scorecard. In two case studies, the Balanced Business Scorecard is evaluated with the conclusion that ISs are a good way to communicate IT benefits to the business managers.

Francalanci and Golal (1998), Ross, Vitale and Beath (1999), Taudes, Feurstein and Mild (1999) and Chen and Edgington (2005) also discuss corporate insight into the benefits of IT.

To summarize, the discussion supports the norm that there should be corporate insight into the benefits of IT.

Norm 10: Costs should be allocated with business unit autonomy

Related keywords: Cost, Overhead, Allocation

The issue of cost allocation is directly discussed in several articles focused on the design of chargeback systems for IT. O'Connor and Martinsons (2006) take an accounting perspective on this issue and discuss the reasons for chargeback as related to the internal cost resource utilization and the effects of externalities. Figure 44 presents the drivers of their chargeback design.
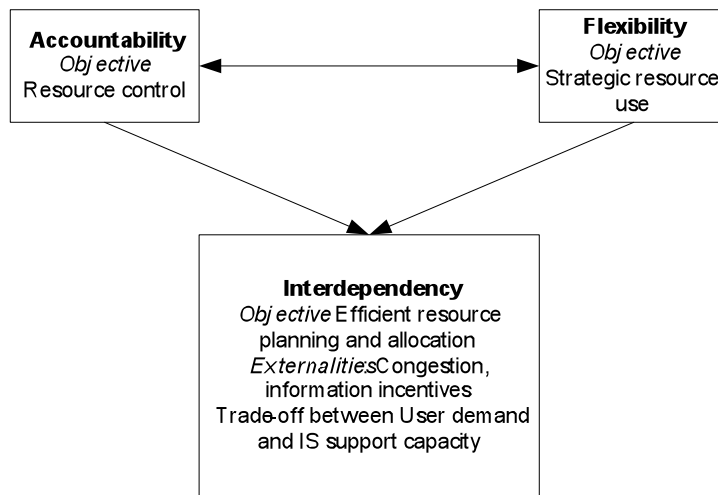
Figure 44. Drivers of chargeback design (According to O'Connor and Martinsons, 2006:1016)

O'Connor and Martinsons conclude that there are principally three methods in accounting that may aid in the design of the chargeback system:

1. There is a tradeoff between flexibility and accountability, and the strict "pay for what you use" may lead to a less than optimal chargeback design.
2. Volitional activity may need to be promoted within areas with a high degree of technological uncertainty or outputs that are difficult to measure.
3. Alternative methods such as incentives could be used as a complement to control.

Peacock and Tarriru (2005) apply an activity-based approach to justify IT investments. This entails relating the investments to product profitability, or allocating costs of IT in correspondence with how much benefit the costs lead to.

Broadbent, Weill and St. Clair (1999) discuss the practice of cost allocation through direct chargeback of business unit specific investments (such as specific business support systems that have no direct value for the other parts of the organization).

Reporting on a study of ten organizations chargeback systems for IT, Ross, Vitale and Beath (1999) present an evaluation of practice. According to their findings, the key benefit of IT chargeback was the increased and improved communication between IT and business. The four organizations in the study

121

that were found to have gained the most benefits from the chargeback had established strong partnerships between IT and business, something that the authors highlighted as a possible way to move towards more successful IT investments.

Lacity and Willcocks (1998) studied sourcing alternatives for data centers and found similar results with smaller data centers outperforming larger ones. According to these authors, this was counter-intuitive. Thus the larger datacenters should have a competitive advantage in the strong economies-of-scale that are present in data management. Some differences in performance were attributed in general to the more sophisticated chargeback systems of the smaller data centers.

To summarize, the research by Academics on chargeback supports the norm that IT costs should be allocated with business unit autonomy.

Conclusion: Validation of norms according to the Academics

Table 18 summarizes the validation of norms in Sub-study C. As the results show, only one of ten norms was invalid and one was partially invalid.

Norm #	Norm	Valid/Not valid
1	IT investments should be linked to business.	Valid
2	Top Management should regard IT as a strategic asset.	Valid
3	Top Management should be responsible for realizing value of IT.	Valid
4	The IT agenda should be established top-down.	Valid
5	The decision process for IT investments should be formalized.	Valid
6	Performance management should be formalized with a focus on business value driven by IT.	Valid
7	There should be a focus on value added of IT in performance management.	Valid
8	Resources should be utilized on an enterprise-wide basis.	Not valid
9	There should be corporate insight into the benefits of IT.	Valid
10	Costs should be allocated with business unit autonomy.	Valid

Table 18. Summary of Sub-study C

Synthesis

Using the conclusions from Sub-studies A, B and C, I present the list of norms and the results of their validation in Table 18. To make the final selection of validated norms, I made a synthesis of the results from Sub-studies A, B and C. The final choice of considering whether a norm was valid was based on the premise that if the norm was validated by one part (Sub-study B or Sub-study C), then it was valid. Hence, the four norms that were not universally validated (#3, #8, #9, and #10) were all valid in the final selection of norms.

The rationale for this criterion for validation was that if the norm was discussed in one of the two perspectives used to validate the norm, then it was considered valid by a majority of the three perspectives (on the assumption that the consultants considered their own norms valid).

#	Norm	Consultants	Professional analysts	Academics	VALI-DATED NORM
1	IT investments should be linked to business.	YES	YES	YES	YES
2	Top Management should regard IT as a strategic asset.	YES	YES	YES	YES
3	Top management should be responsible for realizing value of IT.	YES	NO	YES	YES
4	The IT agenda should be established top-down.	YES	YES	YES	YES
5	The decision process for IT investments should be formalized.	YES	YES	YES	YES
6	Performance management should be formalized with a focus on business value driven by IT.	YES	YES	YES	YES
7	There should be a focus on value added of IT in performance management.	YES	YES	YES	YES
8	Resources should be utilized on an enterprise-wide basis.	YES	YES	NO	YES
9	There should be corporate insight into the benefits of IT.	YES	NO	YES	YES
10	Costs should be allocated with business unit autonomy.	YES	NO	YES	YES

Table 19. Summary and synthesis of identification and validation of norms

123

CHAPTER 6

Study II - Strategies of legitimization

In this chapter, I present the second study of the thesis. After an introduction and a discussion of the basic assumptions and research design for Study II, I present three sections on the methods and results related to the three Sub-studies. The chapter concludes with a synthesis that provides a description of the legitimization strategies identified.

Introduction

To answer the overall research question on how IT Governance related norms are unpackaged, Study II focuses on legitimization and directs the focus towards individual managers. The concept of legitimization strategies is borrowed from the literature on the early developments in Speech Act Theory (Austin, 1961) and Motive Talk (Semin and Manstead, 1983). The concept refers to patterns used to achieve and maintain legitimacy.

The rationale for targeting the legitimization strategies used by individuals is two-fold. First, the individual manager focus is justified by her role in the

overall unpackaging of a norm. The individual manager is the "point-of-entry" for any type of organizational norm where she acts as a bridge, mediator, or means for norm adoption. This highlights the receiving-end of translation, as advocated, for example, by Djelic (2007).

Second, the individual manager is involved in the unpackaging of norms by a process of legitimization. She constantly acts under the pressure of norm compliance. Her reasons for seeking legitimacy on a personal level correspond to those reported at the organizational level (e.g., Pfeffer, 1981; Richardson, 1985).

Study II applies the IT Governance related norms identified in Study I to interview transcripts from the consultants' questionnaire study conducted in 2006. The subject of this questionnaire study, that targeted CIOs at large Swedish organizations, was IT governance maturity.

Basic assumptions

Study II relies on three assumptions that provide the foundation for the analysis and presentation of results. These assumptions are explained next.

The *first assumption* concerns the perception of legitimization as a way to study the unpackaging phase of translation. As previously noted, unpackaging is one of the underlying phases in the translation of management ideas (Erlingsdóttir and Lindberg, 2005).

In this thesis, the management idea manifests itself as norms. These ten norms (identified and validated in Study I) were communicated to the respondents in the interview setting. Each respondent was then asked to respond to each of the norms.

As the interview questions target the "level of maturity" that exists in organizations, the respondent is exposed to a clearly stated norm in each question (in all questions, the fifth alternative response). When confronted with a norm and asked to state and explain her position on this norm, the CIO is under a certain pressure. Semin and Manstead (1983) discuss this pressure in their description of the social predicament that occurs when a respondent enters a situation where her response may be questioned.

Hence, the *second assumption* is that the respondents are confronted with norms. If the respondent understands the communication of the norm (value of a high level of maturity), a situation arises in which the respondent will give one of two alternative responses.

125

The first alternative response is solely quantitative and non-reflective (with regard to expressions of elaboration). Depending on the degree of norm conformity that the respondent expresses (conformity or non-conformity), this response may be interpreted in a number of different ways.

One interpretation is that the respondent has no direct interest in a question and/or in the interview. Another interpretation is that the respondent is not familiar with the norm. Still another interpretation is that the respondent thinks it unnecessary to explain her response further. Regardless of the interpretation, the response is unhelpful in the analysis of the unpacking phase.

The second alternative response is an explanation by the respondent of why her organization does not conform to the norm. Austin (1962) offers a starting point for the analysis of this response by stating that an answer of non-conformity may be either an excuse or a justification. The excuse acknowledges the norm (and thereby also the authority claim of the norm) and the responsibility for the divergence from the norm. At the same time, the excuse explains why the divergence has occurred in this situation. The justification acknowledges the norm but not its uniformity. Instead, the justification explains why the norm is wrong and inapplicable in this situation.

Austin (1962:176f) provides a typical example of the differences in these two alternative responses:

> *…if the objection is to be the use of such a dyslogistic verb as 'murdered', this may be on the ground that the killing was done in battle (justification) or on the ground that it was only accidental if reckless (excuse).*

In Study II, I use Austin's (1962) distinction between excuse and justification as a starting point for analyzing how the respondent relates her situation to a norm her organization does not conform to. Since the excuse and justification responses are strategies of legitimization, I assume that the reason for explaining why a norm is breached is to acquire or maintain legitimacy. With this assumption, Study II follows a basic tenet of institutional theory (Suchman, 1995): namely, the concept of legitimacy. Scott develops this idea of legitimacy:

> *Organizations receive support and legitimacy to the extent that they conform to contemporary norms – as determined by professional and scientific authorities – concerning the 'appropriate' way to organize.*
> Scott, 2003:137

Ashforth and Gibbs (1990) define legitimacy as a state that signals that the organization is in tune with external norms, values, and expectations).

Legitimacy is also defined as a state that is sought after at both the organizational *and* the personal levels.

Hence, the *third assumption* is that the accounts by the respondents are *legitimating accounts*. Creed, Scully, and Austin (2002) use the concept of "legitimating accounts" in their research on how gay, lesbian, bisexual, and transgender individuals relate to policies in their social construction of identity. According to these authors, the development of the concept is steadily moving forward by following theoretical developments, mainly in institutional theory. This assumption also relates the analysis in Study II to the developments in Motive Talk (Semin and Manstead, 1983) in which individuals are seen as constantly engaged in rationalizing their choices. As Semin and Manstead (1983:71) explain:

> *Individuals respond to such implicit or explicit questions by engaging in motive talk, that is, by announcing a motive or imputing a motive or by calling on another or others to avow a motive.*

Goffman (1971) proposes an alternative framework of three "devices" – apologies, requests, and accounts – that I might have used in Study II as an alternative to Austin's (1962) categories of excuse and justification. Two of Goffman's devices ("apologies" and "accounts") correspond to Austin's two categories. However, Goffman's "requests" is a device that introduces a deviation in behavior as preparation for breaching a norm.

Goffman uses the concept of "accounts" that Scott and Lyman (1968:48) define as *"…a statement made by a social actor to explain unanticipated or untoward behavior."* Hence this term implies a motive for legitimization, making the concept of "legitimating accounts" redundant. Nevertheless, I use the concept of "legitimating accounts" for clarification. I also use Austin's (1962) two categories of excuse and justification instead of Goffman's (1971) framework.

To summarize, the three assumptions used in the analysis in Study II are:

1. Legitimization is a way to study the unpackaging phase of translation.
2. The respondents are confronted with norms.
3. The respondents' accounts are legitimating accounts.

Research Design

The purpose of Study II is to identify and describe the legitimization strategies used by CIOs at large organizations in their unpackaging of IT Governance related norms.

I investigate these legitimization strategies by taking a qualitative approach. I focus on a cross-sectional analysis of 18 cases in which I study a particular phase of the overall translation process.

Previous studies of translation have largely focused on the study of successful management ideas using longitudinal case studies (e.g., Callon, 1986; Baas and Boons, 2000; Eriksson-Zetterquist and Lindberg, 2002; Collin, 2006).[23] The use of cross-sectional field studies (see Lillis and Mundy, 2005) in this study seeks to fill a methodological deficiency. See Figure 45.
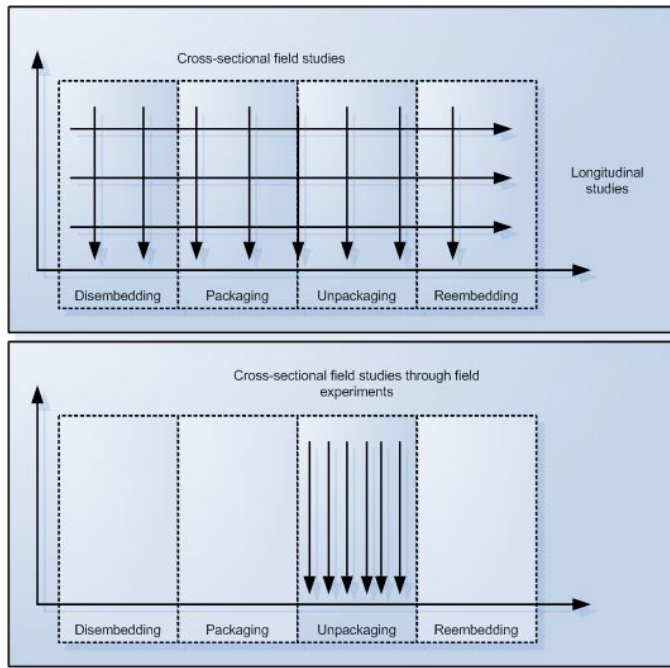
Figure 45. Comparison of longitudinal and cross-sectional field study methodology

Two criticisms may be raised against the approach of Study II. First, the complaint may be that the analysis is on the unpackaging phase only rather than the overall process of translation. Second, the assumption that the unpackaging phase can be isolated in the analysis may be challenged. In response to such criticism, I refer to the work of Erlingsdóttir and Lindberg (2005) who present a process model with the phases of disembedding, packaging, traveling, unpacking, and re-embedding used as a backdrop for a

[23] There are, however, examples of cross-sectional approaches, (e.g., Buck and Shahrim,2005) that use a combination of longitudinal and cross-sectional case studies.

three-case study of the translation of ideas in the healthcare sector. Building on their approach, I focus on the phase of unpacking in the process of translation, re-naming the phase *unpackaging*. My reason for this change of name is to underscore my focus on the actual package instead of the unpacking activity that is the focus in Erlingsdóttir and Lindberg's (2005) study. Figure 46 diagrams the four steps of Study II.
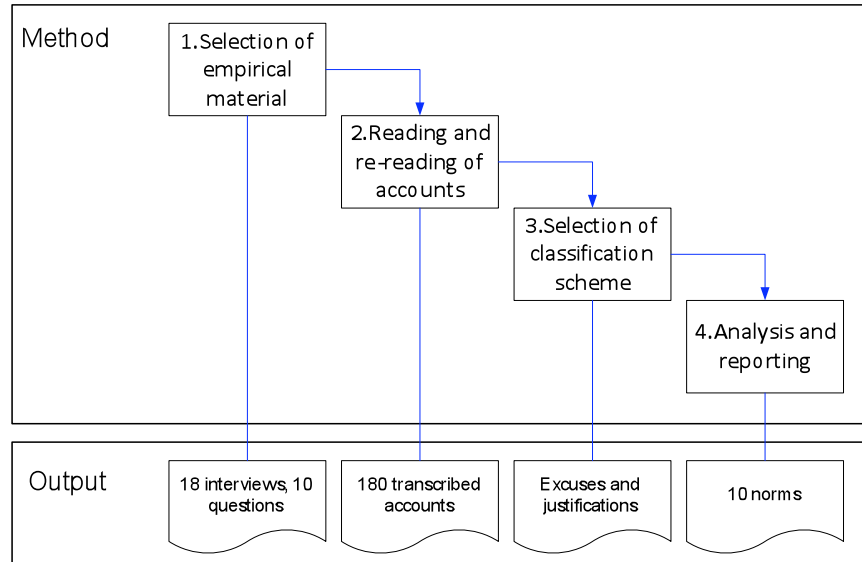
Figure 46. Four-step methodology in Study II

In *Step 1,* I selected 18 transcribed interviews from a project conducted jointly in 2006 by a consulting firm and several academics. These interviews were part of a study aimed at measuring IT Governance maturity among large, Swedish organizations.

The study was part of a larger initiative with seventy respondents in the Netherlands, Sweden, Norway, and Finland. Each respondent was either the CIO, or the equivalent, of an organization selected by the consulting firm. According to the consulting firm, all the organizations were judged successful in their IT Governance.

Researchers from Chalmers University of Technology, The IT University, and the School of Business, Economics and Law at the University of Gothenburg (all institutions are in Gothenburg, Sweden) were involved in conducting the interviews. The researchers were given permission to use the results of the interviews for further analysis. The consulting firm sponsored the research.

129

As the study was a designed as a consultancy activity rather than a research study, the researchers were not involved in the construction of the questionnaire or in the research design. Although this scenario had somewhat unfavorable implications for the continued use of the data, the researchers felt the study offered them unique access to the high profile executives interviewed. Previously, the researchers had been unsuccessful in obtaining access to these executives. Therefore, in co-branding the consulting study, the researchers could acquire otherwise unattainable data.

The consulting firm selected 27 organizations in Sweden. The researchers contacted these organizations to arrange on-site interviews. (See below: one interview was excluded from the analysis).

Figure 47 presents the basic demographics of the organizations. Revenue and IT spending are in Euros.
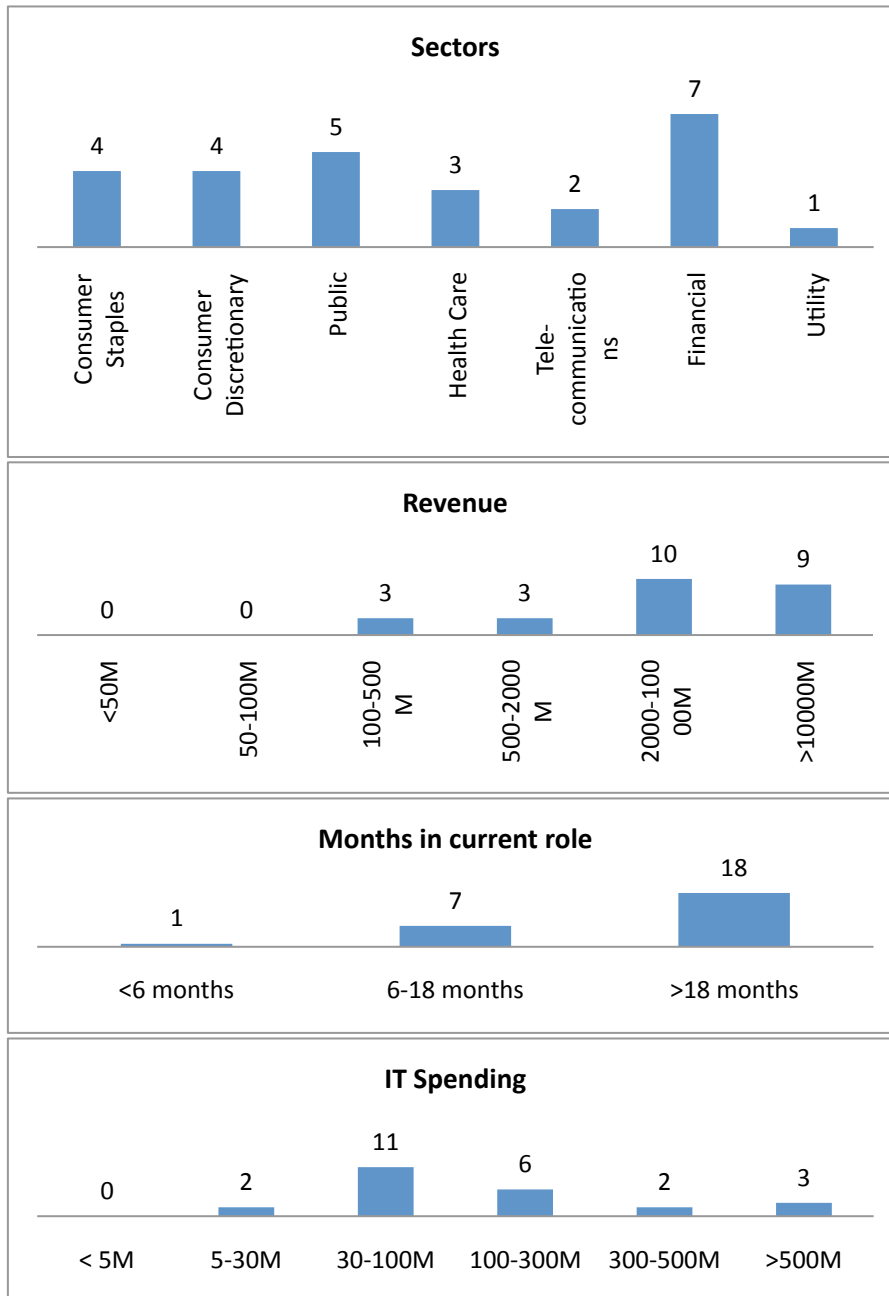
Figure 47. Demographics of the organizations for the consulting firm's study (N=26)

131

The interviews lasted between one and two hours. Each respondent answered the 40 questions designed by the consultants.[24] Their responses were then packaged into a standardized form and sent to the consulting firm. A comparison was then made between the responses from these respondents' organizations and those of the industry as a whole.

One of the 27 organizations interviewed was excluded from the analysis. This organization was disposed to answer the questions but did not wish to disclose information to the consulting firm. Of the remaining 26 interviews, 18 were recorded and later transcribed. Owing to chance and lack of uniformity in procedures, only 18 of the 26 interviews were recorded. The consulting firm did not have direct access to the interviews.

All interviews were conducted in Swedish. The researchers translated the interviews into English. These 18 recorded and translated interviews provide the empirical data for Study II. Sector identification rather than names of organizations and respondents are used in this research. The classification of sectors is from MSCI Barra (www.mscibarra.com), an organization in the financial sector that specializes in creating classification schemes and indices. Figure 48 presents the demographics of the organizations.

---

[24] The interviews were conducted in Swedish although the questionnaire was in English.
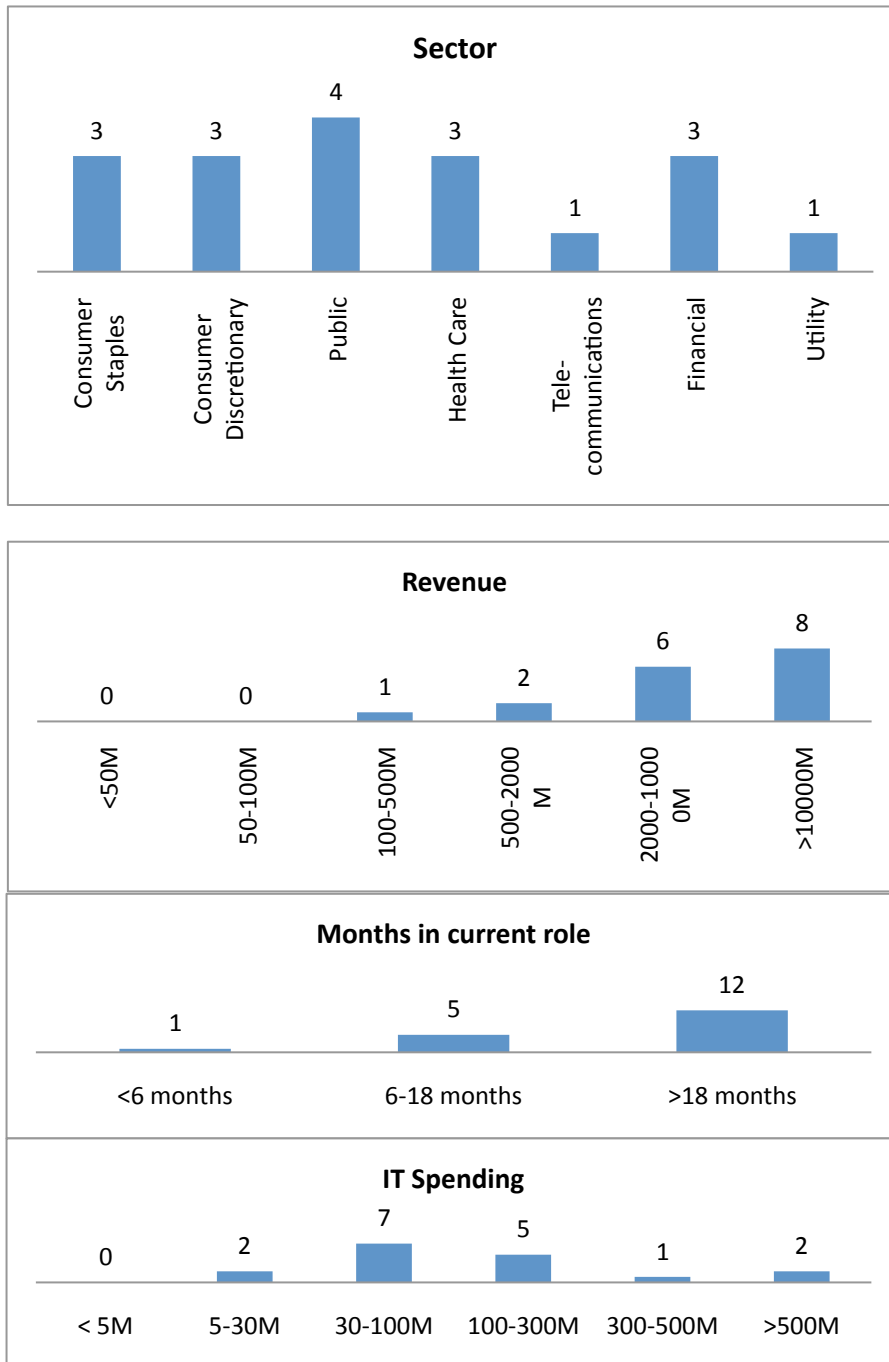
Figure 48. Demographics of the interview sample (N =18)

In *Step 2*, I read and re-read the 18 transcribed interviews, taking inspiration from discourse analysis (Potter and Wetherell, 1998; Wood and Kroger, 2000). My goal was to acquire a full understanding of the content before proceeding to the analysis. This reading and re-reading of the interviews was an iterative process recurring throughout Study II.

The identification and validation of the ten norms in Study I determined the focus of Study II. Therefore, I selected the ten questions (from the total of 40 questions) that matched the ten norms I had identified. These ten questions are the basis for my analysis of strategies of legitimization.

In *Step 3,* I selected a model for categorization using Austin's (1962) distinction between excuse and justification. By approaching the responses as instances of "legitimating accounts", I searched for accounts that fit those two categories.

If the response was a direct presentation of quantitative grading (a response alternative without explanation), I categorized the response as solely quantitative and hence omitted it from further analysis. If the respondent explained her choice of response alternative, I then analyzed the response according to its explanation type – as either excuse or justification.

I categorized a response in which the respondent's explanation oriented towards the actions of the organization as an excuse. In such responses, the respondent explained non-compliance with the norm as the result of organizational contingencies. In short, the respondent focused on organizational action rather than on the norm.

If the respondent offered an explanation oriented towards the norm, I categorized the response as a justification. In such responses, the respondent problematized the norm and the question instead of focusing on the organization's non-compliance with the norm.

Figure 49 is a flow chart that depicts the categorization model.
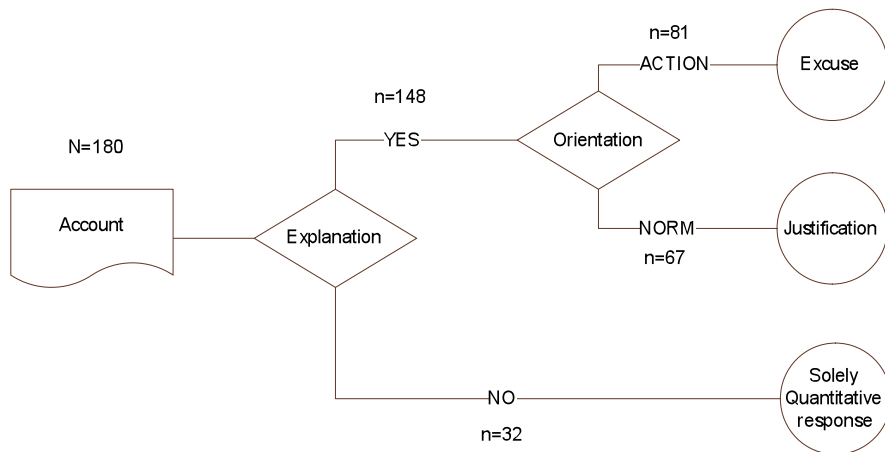
Figure 49. Categorization of responses based on Austin (1962)

In *Step 4*, I analyzed responses to the ten norms individually. Using the categorization model, I categorized the 18 interview responses by norm into excuses or justifications. I then re-read these interview responses, looking for patterns in, and sub-strategies of, the legitimizing strategies of excuse and justification.

Results

This section presents the results of the analysis of the ten norms. The norms are analyzed individually based on Austin's (1962) differentiation between excuse and justification. Sub-strategies are identified in the data. After the ten analyses, I present a synthesis of the results.

Table 20 lists the norms identified/validated in Study I and used in Study II.

#	Norm
1	IT investments should be linked to Business.
2	Top Management should regard IT as a strategic asset.
3	Top Management should be responsible for realizing value of IT.
4	The IT agenda should be established top-down.
5	The decision process for IT investments should be formalized.
6	Performance management should be formalized with a focus on business value driven by IT.

135

7	There should be a focus on the value added of IT in performance management.
8	Resources should be utilized on an enterprise-wide basis.
9	There should be corporate insight into the benefits of IT.
10	Costs should be allocated with business unit autonomy.

Table 20. Norms from Study I used in Study II

Norm 1: IT Investments should be linked to Business

Excuses

The excuses in the responses consist of expressions of momentum and of elaborations where the respondent clearly indicates that the organizational level of maturity is a little bit higher than the selected answer. A response from the Utility Sector is representative:

> *The easy answer is yearly, but it is really even better if you are allowed to elaborate on the answer.*

In this response, the respondent signals that she has a clear level of maturity in correspondence with the question. At the same time, the respondent says a further elaboration would show that both the level of norm compliance and the level of maturity of the organization are still higher.

This response may be interpreted as a justification since the respondent signals that the response alternatives (and thus the scale of norm compliance) do not correspond. Despite this possible interpretation, I classify this account as an excuse because the respondent excuses the organization's lack of complete norm compliance by showing that the level of norm compliance is greater than that of the selected response alternative.

The same respondent from the Utility Sector then explains how the organizational process is configured:

> *Then this is followed over the year, but to say that it is on a continuous basis would be to exaggerate, right? I wish it were, but it is here, and a little bit better, and on the way up, you could say…*

In wishing that the level of maturity were greater, the respondent acknowledges the norm and the organization's non-compliance.

136

Another excuse is the respondent's explanation of the intent and direction of the organization rather than of the actual situation. In the following statement, a respondent from the Financial Sector comments on the momentum of the organization:

...we work towards portfolio thinking, but...

This comment is followed by an explanation of why the organization does not comply with the norm:

We have a very decentralized organization that is reflected in the IT organization, not that the IT organization itself is decentralized to any great extent... The product ownership governs the use of IT, whereby it becomes a little more difficult to control.

In this account, the respondent explains that the decentralized organizational structure is partially responsible for the lack of complete norm compliance. The respondent's excuse is that the governance structure inherent in the organizational structure related to IT limits the level of maturity. Therefore, the organization does not fully comply with the norm.

A respondent from the Healthcare Sector also attributes non-compliance to the momentum of the organization:

Yes. [the respondent laughs] *It would have been beautiful if everything were in symbiosis! But... you could say that we have come a long way...*

This respondent indicates that there might be a problem with the norm. Such a response might be classified as a justification. However, the respondent then points to the direction of the organization and its impressive progress. In a clarification, the respondent states:

And the process is now beginning to be in demand, even in product/business development is in the earlier phases, but we are not... We are on a discussion level here; we have not implemented it yet...

In this account, the respondent describes current activity at the organization, but then decides that this activity is really just on a discussion level. The respondent concludes:

So we have come a long way actually. So much has happened in a year. A year ago we were almost ad hoc. There has been a dramatic change for the better.

This comment is an example of an excuse where the respondent describes both the momentum and the progress made and at the same time clearly states that the increase in norm compliance is something positive.

137

Another example of an excuse is when the respondent begins by describing the "natural state" of the organization. In a matter-of-fact tone the respondent at first signals that norm compliance is a natural thing. Then the respondent continues with an explanation of how the organization fails to live up to these standards.

A respondent in the Public Sector makes such an excuse:

> *What cannot be traced to the IT strategy should not be invested in. Is this followed? Now, I can't say that it is, but this is our goal. This is the way it has to be. If you can't trace the benefits and the need, in this loop of authorization, if these benefits cannot be described...*

In a similar example, also from a respondent in the Public Sector, the respondent begins by stating that the investments in IT are always demand-driven.

> *With the flow and amount of customer transactions and customer contacts that we have, we have to have a high level of IT. It is not a goal in itself. It is entirely driven by demand. It is demand-driven.*

After a long description of how such IT investments are structured at the organization, the respondent then concludes with a radical turn in perception:

> *As our task is not to sell sausages on the square, we do not have to develop the world's best cash machine. There is really no requirement that IT investments be linked to business. No, I will be honest.*

This statement may seem rather strange since in the first sentence the respondent is very clear in stating that the organization follows the norm. Thus the second sentence is an excuse where the respondent, after first claiming full norm compliance, later retracts that claim and gives an entirely different answer.

Justifications

The justifications in the accounts appear largely in discussions and in the tendency to reframe questions rather to answer them directly. One example comes from a respondent in the Public Sector:

> *Yes, that is a pretty hard question to answer, I think. The question is: Are they communication vessels?*

The respondent concludes later that they (the business needs and the IT investments) are communication vessels, but only after giving a brief example from the organization:

> If I were sitting here together with the Chief, we would agree that they are linked. If you ask the county chiefs then you will probably get a different answer. Many county chiefs have a background in Law, and they have, for natural reasons, a little bit of a different perspective.

In the revelation that executive levels of insight vary among the counties, the respondent problematizes the question and avoids a direct answer. The norm is justified by the incongruence in the respondent's own organization.

Another example comes from a respondent in the Consumer Discretionary Sector:

> Yes, I would like to call it 'continuous'. On the way towards symbiosis, but… In these parts of the investments, in these companies one says symbiosis, while in these companies and among their staff this is not the case. Therefore you could say that it is the same way.

Another type of justification appears in the next comment by a respondent in the Consumer Staples Sector. This respondent directs the response to the question by showing which frameworks are applied and why they are applied. The respondent explains that one reason for applying these frameworks is to satisfy a particular group of stakeholders:

> There are defined as SOX or COBIT. The framework that you most often use to become SOX- compliant pretty well specifies how an IT strategy process could be configured. And we have really just implemented… There are good and bad ways to conduct this. If this is a way to make these guys more satisfied, then why not?

Yet another type of justification appears in the next comment by a respondent in the Telecommunications Sector:

> I reacted more to that word regarding strategic investments. In some cases that means you do things without knowing whether or not they will be balanced, right?

This respondent focuses on one concept in the question, problematizing and criticizing it. The respondent then explains how the organization tries to stay on top of this process in order to follow the norm:

> And I mean that these are connected. I mean if we are to improve a process in customer service or delivery by automating a part of the business, they must specify how they wish to change the process. I won't do

139

that. They are the ones who will have to live with it. But I build it in IT and then it costs money. IT is a cost. Then maybe I can remove systems so that I get a plus side, but foremost I get a lower cost in the process. Then Business needs to raise its hand and say: 'I am ready to cut ten guys'. There is a business manager who will sign off on this. And that will be implemented afterward. Otherwise you can't see… and then this becomes very tight, hmm?

This respondent indicates that the organization has a high level of maturity without actually subscribing to the alternatives offered by the question. Instead, the respondent interprets the question (after first problematizing it) and then gives an example from operations in the organization.

Norm 2: _Top Management should regard IT as a strategic asset

Excuses

The excuses in the accounts are either a re-focusing of the question or a further interpretation of the norm itself.

One example is the response that regards the business tendencies of the CEO as representative of Top Management. A respondent in the Healthcare Sector comments:

> *Well… I would like to say that… not so much the board, not that many IT projects reach this far up to them. But the CEO, our new CEO, is conscious of this, absolutely.* [The respondent names the CEO] *comes from sales in the US. He comes from the market side, and there the efficiency of field operatives is to a large extent IT.*

This excuse also appears in a comment by a respondent in the Public Sector:

> *Well, we are in such a lucky position because our new CEO is interested in these issues.*

In this case, the overall response is highly positive, and yet the level of maturity expressed by the response does not really match the level of norm conformity. Instead of focusing on the large organization and the entire group of Top Managers, the respondent excuses the organization's shortcomings by equating Top Management with the CEO. This is an excuse for norm divergence.

One respondent in the Consumer Discretionary Sector summarizes this line of thought:

I would say that if you really take this at a corporate level and let [the respondent names the CEO] *be the symbol here, then it is high, but there are different executives, HR Executives, etc. who do not share this, so to speak, high regard for IT.*

In other organizations, the respondents were more frank concerning the difference in maturity between the different levels of Top Management. A respondent in the Consumer Staples Sector comments:

Well, the CEO of this company sponsors it and views it as strategically important. Whilst Top Management, on the other hand, is more passive, if you are allowed to say this, hmm?

This respondent highlights the differences in the perception of IT in the organization by differentiating between the CEO and Top Management. In making this differentiation, the respondent interprets the question in a different way than the other respondents quoted here. This respondent exposes rather than hides the lack of insight by Top Management.

Another excuse appears in a number of responses that differentiate between areas of organizational operations. This is the excuse where the respondent explains the norm divergence as the result of organizational contingencies or differences in perceptions in various functional areas of the organization.

A respondent in the Utility Sector makes this type of excuse:

So generally I would choose an option from the lower half, if you look at the maturity level. Then there is the entire distance between the end points.

After explaining the differences in the business areas of the organization, the respondent says it is difficult to give an answer that applies to the entire organization, given the organizational contingencies.

The excuse by the respondent in the Consumer Staples Sector is similar:

It varies a lot. I would say that if you take our production, then it is probably automation of processes, but maybe also for the retailers. But also for the business managers who are responsible for selling a certain number of rigs in Europe. There are executives in these divisions.

Justifications

The justifications mainly focus on the differentiation between IT as related to cost reduction (rationalization) and revenue growth (business impact). In

141

most cases, respondents see IT as a way to promote rationalization with less status; thus their organizations are in direct conflict with the norm. For example, a respondent in the Financial Sector describes the CIO who uses the project management portfolio system to show the distribution between rationalization and business development projects:

We are not that much into rationalization projects, but we do more business development. Sure, we do the other type as well, but that is hard to fit into our plan for projects driven purely by cost efficiency … If we say the following… [respondent shows the project management portfolio system]… *Sixteen of one hundred projects. That is pretty much related to the total amount of money as well… No, it is less – it is 10%.*

This respondent states that a strong focus is on business development. In this case, the justification for not being totally norm compliant is that the number of projects where "IT as a strategic asset" response is in the minority.

This response also highlights the difficulties that respondents have in commenting on whether their organizations follow the norm, given the existence of a diversified project portfolio with different foci on efficiency and revenue growth. For example, a respondent in the Financial Sector comments:

It is bloody difficult because it is necessary to reduce spending in the business by making processes more efficient, but it is also critical to drive revenue growth…

The respondents say both such projects fall under the heading of IT. Yet, at the same time, they understand how this interferes with the overall perception of IT as a strategic asset at their organizations. There is a potential conflict between the respondents' efforts to meet norms and the organizations' demands for cost reduction and rationalization that prioritize such investments. Another respondent in the Financial Sector comments:

A hell of a lot is about rationalizing processes, but it is also 50% about creating new business.

There are justifications where the difference between what is said and the alternative selected is apparent. A respondent in the Consumer Discretionary Sector states:

Well, [the respondent names the company] *acts on the market as a selling channel with its own distributor, call center and such, but the system support for the agents is also an essential part…*

After a lengthy and detailed technical analysis of the intricate and delicate operations of IT in the overall business, this respondent concludes:

142

…therefore, you could say that it is critical to drive revenue growth in this context.

This respondent justifies the norm divergence by using technical jargon, stating all the difficulties involved and making the current position of the organization seem the natural position. In this way, the respondent actually avoids answering the question regarding Top Management's perception of IT.

Norm 3: Top Management should be responsible for realizing the value of IT

Excuses

The excuses are mainly accounts of how the practical activities surrounding the responsibility for the added value of IT are organized. The allocation of responsibility following decentralization logic is central to these accounts. A respondent in the Healthcare Sector explains:

…the business area managers are responsible for realizing the value of an activity. You go in and change that person's budget. That person may have said 'Yes, by this initiative I can lower my costs for 2006 by 10%'. Take personnel costs, for instance. Yes, then Internal Control takes control of the budget and cuts costs by 10% so that the business area manager has a different number to be measured against. Then she will be responsible for realizing the value of IT.

Several other respondents agree that this type of allocation of responsibility exists after an analysis of the investments' benefits on future years' budget. A respondent in the Utility Sector comments:

But I would stress that the business managers are responsible for realizing the value of a certain investment. So typically we do it like this, particularly when it is a little larger investment If we change the system for customers, that is a substantial investment, and then the sponsors are the people responsible. Really the business unit managers are responsible for the different businesses because they own the business case that is being calculated. They take this calculation to their organizations and the business manager signs off on it.

This respondent differentiates between minor and major investments, making the excuse less general by the inclusion of details.

143

However, several respondents quickly add that the most responsibility lies with the CIO and the CTO, as the following comment from a respondent in the Consumer Discretionary Sector shows:

IT Management is responsible for the cost element of IT – that the projects are on time and on budget and that the maintenance costs and quality costs are according to plan, the project budgets, other budgets and such. That is their responsibility is. It is their headache.

This respondent differentiates between responsibilities for the projects and the benefits the projects produce. Following this account, the respondent identifies the business area managers as most responsible for the realization of the benefits.

Other respondents more directly take responsibility themselves although they also differentiate between operational and final responsibility. Another respondent in the Consumer Discretionary Sector says:

In general, I have the responsibility. The responsibility may also depend on the individual projects, the program, or the particular project managers. But on a general level, I have the responsibility.

A respondent in the Public Sector explains:

In rare cases it is my responsibility. If no one else can be pointed to, then it is mine. Message in a bottle – come to me! You can't always have a direct relationship and a direct match.

Justifications

Some respondents' justifications were problematizations of the question. An example is the comment by a respondent in the Telecommunications Sector:

Yes, the added value of IT is that it is partially the products and partially the processes.

By dividing the concept of added value of IT between products and processes, the respondent illustrates the need to be more concise in commenting on the norm. In this instance, the norm is not applicable because of the varying structures in the different elements of products and processes.

Another comment, from a respondent in the Financial Sector, relates to the differentiation between the project and its results:

I do have the strategic responsibility for it. And I see to it that we get the most 'bang for the buck'. At the same time, each business area manager

has this responsibility because he is monitored on the projects so that he delivers the business results he should, hmm?

This respondent shows that the concept of responsibility should be differentiated between the projects and the portfolio. By drawing a line between responsibility for the projects and responsibility for the portfolio, the respondent justifies the organization's non-compliance with the norm. The respondent takes responsibility for the overall strategic business value of the investments and assigns the responsibility for the operations business value to the business area manager.

This type of justification is in other accounts where the respondents describe themselves as suppliers, simply delivering what they are asked to deliver. One example is from a respondent in the Consumer Discretionary Sector:

...if you demand that we deliver the wrong things, then the risk is great that you will also receive the wrong things...

This respondent appears torn between the role of internal supplier of IT competence and projects and the role of the proactive executive with shared responsibility for the project results.

In some cases, the issue of responsibility is very clear. For example, a respondent in the Consumer Discretionary Sector comments:

I would say that they [the respondent refers to company Top Management] *are the ones who should have control over how much money we spend and how much money we can afford to spend. They are the ones with responsibility for this. Then you could discuss different forms of responsibility.*

This direct avoidance of responsibility where the respondent rejects the norm in the question and states what the norm should be appears in one account only.

Another justification is the reversal of the question where the respondent asks the interviewer for help with the justification. An example is the response offered by a respondent in the Production Sector:

That is the process, right? That is probably the one that fits the best, right? Business, and in that manner the process owners, right?

Such a question to a question indicates that the respondent, wishing to avoid taking responsibility for a response, makes no direct response.

145

Norm 4: The IT agenda should be established top-down

Excuses

The excuses indicate clearly that respondents believe the current structure and the current choices in the IT Agenda (or its equivalent) are satisfactory. Hence, the responses are detailed accounts of what actually is being done. However, generally the result is that the respondents avoid answering the question. Such is the case when the respondent in the Healthcare sector replies:

> *Yes, we have... well, it is not ad hoc IT executives. We meet and discuss and prioritize this, and we do this five times a year. Four times a year there is an IS Community that signs off on the Global prioritizing where the executive members on the board of directors, except the CEO, are present,*

The respondent gives this answer, falls silent and then asks to move to the next question. The respondent has given a detailed account how the IT agenda is set without actually answering the question.

A respondent in the Public Sector uses another excuse:

> *There is a business plan – that is the same thing. I understand what you are talking about. We have an IS IT plan, an embryo, but it will be further developed and will govern the IS IT organization on a yearly basis, an annual plan, or a staff plan.*

Here, the respondent intends to move to a higher level of norm compliance by directly equating the IT Agenda with the business plan. The respondent also indicates an understanding of the question. This is followed by a reference to the IS IT Plan in its current embryonic stage, as yet under development.

Another example comes from a respondent who is also in the Public Sector:

> *This is at least what we strive for, but I would say that if you wanted a snapshot then it would not be accurate, but almost, in the Fall,*

In this case, the respondent initially responds by signaling a high level of maturity, only to back away from this position later in the response. The respondent concludes that this level of norm compliance will be achieved in the Fall.

A respondent in the Consumer Discretionary Sector makes this same retraction by admitting to deviations from norm compliance.

I really feel that the last one is most accurate. Maybe not in every, but…
We really have a good structure for IT together with the IT managers of
the different countries and so on, so that… I think so.

Justifications

The justifications in the accounts reveal that the majority of respondents
disagree with the concept of an "IT Agenda". Many respondents doubt the
existence of such a concept in their organizations. In their responses, they tend
to interpret the concept for themselves. This is a justification since the
respondents make individual interpretations of the norm. A respondent's reply
in the Consumer Staples Sector typifies this type of justification:

I have a problem with this one. Because we don't have what many
companies call an IT agenda. If you read Gartner reports and things like
that, there is a phenomenon called the IT Agenda, but we do not have
one… No, we don't work like that at all… it is not like we sit down and
decide that this year or this quarter we will have an extra focus on
security. Yes, I don't know if this is a good or bad way to do things, but we
are not suffering. We have never missed it, I dare say.

In this response, the respondent signals an understanding of the basic concept
of IT agenda and shows familiarity with the vernacular of the professional
analysts (in this case, the Gartner Group). At the same time, the respondent
refutes the IT agenda as a general best practice and states that the organization
does not have one. The respondent justifies the organization's non-compliance
with the norm by concluding that the organization has not suffered as a result.
Nevertheless, the respondent shows some deference to the norm in the
response.

Another justification in the accounts is the equating of an IT Agenda with a
project portfolio that is used to control the current set of initiatives. A
respondent in the Public Sector makes this comparison:

Yes, we have this, but not specifically for IT. In other words, we have a
total project portfolio that we prioritize within the boundaries of a total
project portfolio.

The Public Sector respondent then discusses another strong norm in IT
Governance – the relationship between IT and Business.

But that is also an important part of the way of thinking – IT can't be on a
track of its own, existing on the side of Business.

147

This respondent indicates that an IT Agenda can never exist without clear and causal relationships with the business agenda. The respondent problematizes this question by implying that IT in some cases exceeds its scope:

> Or, in some cases, IT drives development. So sometimes development and change drive Business and sometimes are driven by it. But it is still bloody important, I feel, that you see it as an integrated element.

In this justification, where the existence of a separate IT Agenda is problematized, the respondent generally avoids answering the question.

Another justification is in the following account where a respondent in the Financial Sector makes a free interpretation of the IT Agenda, thus simplifying the response:

> Well, of course, we prioritize about what to do, but well... Yes, OK, then I guess you could say that we have an IT agenda. It is bottom-up. You have a gross list that is then top-down prioritized.

Several respondents express their difficulty in answering the question. An example is the answer by a respondent in the Telecommunications Sector:

> I would say that the IT Agenda is pushed forward to a large extent. There is no good answer to this... Bottom up... There is no good alternative here.

This Telecommunications Sector respondent then explains the current situation by elaborating on this comment:

> It is not only bottom up, is it? It is not like IT executives meet ad hoc. It is not only IT executives who meet. We have a system where IT meets with its counterparts. Then the IT Governance works systematically with the business owners, from the outside. From that result, demands and possible solution proposals continually evolve...

This respondent emphasizes that the IT Agenda is set in the balance between IT and the business owners. At the same time, the respondent stresses the potentially proactive role of IT Governance, with its constant search for solutions to business demands.

This Telecommunications Sector respondent then describes the political dimension in establishing the IT Agenda by focusing on the struggle for attention by particular functional solutions:

> And then there is always, of course, a certain waging of war where the finance director thinks that we should spend more on the financial system...

148

Norm 5: The decision process for IT investments should be formalized

Excuses

There are several excuses in the accounts related to this norm. One excuse is the delimitation of responsibility and scope in the respondents' answers. An example is in the comments by a respondent in the Public Sector:

> *I only see to it that our framework functions well. The business manager provides the contents of the applications and finances them. And we, of course, support them with the IS IT competence that is needed, but the design and requirements, that is their responsibility. This is something that the IT dimension can't take responsibility for. Instead, the business areas are responsible for clarifying and communicating their needs, wishes, and subsequent requirements.*

In this case, the respondent is clear that the IT responsibility ends with the framework. The respondent declines to take any responsibility for performance-related outcomes.

A second excuse is the call for clarity on the high level of structure in the current investment process. At the same time, doubts are expressed about whether this structure is actually a tool. A respondent in the Consumer Staples Sector makes this excuse:

> *No, that is very tightly controlled – today, that is. Not so formal* (respondent refers to the use of IT support) *– what do you call it? … There are, of course, notes-based tools, but that is more documentation than anything else, so to speak.*

Several other accounts reveal the same perception of how well structured the investment process really is. Another respondent in the Consumer Staples Sector says:

> *Yes, there are, for instance, models for business cases and there are agendas for how the review process is to be run.*

In a sense, this is a typical response to the question for this norm. The respondent signals a high level of maturity and norm conformity but also reverts to the last response alternative.

Only one respondent clearly states that the organization actually fulfills the norm completely by using a tool-based approach to IT related investments. In

149

this account, this is a direct response to the question, but the respondent does not explain how or why this approach works.

A third excuse comes from a respondent in the Telecommunications Sector. In this account, the respondent begins by signaling that the organization is on the highest level of maturity but then is reluctant to say whether the process in place is considered "Tool- supported".

> *Well, we have a tool… Or a "tool" is maybe an overstatement… But we have, we have agreed upon a development model and that development model requires that we define… certain people can activate a pre-study, right? Within restricted cost limits… Then you go to a DP1, and you are to begin changes. Then you have an embryo for a business case, and you say, 'OK, we will do the entire investigation and we will start discussing with vendors, and we have short lists to acquire and conduct the entire project'. Then you have a DP2 and, according to the model, you must have done a number of things that must be documented and you must see the entire business case. Then you link it in there – that is plus and minus and payback and the whole shebang, right?*

By retracting full norm compliance and instead of offering a detailed account of how structured the process is, the respondent offers an excuse as to why the organization is not in compliance with the norm.

This same respondent in the Telecommunications Sector provides another example of this excuse by adding the ingredient of momentum and a show of progress:

> *We are working with implementing a portfolio model…that is something that we have not completely implemented, but we are working in that direction – to implement such a model. It is rather complex and takes time, but it is decently on the way and… there is a clear structure in this 7Q dialogue, isn't there?*

This is another example of how the respondent excuses the level of maturity by stating the work is progressing and the organization is moving toward full norm compliance. For the same type excuse, I also found examples of organizations that do not really follow the norm at present. This is the situation that respondent in the Consumer Staples Sector describes in expressing reservations about how mature the organization really is:

> *I would almost say that we run ad-hoc processes. Of course, it varies. There are some areas that are well defined in the enterprise and some areas that are well defined at the corporate level, but I don't think that we have a clear domain.*

This respondent adds details that describe how diversified the practice at the organization is and how some areas have the right to override the investments process if they have just cause.

Justifications

In the justifications responses, a common approach is a problematization of IT. An example is by a respondent in the Public Sector:

> *Well, IT becomes a very all-grasping perspective in this context. Since I feel this is IT* [the respondent points to a cell phone]. *That doesn't really narrow it down.*

By including telecommunications and telecommunication devices in the concept of IT, the respondent signals that the question is difficult to answer. The respondent continues by differentiating between IT operations as infrastructure, maintenance, and development.

> *…infrastructure and maintenance is more governed by IS, while development is more governed by a buyer-perspective, a system owner perspective. Then, of course, you always have a little garbage business on the side…*

This differentiation is common in IS. By stating there are different structural levels for the different areas, the respondent justifies non-compliance by the norm's inapplicability to the organization as a whole.

Other respondents use justification more directly by stating that they do not know what "tool supported" is, and they have no intention of going into details. A respondent in the Public Sector offers this justification:

> *Yes, it is probably this one in the middle. Exactly, because what separates… Tool supported, I don't know what that is… No, I would claim that we are in the middle.*

A respondent in the Healthcare Sector offers the same justification:

> *"Yes, it is one of these two* [the respondent reads the choices*]. I do not know the difference. Take the one in the middle.*

A respondent in the Consumer Discretionary Sector expresses the same confusion about defining the tool-supported decision process, but gives more detail in justifying the norm compliance by the organization:

> *We have a tool, then, we have… Well, I don't know if that is what is referred to as a tool, but we have a business case we use. And then we have*

151

a PowerPoint guideline that we use as a standard tool for how to calculate the business case and how to present it. All business cases look like they are constructed following the same system.

This response may seem odd because the respondent, after expressing sincere doubts about the nature of the tool, moves towards full norm compliance. After some hesitation, the respondent chooses norm compliance since at least one outcome of the investment process seems to relate to a tool-supported IT decision process.

Another justification is in the situation where the respondent expresses norm compliance and then problematizes this choice. In some responses the role of the CIO is a warrant for structure. An example comes from a respondent in the Financial Sector:

It is enterprise-wide tool…. If you imply not a typical tool but defined processes, then, yes. There are defined processes. My colleagues think that I am a huge bore because I haven't implemented Blackberrys. But then I say, wait a minute… I don't decide – you do the prioritizing.

This same respondent explains further why structure is necessary. The detrimental effect of such structuring on the respondent's popularity at the organization is also noted.

In the department – 'Eat your own dog food' – this is how we do it. We don't make up a lot of new ways of doing this that require resources. We stick to what we jointly decide in the decision forums. That is how we do it. You are not always the most popular guy, I could add.

This respondent comments on the absurdity in NOT following the norm and the implications for board-level decision-making.

I said this the other day – when we got new directors of HR and Strategy. They had driven this Blackberry issue, and then I said in a friendly way: 'Dear colleagues, we have now discussed 500.000 SEK issues at two separate meetings of the Corporate Board. We only have half a billion in our budget. Now we have to stop this.' And so we have stopped the discussions.

This is a justification in which the respondent first explains how structured the process is and then later claims responsibility for the only real warrant for the process.

Norm 6: Performance management should be formalized with a focus on business value driven by IT

Excuses

In several excuses focused on the use of alternative measures for performance measurement, the respondents detail the extent of their organizations' performance measurements. In these responses, the respondents avoid the question and show that the performance measurements of the organization are highly formalized. But the respondents do not use the techniques in the response alternatives.

The highest level of maturity for the norm is implementation of IT Balanced Scorecards (or similar techniques). However, the respondents avoid answering the question by offering alternative techniques. The comments by a respondent in the Public Sector reflect such an excuse:

> *We do these compass measurements… We don't do it annually, but at least at even intervals. Then we have the possibility to see how we have changed our IT costs in relation to what we deliver, and how the IT costs, in a broader perspective, stand in relation to the total costs in each regional unit… In that way, we have a sort of measurement system,*

In these comments, the respondent points out that a benchmark technique is used. Although this technique is not performed annually, they do focus on the cost aspect of IT. The respondent may also imply that this technique *could* be regarded as a measurement system, suggesting some hesitation as to whether this is actually the case.

A respondent in the Financial Sector displays this same hesitation:

> *We do not account for this in any other way than at the project level, you could say. Of course, not according to any model…*

Here the respondent is doubtful whether the organization's approach can be attributed to any model. By focusing more on the projects themselves as objects of performance, the respondent argues for some norm compliance, as the following comment reveals:

> *Well, if you break it down and say that it means following up on the projects and their results, then that is applicable.*

In another example from a respondent in the Financial Sector, the respondent offers a very detailed account of an alternative approach to performance measurement.

153

Yes, performance management. We have a...we have... We have a lot of statistics. The IT Board monitors and follows up on projects and maintenance statistics on a monthly basis – actually, three times a month.

By interpreting the question of performance measurement as the use of statistics for advanced business intelligence analysis, the respondent avoids relating the response to the alternatives in the question. The respondent continues:

Then we also have something called the 'Quarterly CIO reviews' where I sit together with some of my colleagues on the IT Board and report according to a performance management scorecard– that is rather encompassing – to my SAS director and to some of his bloodhounds. I am joking, of course. They have read all these papers and have a thousand questions.

This respondent directly relates the response to the question by using the word "scorecard" but does not use the term "Balanced Scorecard". The respondent continues with an interesting account of the translation of IT specific performance measurements and reporting, using language more consistent with typical corporate language:

Behind this, there are an awful lot of slides with information about what we are currently covering. I condense and simplify this information and then report it to the corporate board on a quarterly basis. Then I have transformed the information into something that regular people can understand.

Other respondents also mention such translations as shown in the Justifications Section for this norm.

One respondent in the Consumer Discretionary Sector uses a direct excuse that shows more openness.

Really, if we are to be honest... No... It is time, budget, fulfilled benefits of the projects according to business case – that is really what it is about; it is not a Balanced Scorecard.

A respondent in the Telecommunications Sector gives an equally direct reply:

We are not on one of these systematic balanced scorecard levels... we are not. On the other hand, we do follow up. Yes, we reach our cost targets and we deliver projects on time ...

As in the other excuses, when the response choices do not provide alternative approaches to performance measurement, the respondent offers an alternative response.

154

Another excuse arises in the situation where the respondents show a strong personal interest in, and respect for, Balanced Scorecards. In this excuse, the respondent first asserts full norm compliance and then expresses displeasure with the organization for not having the same level of compliance. Comments by a respondent in the Consumer Staples Sector exemplify this excuse:

No, we don't have it (the respondent refers to the Balanced Scorecard). *I miss it, but I should be able to influence its adoption. But this is really a slow process.*

In this account, the respondent expresses almost a sense of grief because the organization has not yet adopted the Balanced Scorecard. After explaining the level of maturity of the organization, the respondent then comments on the possibilities for implementing Balanced Scorecards.

We probably have the ability to get this done with the Balanced Scorecard, I would say, but we have not yet come all the way.

A respondent, also from the Consumer Staples Sector, emphasizes the momentum aspects a little bit more:

…we will try to implement the Balanced Scorecard, but we are not there yet, right? Unfortunately. We have some Balanced Scorecards, scattered about, at different administrative levels, you could say. But some are not there, in any case.

Justifications

Many justifications for this norm reveal reservations about the language of question itself and the techniques of the response alternatives. The following statement by a respondent in the Consumer Staples Sector is typical of such justifications:

I can't find an alternative here that I… Well, how does it work for us? Yes, first and foremost each and every – if we are talking about development activities – aspect of maintenance and development is followed up for each activity. Purely economically then, from an IT perspective, we focus on cost, on time, on quality.

This respondent is unable to find an alternative that fits the organization's level of norm compliance. After a short pause, the respondent refocuses the question on the practicalities in a particular area of expertise, IT Operations. The respondent continues by indicating a low level of norm compliance.

155

The respondent also exhibits some doubts about the validity of the norm of Balanced Scorecards that are specifically designed from an IT perspective:

We do not look at the scorecards from an IT perspective, which I really can't understand. The scorecards are designed from a business perspective…

One interpretation may be that the conflict between Business and IT, worsened by a norm that states IT should be a dependent continuation of Business (and not an independent entity) is a way for the respondents to justify their own situations. Balanced Scorecards that are NOT related to Business would conflict with other norms that the respondents think have a higher degree of validity. Such an interpretation suggests the need to analyze the interplay among norms rather than to decompose the norm system into a set of separate norms.

A respondent in the Financial Sector expresses a similar idea:

Then it is well on the way, so to speak. We use what we call scorecards… both at the business and at the internal levels… even if they continue to come in new versions.

The respondent indicates there is an effort to reach higher levels of maturity than the organization currently has. At the same time, the respondent states that their scorecards are not Balanced Scorecards. The respondent clarifies this statement:

Well, we have a model that was produced after a Norwegian model, Målekort… Then you decompose the business into a number of measurable points. Based on our data warehouse strategy, we gather the data and analyze in minute detail…

A respondent in the Public Sector, whose organization uses Balanced Scorecards, expresses a very positive opinion of IT Balanced Scorecards for use in performance management:

No, we use the Balanced Scorecard in [the respondent names the organization], *but perhaps not in way that is portrayed here. Now I have to read this* [the respondent reads the alternatives]*… No, it is the third alternative. Even though I do not like the answer. I wish that we used the IT Balanced Scorecard, because we lead* [the respondent names the organization] *with the Balanced Scorecard right now: But if you have the highest level, then it is easy to break it down. You should talk to farmers in the language of farmers.*

This respondent refers to the practice of translating IT-specific performance measures into the language of the rest of the organization (i.e., the board and senior management). The respondent clarifies this idea:

> *Right now you have to translate our gibberish so that it is understandable at the reporting level. You can't go there and talk using terms they do not understand, no. So, even though we use IT terminology in our work, we have to transform and translate it. Otherwise, we won't be understood and will achieve nothing. We can live with that. It would be arrogant to think that IT language should dominate our corporate language.*

The respondent downplays the importance of IT language by describing it as "gibberish" that has to be translated for use at reporting levels. The respondent recognizes that this important terminology in the IT internal operations may have a counter-productive effect as far as full norm compliance. Hence, the respondent justifies the low level of norm compliance in this particular situation.

A respondent in the Public Sector takes a different approach to justifying non-compliance with the norm:

> *Yes, no, I would not say that, but there is an effort to measure more. We must identify what is of value… We are not measurement fascists, but we do measure such things that we think are useful to us.*

In this example, the respondent signals for the need to consider which measures are relevant. Hence, the full level of norm compliance should be related to particular organizational contingencies, such as the relevant measures. Nevertheless, the respondent then shows a clear intent to move towards norm compliance:

> *Yes, I intend to use something similar to the Balanced Scorecard in my area, but that is more to measure the internal efficiency, not that of* [the respondent names the organization].

Norm 7: There should be a focus on the value added of IT in performance management

In general, the respondents support the scale of maturity in the response alternatives. None of the respondents offers an account that questions the need to strive for the last alternative. A comment by a respondent in the Financial Sector is representative of this conclusion:

> *You could tick off all the alternatives, and the most important is, of course, the last one.*

157

Excuses

One excuse is the legitimizing strategy of simplifying the question and thereby claiming full norm compliance. This strategy, however, is only used after gaining approval from the interviewer. An example comes from the comments by a respondent in the Public Sector:

> *This is with the budget scope… you have to stay within budget, of course… you could really say the fifth alternative, but that is not really it… because we really work for it … yes, you could almost say five, because we try to decrease our IT spending but still try to get more from it, right?*

The respondent equates the work and intent of the organization with the fulfillment of the norm. At the same time, the respondent makes clear that the only way to do this is to decrease IT spending. This excuse is a generalization by which the respondent actually refrains from answering the question in detail and instead focuses on the general intent.

Another excuse strategy the respondents use is to explain the non-compliance with a norm by the organization's sense of direction and the perception of momentum. In this way, the current level of maturity corresponds, not to a stable state, but to an improved, future situation. The following comment by a respondent in the Healthcare Sector is an example of this excuse:

> *You must measure and follow up on what IT results in. You have to take each business case and measure what we have gained. Have costs decreased? Have revenues increased? If so, then we are getting somewhere.*

This is a generalization revealing an inability to answer the question in detail. However, these comments are also used to justify non-compliance with a norm by the organization's sense of direction and momentum.

A respondent in the Public Sector provides a similar excuse:

> *It is an embryo that we have to develop further, because we really have to get down there. Well, that is really what will create the best understanding of the importance of, for instance, IS IT. I really believe the way in which you measure creates what I call F-value – business value, you could call it.*

A respondent in the Consumer Staples Sector uses another excuse that relates to the budgeting principles of the organization:

> *I believe that you really don't give a crap about the budget and such. Of course, that isn't really true, but you get what I mean. The important thing*

is not to stay within budget, but to constantly manage the total in some way. You should always try to exceed your budget in some way. So that is what you look at... On the other side, I think that we are doing a bad job regarding the efficiency of IT, but that is a separate issue.

The respondent is critical of how the measurement of the "efficiency of IT" is operationalized. At the same time, the respondent downplays the role of the budget and even suggests that operations should overrun the budget.

In addition to budgets, the respondents mention benchmarks and Balanced Scorecards to justify their non-compliance with the norm. In general, however, they think these measures are highly problematic owing to concerns about comparability and the assumed uniqueness of their organizations. A respondent in the Consumer Staples Sector makes this point:

It is on a project-level basis this happens, really, but we have a lot of benchmarking clauses in our contract with [the respondent names the outsourcing partner] *that are not simple to implement.*

Of the six excuses, three reflect the respondents' ambivalence about how they should answer the question. In these cases, the respondents ask the interviewers for help with their responses. Of course, this is natural way to clarify a confusing question. However, given the question, the level of details in the response alternatives and the detailed responses from a majority of the other respondents, I see this request for help as particular kind of excuse.

Instead of answering the question, the respondent redirects the question to the interviewer in an attempt to avoid responding fully. The respondents do not, however, offer a response alternative, but instead introduce a type of reservation. An example is the response by a respondent in the Healthcare Sector:

We are not good enough at measuring impact. The last alternative is impact, right? Is that how you are supposed to read it?

This respondent highlights an organizational shortcoming and follows up with a question asking for clarification. This response is a way to excuse the organization's non-compliance with the norm.

Still another respondent in the Healthcare Sector makes the same point:

Then it is probably this one. Yes, cost and efficiency are the most important areas, but then we also have a level of service that is, of course, very important. But that is also part of efficiency, wouldn't you say?

159

Similarly, several accounts indicate that it is not easy to comply with the norm regardless of how necessary the organization thinks such compliance is. A respondent in the Telecommunications Sector concludes:

> *It is probably more the second one. We land wherever we have intended or not intended. It is difficult.*

Difficulty, then, is an excuse for not complying with a norm.

Another excuse appears in the comments of a respondent in the Public Sector. This respondent avoids answering the question by problematizing it:

> *It is one thing to account for a cost, but it really doesn't mean anything. What do you relate this cost to, hmm? Really, there is the outcome –the benefits really – that is what we must grasp – why we invest money or burn money…*

The respondent bases the arguments on the necessity to continue to strive towards the norm in a discussion about the shortcomings of accounting.

A version of this excuse appears in the accounts by respondents in organizations that have taken an active position against budgets as a means of management control. As some alternative responses are related directly to budgets as a control mechanism of performance management, this requires the respondents to explain further the differences between their own control measures and those proposed by the alternatives responses. The comments by a respondent in the Financial Sector exemplify this excuse:

> *In general terms, the budget is not that significant in our culture. We are very picky about making a very competent estimate before moving ahead. And we are not happy when this estimate is not made, but of course is not so simple. … if increases in spending are unmotivated there is a problem. We have the world's most cost-efficient bank.*

In general, these explanations by the respondents do not clearly differentiate between the organizations' control measures and those of the traditional budget structure.

Justifications

The justifications reveal examples of problematizing the issue. Thus it is impossible to determine the total level of maturity for certain organizations. The respondents give long descriptions of how different the business units and the areas of their organizations are from one another. The comments by a respondent in the Utility Sector is illustrative of such a response:

160

> *...the infra-part we control rather strictly – the IT part, the cost per IT, the cost per unit efficiency of IT. We follow up closely. The project business has a sliding scale that depends on who owns the project...*

This same respondent explains with this justification that the organization is not totally compliant with the norm. The respondent states that the different business units have the responsibility for the follow-up on performance related to IT. This may be an example of an avoidance of responsibility by the respondent. As in most organizations, including this one, the respondent has the most responsibility for IT Governance but shifts this responsibility to the managers of the business units.

Norm 8: Resources should be utilized on an enterprise-wide basis

Excuses

The excuses for this norm show that there is a clear consensus that the functional level of resource utilization is not a positive one. The respondents refer to a lack of organizational support for the norm and state that the level of norm compliance is relatively low.

A respondent in the Consumer Staples Sector make this excuse:

> *Yes, unfortunately it is functional. I dare say that when it comes to IS, then it is a little too much of a resource pool per function.*

The respondents tend to offer a direct excuse for their low level of compliance, revealing that situations at the organizations are more complex. The same respondent in the Consumer Staples Section says:

> *Of course, it is done. We have projects and we make two budgets, you could say. One is the product line and the other is the consumer line. We try to weave them together, and in the end we really make a budget per project.*

In these comments, the respondent says that there are project-based resource pools in addition to the functional resource pools. In this way, the respondent inserts a sense of momentum and direction into the response. A respondent in the Healthcare Sector makes a similar excuse:

> *Yes, we are probably starting to move towards portfolio. That is what happens when we get a grip on everything. When we get to the program and portfolio follow-up, we start to draw conclusions about money as well as other resources. So we are moving in that direction.*

161

Once again, the respondent signals it is understood that it is necessary to follow the norm, despite the fact that the organization is not yet at this level of maturity.

A respondent in the Financial Sector indicates similar momentum:

We are in the middle of a change. I am talking about internationalization. We are not really there yet, but in the Swedish area, where the main part of our business is, it is like this.

In discussing the diverse nature of the organization, the respondent explains that the current level of internationalization is a hindrance to achieving more norm compliant behavior at the organization. Although the organization has achieved compliance in the major area of its business, the respondent does not think there is general compliance.

A respondent in the Public Sector shows that the organization is moving toward an explicit, process-oriented organizational form:

Well, in the process-oriented way of working that we have implemented, we have a resource dimension. In the two departments I am involved in, one is really a resource pool. That pool participates in tasks that could be called projects...so that is a simple model, but in our context, it is rather radical.

By applying a process-oriented approach, a higher level of maturity and norm compliance is achieved automatically. This respondent seems to take pride in this, given the nature of the business and the previous functional perspective.

A respondent in the Healthcare Sector explains that organizational contingencies make full norm compliance difficult (and perhaps also impossible):

But you have to remember that we have a strict organization that... it really doesn't change...

This respondent excuses the difficulties in changing a culture and organizational structure by explaining that the organization tends to resist change.

A respondent in the Consumer Staples Sector indicates a willingness to work towards norm compliance. This respondent's personal view is that norm compliance is better than a functional approach. However, the respondent also points to the difficulty of changing the organization:

This is something that we are trying to escape. I mean, we have built operations that are entirely functional, moving towards... But we have

*not. Just because we have changed the function box, people do not change
their behavior.*

Justifications

Many justification responses indicate the respondents' difficulty with the
definition of "portfolio". For example, a respondent in the Financial Sector
says:

> *But it is some sort of portfolio… What is a portfolio, really? What do you
> really mean by that? Yes, but not really, not simply… Say this: we have one
> pool for all banking in Sweden. We have one pool for banking in general,
> but it provides some support for Finland, England, and so forth. I do not
> know what to call it.*

Here the regional and national differences are not seen as an obstacle to
achieving norm compliance. The respondent asks the interviewer for approval
of this interpretation of the concept of portfolio.

A respondent in the Public Sector offers another such a justification. In this
justification, the respondent includes an admission of personal responsibility:

> *Really, the decision mandate lies down at the work units, but my role is
> really to see to it that we deliver, that we have a coordinated delivery.
> They look at their areas of responsibility. My role is to see to it that there is
> an umbrella over this. I would prefer to see it as a portfolio, right?*

In this account, the respondent equates the coordinated delivery with a
portfolio resource pool and takes personal responsibility for it.

Other respondents offer justifications by equating the process approach with
the project level of maturity. By focusing on the process-oriented organization
of resources in the organization, a respondent in the Consumer Staples Sector
justifies the organization's level of maturity and thereby finds an answer that
fits:

> *The resources…There is a process, right? Resource pools per project.
> There are, of course, others as well.*

This respondent also signals that the organization is complex and that several
other applications of resource utilization would result in different answers to
the question. This is a justification that focuses on an inability to simplify the
organization by selecting one of the response alternatives.

A respondent in the Utility Sector offers this justification:

163

There are certain, single areas that we collect into what we call 'mini portfolios', really, within one area. And then we can handle them portfolio-wise, so to speak. Web management, for instance, is one of these areas.

This respondent shows that for certain aspects of the business, a particular version of the portfolio approach is used.

Norm 9: There should be corporate insight into the benefits of IT

Excuses

Most excuses for this norm reflect the respondents' regret at not attaining norm compliance that they see as the natural goal of the organization. A respondent in the Healthcare Sector makes this excuse:

Well, I wish we were there, but we are not.

Similarly, a respondent in the Public Sector says:

Yes, let's go with alternative three. I think I would like to move to four or five, but we are not there. We will have to go there, of course.

This expression of momentum and direction appears in a number of other accounts, such in the comments by a respondent in the Healthcare Sector:

Well, if you come back here in a while, we will be on level four.

A respondent in the Public Sector presents another example of how the respondents excuse their non-compliance with the norm. This respondent, in explaining how things actually work at the organization, concludes there is a lack of total control.

Not really control over costs… because we do not have full cost control over what could be regarded as IT related costs with the users. If you are an internal user, and you and I are tied to a workplace, when there is a faulty machine, you would say 'Hey, could you help me?' And in another workplace you call the IT helpdesk instead. When you call the IT helpdesk, then we have full control, but in the first case, that is not so, right? We do not really have full control.

A respondent in the Healthcare Sector makes this same excuse:

We know the benefits, but it is this – when you do the total recapitulation, we don't really have this, but we know what benefits we are looking for.

164

This respondent shows that the organization agrees on which benefits are relevant for control. Yet, at the same time, there is no overall control. Hence, there is no norm compliance.

In the following comments, a respondent in the Healthcare Sector explains the organization's inability to reach full norm compliance:

> We measure the total cost and split it into operations and investments, but we can't really follow up and link that to the respective projects.

A respondent in the Consumer Staples Sector offers another excuse:

> We have a pretty good idea of money, anyway, on the costs. We can probably trace the cost pretty well. I would make a disclaimer, if I may think out loud here. We have, in all larger businesses with more than two people, shadow IT, if you can describe it this way, hmm? We don't have too much of that here, but it is present in the rest of the corporation.

This respondent indicates that overall control over costs is good but points to the existence of a "shadow IT" –the indirect, hidden costs that occur in close relationship to the use of IT. The respondent rules out the existence of this phenomenon in the smaller organizational entity but states that it may exist in other areas. Thus the respondent shows a good understanding of the difference between the IT costs accounted for and the total costs and benefits that exist related to IT.

Justifications

The justifications are mainly an expressed inability by the respondents to choose one single alternative, or, by problematizing and breaking down the answers, a suggestion of different alternatives for the various elements of their organizations.

A respondent in the Utility Sector offers this second type of justification:

> If we look at the production of services, we have strict control over both the unit costs and the total costs – the costs for different services. And we have to split this. We can't, for instance, support certain services at the cost of others. Each service really stands on its own so that we can see if it is something we should be doing ourselves in this particular area. As far as the user side, we follow up on the business unit level as well and then at the aggregate level. And there we really do have good control over the income structure side –how much money we put into it and the performance indicators for it. The weakness is, I guess, the project side and the benefits…

165

This respondent states that there is a difference between the maturity of the service versus the project and benefits side. Thus the respondent problematizes the question and refrains from giving a single response.

A respondent in the Consumer Discretionary Sector makes the same justification:

There is a difference between the different countries as well. When you have made some progress   working with it, you can, so to speak, get the exact numbers or much better data. In Sweden there is no follow-up, but usually you do it in other countries like Finland where there really is a matrix to follow-up on…

The respondent broadens the question by including another country. In this way, the respondent shows that the norm compliance is not possible at the organizational level.

A respondent in the Financial Sector offers another justification by explaining that despite their technical ability to follow-up on costs and benefits, making decisions that affect the organization based on this information is much harder.

> *The hard part is when there are cuts in spending in an organization as large as ours. Savings of five minutes for a lot of people in the organization means a lot of money. But how do you remove a person's finger and make money out of this? This is rather subtle…*

Norm 10: Costs should be allocated with business unit autonomy

For this norm, the focus in the responses is on a number of dichotomies in the question. These dichotomies are: operations vs. projects, fixed costs vs. variable costs, corporate vs. business unit, overhead vs. dynamic, user vs. turnover, strategic vs. operational, and in-source vs. outsource.

Excuses

Most of the excuses concern the respondents' frustration about creating a uniform model for cost allocation. A respondent in the Consumer Staples Sector makes this excuse:

> *IS should break-even and IT operations should also break-even. But with all the other things around…And with a project like this* [the respondent names the project], *it can never be passed out to the sale companies, right? Would they pay for it? IT is a strategic investment that the company bears.*

166

This respondent points to the necessity of handling strategic investments on an overall corporate level. A respondent in the Financial Sector makes a similar point, although from a slightly different viewpoint:

I guess this is what many experience as frustration: they see the positive effects – the increase in stability and the better cost control. We do what we should, we do it on time, and we follow up on it. But then, 'Why can't I get a printer by tomorrow?' Or whatever it is … that was just a ridiculous example…

In this example, the respondent indicates that the overall perception of total control through centralization of IT procurement is frustrating for the users. The micro-investments require the same procurement methods as the larger investments.

A respondent in the Telecommunications Sector expresses frustration about the governance structure of IT related investments and procurement methods:

Well, all the IT costs are allocated. If we create IT architecture, nobody wants it, right? But if you ask,' What do we have'? We have allocation keys that are highly central. Then we have need-based, or usage-based allocations for the rest.

This respondent shows that the infrastructure costs are allocated separately from the more usage-based costs.

A respondent in the Healthcare Sector discusses the issue that IT is not directly evident to users in their work environment as they perform their everyday tasks:

We have financial and control applications where we would like to split the costs of the financial and control system per user. Some of the system costs are variable and others are fixed. Then there are license costs that may be variable. If there are ten people who leave the business administration department, or if we rationalize, then you can make a change in the licensing model for the financial and control system. This makes it possible to decrease the costs. But a base cost remains. You have the actual machine that the system is run on, you have costs for data communication, and so on. You can't break and throttle as fast in relation to costs so it is a while before you can change. So this has really not been easy. But we have invested a whole lot of dough in trying to achieve this, and we have had to make a little pit stop.

167

Justifications

The justifications are problematizations by the respondents who indicate there are different answers to the question depending on the company level in focus. A respondent in the Public Sector makes such a justification:

> *It depends on what level you look at. Somewhere in the middle alternative you could merge this, right? Some costs are national costs and lie in the infrastructure and are not accounted for at the business unit level. You could say, I have no budget that is linked to how many* [the respondent refers to employees] *there are. That connection does not exist.*

This same respondent states that costs are directly allocated from corporate to county level:

> *We do not work with business units. They are not subsidiaries. You could say that even when it comes to the equipment, the end users have a very clear connection down to the county level, even though they get an invoice from us, each month.*

Given the justification that this respondent gives for not fulfilling the norm, this response seems to contradict the first response.

A respondent in the Consumer Discretionary Sector offers another justification by stating that the allocation of costs is an American phenomenon not directly applicable to operations that are primarily Scandinavian:

> *We kind of allocate, not the IT costs – that is a typically American phenomenon. I would like to say that there is a... No, that is not how we do it here. IT is more like business and IT is free... that is one side of it ... Yes, they are free to buy everything but infrastructure externally, so it is infrastructure that is set by a skeleton agreement that we have set up with different suppliers, particularly our outsourcing suppliers.*

This response touches on the subject of outsourcing strategies by which the business units of this particular organization are free to buy everything but infrastructure externally. This subject comes up in several other accounts classified as justifications. A respondent in the Consumer Staples Sector states:

> *Some countries have totally outsourced, and that is the best in the end.*

This respondent states that the optimal way to build the IT organization is to allow and advocate total outsourcing. A respondent in the Utility Sector agrees:

Free to manage costs by ability to purchase services externally – that alternative exists. It is the entire sourcing strategy. So it is also built into the model as well. What we are not the best at, we should not do…

The same respondent also gives an illustrative example of an alternative perspective on the allocation of costs that differentiates between services and products:

But really, the allocation of cost – there is nothing that is allocated, no fat, so to speak, and very little central money. Everything is expressed in terms of services that are paid for by this shared service model. The infrastructure part is in a price list, to put it simply, and there you pay per piece.

Synthesis

The accounts relating to the ten norms reveal a number of sub-strategies in the two main strategies of Excuses and Justifications. The results also show a high degree of variance between the different norms when it comes to the sub-strategies employed.

Excuses	*Justifications*
Equation	Problematization
Direction	Differentiation
Intention	Reinterpretation
Delimitation	Confusion
Concretization	Discrediting of norm
Diversification	
Personalization	

Table 21. Sub-strategies in the accounts (ordered by relative frequency)

Some sub-strategies (Equation, Differentiation and Concretization) are present in both the main strategies of Excuse and Justification. However, if a sub-strategy has a higher (+2 instances) representation in one of these two strategies, I categorize that sub-strategy in the main strategy with the higher representation. The number of instances in the two strategies is subtracted from one another for the ranking determination. Next, I describe each sub-strategy.

169

Sub-strategies of Excuses

In the sub-strategy of *Equation*, the respondent answers the question by simplifying the level of analysis. In this simplification, the respondent may equate Top Management of the organization with the CEO in order that the respondent's viewpoints appear to represent those of Top Management.

In the sub-strategy of *Direction* or momentum, the respondent excuses the organization's lack of norm conformity by focusing on the current level of development rather than on the current level of compliance.

In the sub-strategy of *Intention*, the respondent focuses on the intentions of the organization rather than on the level of organizational norm compliance. The respondent replies with a clear statement that the organization understands the necessity of norm compliance rather than with a   description of the current situation or the development.

In the sub-strategy of *Delimitation,* the respondent attributes the lack of norm compliance to the diverse nature of the organization. By focusing on a separate organizational entity in the entire organization and by responding from this standpoint, the respondent excuses this non-compliance with the norm on the general organizational level.

In the sub-strategy of *Concretization*, the respondent uses analytical terms to make the response more specific. In this way, the respondent avoids answering the question on a general level.

In the sub-category of *Diversification,* the respondent explains that the diverse nature of the organization makes it impossible to achieve a high level of norm compliance at the organizational level. While this excuse is closely associated with the excuse of *Delimitation,* there is a difference. In *Diversification* the respondent does not single out one organizational element as a reference, but instead simply states that the low level of norm compliance is attributable to organizational contingencies.

In the sub-strategy of *Personalization,* the respondent states that while the respondent's own perception directly relates to the norm, the organization does not fulfill the norm.

Sub-strategies of Justifications

 In the sub-strategy of *Problematization*, the respondent begins with a critical reflection of the norm and tries to identify the difficulties and contradictions. In many instances, the respondent focuses on the inter-related nature of the

norm system by indicating that other norms take precedence over the norm under discussion.

In the sub-strategy of *Differentiation,* the respondent focuses on the difficulties in defining the basic concepts involved in the question. For example, the respondent may have difficulty in differentiating IT as a way to drive rationalization versus revenue maximization.

In the sub-strategy of *Confusion*, the respondent uses technical jargon to show the extreme complexity of the question. This complexity makes norm compliance impossible.

In the sub-strategy of *Re-interpretation,* the respondent explicitly re-interprets the question, often by asking for the interviewer's approval of the re-interpretation.

In the sub-strategy of *Discrediting of norm,* the respondent signals that the norm is either not achievable by the organization, or is an irrelevant and separate phenomenon for the organization. An example is a respondent's statement that the norm, being seen as an American norm, is not directly applicable to Scandinavia.

171

CHAPTER 7

Analysis and conclusions

In this chapter, I analyze the empirical findings from Study I and Study II. I organize the analysis into three sections – one for each of the three theoretical perspectives discussed in the Chapter 4. After each of these analyses, the theory based conclusions are summarized. Following this, the overall conclusions of this thesis are presented along with the contribution to theory.

To answer the research question, I turn to the three theoretical perspectives: Translation; Professionalization; and the Marginal Man. Figure 47 illustrates the process of the analysis, including a recapitulation of the research process prior to the analysis.
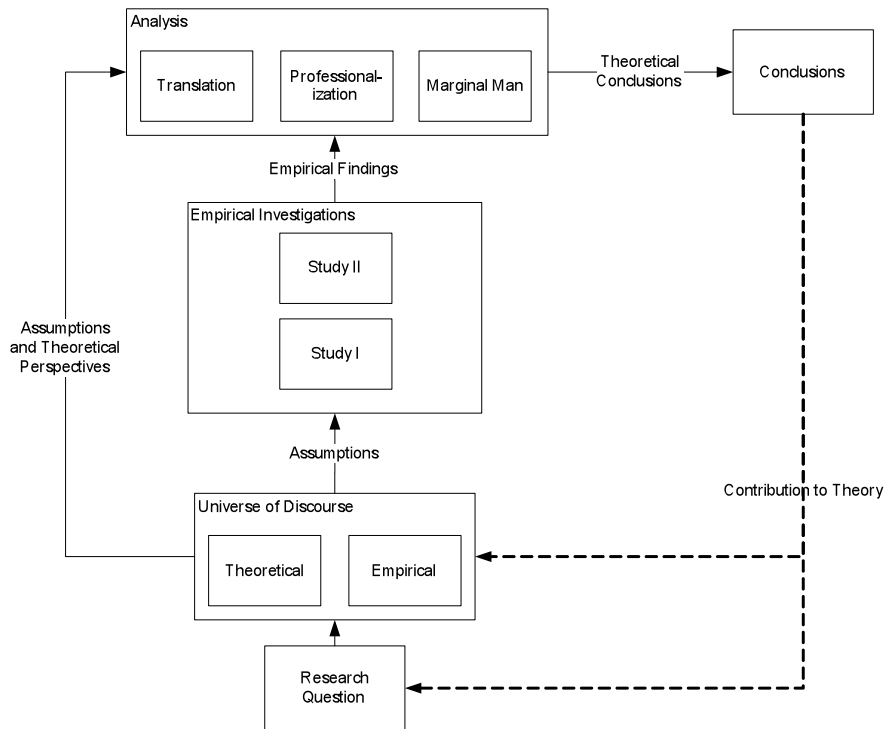
Figure 47. The Process of Analysis

As seen in Figure 47, the assumptions and three theoretical perspectives were derived from the Universe of Discourse to function as interpretive lenses for the analysis. From these three theoretical perspectives and the empirical findings, a number of theoretical conclusions were drawn. These were then used as input for the Conclusions. On the basis of the Conclusions, a number of contributions to theory were identified.

Translation

I address the translation perspective in two parts: Unpackaging as Legitimization and Unpackaging of Norms. Following this, I summarize the main points of the analysis.

Unpackaging as Legitimization

The CIO unpackages IT Governance related norms using a process of legitimization. This process involves a number of sub-strategies of

173

legitimization that are categorized under the main strategies of Excuses or Justifications. In previous research, analytical attention has focused on understanding how ideas are translated (Lervik et al., 2005; Holm Pedersen, 2007). By contrast, this thesis points to the importance of norms in IT Governance since such norms are generally not subject to direct interpretations. Instead, the CIO may re-interpret her own organizational settings to fit the management idea.

As interesting issue arises when we switch our analytical focus away from the management idea to the norms that constitute this idea. Previous attempts to decompose management ideas have not targeted the underlying norms (see Bjørnenak and Olson, 1999; Boxenbaum and Battilana, 2005; Örtenblad, 2008). This suggests the application of the construct of norms (Ross, 1968) as an interesting approach in the study of the translation of management ideas.

My interpretation of the CIOs' tendency to accept the norms may appear counter-intuitive to their best interests. In asserting and maintaining the legitimacy of the organization, the CIO avoids conflict with the norms. Instead, the CIO directs the attention towards motive talk by focusing on the organization's acceptance of the norms. The CIO then uses legitimizing strategies that allow her to claim norm compliance without actually having achieved it at the organizational level.

This means that the CIO acknowledges the authority of the norms (and thus that of the profession(s) that construct them) and seeks alternative means to achieve compliance. By choosing between a direct acceptance of the norm (Excuse) and a minor re-interpretation of the norm (Justification), the CIO carefully balances the legitimacy of the organization. This choice also ensures the CIO's personal legitimacy by avoiding direct conflict with the norm.

The CIO accounts that are the basis of the analysis in Study II represent the CIO as a corporate creature, clearly intent on excusing/justifying her own organization and its behavior. In rare cases, the CIO questions her organizational environment and blames other aspects of the organization. Yet the overall impression is that the CIO upholds the legitimacy of the organization by its relationship to the norms.

In this thesis, the send-receive metaphor of management ideas (e.g., Erlingsdóttir and Lindberg, 2005) has a predominantly receiving-end focus. Researchers such as Djelic (2007) and Holm Pedersen (2007) support this focus when they argue that the personal level of analysis should be addressed in more detail in the study of translation.

As the responses in Study II show, the receiving end of the translation process in IT Governance related norms is a complex process that involves a high level of sophisticated motive talk by the receiver (CIO) herself. Since this thesis

focuses on the establishment and maintenance of legitimacy as the primary reason the CIO involves herself in motive talk, the conclusion is that legitimacy is a central element of translation.

As some research reviewed in Chapter 4 claims, another avenue of analysis that focuses on the concept of "identity" rather than "legitimacy" may result in more fruitful findings at the personal level of analysis in translation studies (Strandgaard Pedersen and Dobbin, 2006; Sturdy et al., 2006)[25].

Unpackaging of Norms

In this thesis, the norms are regarded as elements of management ideas. Thus norms are also subject to what Latour (1986) refers to as travel in time and space. Zilber (2006) supports this claim in his study of the travel of myths.

Study I shows that Consultants, Professional Analysts, and Academics (the supply side) support the same norms related to IT Governance. The conclusion is that these norms have been successfully diffused since the three groups share a common understanding of IT Governance, at least on the norm-level.

The same holds true for the receiving-end of the translation, with the CIO being the primary recipient. The isomorphic tendencies expressed in how the CIOs shared a perception of the authority of the norms accentuates that the authority of the norms are shared not only by the supply but also the receiving side.

The Synthesis section in Study II indicates that the interpretative viability of the norms is relatively low. The CIOs, in their motive talk, construct the interpretative viability mainly by their choice of legitimization strategies. This introduces a new perspective on interpretative viability (Benders and Van Veen, 2001; Ax and Bjørnenak, 2005) where the focus is on the interpretative viability of the management idea as a factor in diffusion success.

However, this construction does not lead to the uniform and isomorphic adoption of the norms into similar practices, thus supporting Trägårdh and Lindberg's (2004) position. The norms in this research are not "ready-made scripts" but rather "points of departure" for managerial and organizational behavior. There are clear differences in how the CIOs express their compliance with the norms, but few examples of actual norm divergence.

Another issue raised by this thesis concerns inter-norm conflicts. This research takes the first steps towards establishing that IT Governance is comprised of a

---

[25] See the section of this chapter on the Marginal Man for further discussion on this.

system of norms (the norms of this research do not claim to be all-inclusive) based on deontic logic (von Wright, 1963).

Not all norms are created equal. This statement may seem a truism, but if used as a starting point for a re-evaluation of the norms in the norm system of IT Governance, it deserves particular attention.

Among the respondents, Norm No. 1 ("IT Investments should be linked to business") takes precedence over Norm No. 6 ("Performance management should be formalized"). Hence, the first norm of this research may discredit the sixth norm. Thus my finding is that using other norms is one of the few ways a CIO can directly challenge a particular norm. This finding implies there is a norm hierarchy and that the only way to discredit a norm with a strong claim of authority is to use other norms with more authority.

In summary, the linking of IT investments to Business, with the implied dependence of IT on Business, is the norm with the most authority. Hence, this norm may be perceived as the foundation for IT Governance. Study I does not, however, specify this dependency. Instead, it appears in the interview transcripts. In other words, this was not a norm that was explicitly established on the sending side, but instead constructed on the receiving end.

One example is the variation in the CIOs' understanding of the concept of IT Balanced Scorecards. Some respondents believe such scorecards are highly valuable techniques while others think the scorecards' general idea is offset by the construction of an IT-centric accounting technique. Regardless of the truth on this matter (the IT-centralism of the IT Balanced Scorecard), the difference in the CIOs' views is of interest.

Another interesting aspect of this issue relates to Norm No 2 ("Top Management should regard IT as a strategic asset"). For this norm, there is a potential conflict between the concept of "strategic" and the overall perception of IT as a way to achieve rationalization gains. If the respondents see IT as a force to drive and accomplish rationalization, this perception may oppose some aspects of the norm. The CIOs have difficulty in understanding the concept of "strategic" and thus attribute different values to it than initially intended.

If IT is perceived as a strategic asset, then this could be seen as one step towards the perception of IT being somewhat more of a means in itself. This caused some confusion that was discussed in relation to the different takes on IT as a means for driving revenue generation (business opportunities) versus cost minimization (rationalization). Given the diverse nature of IT, this was highly problematic for the respondents. IT was, off-course used as a means for both of these purposes, and that would require the further differentiation of the IT asset and a more nuanced terminology.

Chapter 4 refers to Holm Pedersen's (1997) focus on the process of translation of policies. According to his perception of translation, the process has two phases: idea-to-script and choice-of-script. This differentiation implies that the actual implementation of ideas is accomplished by selecting a number of ready-made, easily available scripts.

There are some problems when the CIO is equated with Holm Pedersen's policy maker. First, the idea-to-script phase is difficult to study. As this thesis shows, ready-made norms exist in consensus-like conditions in the CIO's environment, but the conversion of these conditions to scripts is a problematic and multiform process. Second, the scripts (guidelines, standards, etc.) are not the focus objects for the CIOs in this research. The norms are the points of departure in the CIOs' descriptions and legitimizations of their organization's behavior. I find no clear and uniform reference to scripts in their responses. Instead, I see attempts to focus on the norms as a way to secure legitimacy. My research reveals that scripts are the not primary carriers in the efforts to assert and maintain legitimacy.

Theoretical Conclusions

IT Governance related norms are unpackaged by a process of legitimization. In this process, the CIO accepts the norms and rarely questions their authority. She uses different forms of motive talk to excuse or justify her organization in its attempts to comply with the norms, and different norms call for different strategies of legitimization.

She constructs interpretative viability in her responses by interpreting where she should direct her responses in the organization, rather than in her interpretation of the norms. Hence, the interpretative viability is attributed to the organization, not the norm.

The CIO is loyal to her organization and seldom charges it with non-compliance with the norms. In the few instances where she lays blames, she points to the business managers.

There is a hierarchy among the norms. Some have more importance than others. This hierarchy allows the CIO to challenge a norm with weak organizational compliance when there are other norms with higher stature.

Professionalization

In this section, I address the different professionalization mechanisms described by Abbott (1988): cognitive strategies, abstraction, maintenance of abstraction,

and system properties. My purpose is to analyze the professional system of the CIO in the context of Abbott's professionalization mechanisms. This discussion complements the previous discussion on the profession as a carrier of norms (DiMaggio and Powell, 1983). I summarize the main points of the analysis at the end of the section.

Cognitive Strategies

According to Abbott (1988) this mechanism has three strategies: reduction, metaphor, and treatment.

The strategy of *reduction* appears among the cognitive strategies used by the CIOs. An example is the dichotomy of proactive-reactive choices used to address business imperatives and requirements. Some CIOs tend to take a proactive stance in which they downplay business managers' insights into their businesses needs related to IT. This proactive stance is often coupled with the CIOs' belief that the business managers are less than knowledgeable about the role of technology in everyday operations. The CIOs thus hijack the business managers' definition of IT requirements.

The strategy of *metaphor* also appears among the cognitive strategies used by the CIOs, although less frequently. In using models and frameworks, such as COSO and COBIT, the CIOs expand the traditional functional area of IT to encompass other aspects of the business. They use the models to understand the business as a whole. This strategy is often related to the keen process knowledge of IS that the CIOs have. The models map and control the processes using high level programming languages and architectural frameworks.

The strategy of *treatment,* which partly overlaps the second strategy of *metaphor,* exists in the CIOs' initiatives where the implementation of new IT has a fundamental effect on the business. Several CIOs are very clear in stating that the business is highly dependent upon IT, not only to perform current operations, but also to transform initiatives.

One example is the implementation of large-scale, standardized software that often involves the re-engineering of business processes. In such instances, the solutions to problems diagnosed by others (e.g., low flow-through in production or decreasing customer retention) are the IT artifacts and initiatives.

Abstraction

As far as the mechanism of abstraction, there is more focus by the CIOs on a high level of formalization and a broader area of application, According to Abbott (1988), abstraction exists in a profession that is experiencing increased pressure from other professions. A possible conclusion is that the CIOs of this study are experiencing such external pressure.

Norm No. 5 ("The decision process for IT investments should be formalized with a focus on business value driven by IT") is relevant. Several CIOs indicate that the effect of the pressure to evaluate the benefits of IT investments is that they consider the formalization process a safe way forward.

One approach is to shift responsibility for benefits realization to the business managers. This tactic is used in conjunction with charging the business managers with the responsibility for the development of a business case for the investments and by limiting the representation of IT people in the prioritization groups. Such groups consist of the business managers and controllers who are directly responsible for making sure that those people who support the investments take financial responsibility. This approach supports Norm No. 3 ("Top Management should be responsible for realizing the value of IT").

IT Governance, then, is a vehicle used to balance broadening the area of application against the formalization of scope. The current configuration of IT Governance (as expressed by the norms) promotes positive formalism.

Maintenance of Abstraction

It is difficult to analyze Abbott's (1988) maintenance of abstraction (as expressed by the choice between amalgamation or division) using the interviews of Study II. There are some accounts where a possible division results when the CIO distances herself from the rest of IS by portraying the Chief Technology Officer (CTO) as the CIO's left hand. The CTO is then responsible for all the technicalities associated with the management of IT and IS. There are also a few cases in which the CIO names the IT Strategist as the individual responsible for the technological strategies of IS.

One interpretation of the maintenance of abstraction is that the CIO focuses on securing her own professional space by differentiating herself from the rest of IS. This separation requires taking a more active role in the senior management of the organization. The implication is that increasingly the CIO is a member of Top Management, as the demographics data presented in the Background chapter demonstrate. Another implication, however, is that the

CIOs are not establishing their own profession but are joining the more general occupation group of senior executives.

System Properties

Abbott's (1988) last mechanism, the system properties (of the system of professions), involves the *connectivity*, *dominance*, *residuality*, and *systematization* of the profession.

Connectivity is very high. There is no formal education or governmental licensing that automatically ensures the legitimacy of CIOs. There are no certifications other than the framework-related certifications from various interest groups such as the IT Governance Institute (ITGI). The result is a rather weak position for CIOs concerning the exclusivity of their knowledge. Instead, with their varied education backgrounds, CIOs are directly tied to their demographic environments. CIOs also share a large number of their tasks with general management, a situation that diminishes their claim to exclusivity.

Dominance is high. As Study I shows, when several IT actors share a set of norms, there is a common understanding of what actually constitutes best practice in IT Governance. Abbott (1988) describes both the structural and cultural dominance with its strong norms for the role and function of IT (cultural) and for the organizational settings and configurations of the IT investment process (structure).

The confusion regarding the scope of the CIO leads to a high level of *residuality*. Another interpretation is that despite the dominant models for IT Governance, there is room for interpretation with respect to the role and responsibilities of the CIO. Several respondents in Study II have different opinions about whether the CIO should be a member of the corporate board and about the CIO's involvement in the investment process. This means that the CIO's role depends upon her organization. Thus residuality is a measure of the heterogeneity of the CIO's role.

On the issue of the *systematization* of knowledge, the results are somewhat contradictory. On one hand, the norms promote a high level of formalization in the processes that fall under the CIO's jurisdictional control. On the other hand, the guidelines for CIOs (apart from popular management literature and frameworks such as COBIT, ITIL, and VALIT) are few or none. In this research, the IT Balanced Scorecard is problematic since its use implies that IT may be measured separately from the business objectives.

Theoretical Conclusions

This brief analysis of the CIO shows that it is a profession under strong external pressure. Neighboring professions intensify the CIOs' battle for jurisdictional control. Adding to the difficulties are the needs and desires of the CIOs themselves, particularly as they try to shift responsibility for the investment process and benefits realization to the business managers. Such actions may seem counter-productive for a profession that wants increased jurisdictional control. One explanation may be that the CIOs in this research wish to identify themselves with Top Management and to distance themselves from IS.

Applying this idea to IT Governance, IT Governance becomes a vehicle for the amalgamation of the CIO with Top Management. Hence, the unpackaging of IT Governance is conducted instrumentally, with a bias towards particular content that serves the CIO's professionalization agenda.

Marginal Man

Consideration of the theoretical perspective of the marginal man allows me to return to the personal level of analysis. My focus in the next two sections is the CIO as the marginal man and the marginal man's loyalties, logics, and identity. I conclude with a summary of the analysis.

The CIO as a Marginal man

According to Stonequist (1935), the marginal man is a person who occupies two social worlds at the same time. This description applies to a majority of the CIOs in the organizations of this research. They are often both board members and operative actors in IS. They communicate with senior executives on the costs/benefits of IT and on the portfolio of IT related projects in boardrooms or in boardroom situations, using the language of the corporate culture. Simultaneously, they communicate with their IS colleagues using complex, technical terminology.

Keeping the theoretical perspective of Professionalization in mind, it is clear that the senior executives, many of whom are board members or have board level positions, are the reference group for the CIO. Hence, the CIO is torn between the IS group and the senior executive group.

According to Kerkhoff and McCormick (1955), the marginal man institutionalizes the norms of his reference group. For the CIOs of this research, the general governance norms then must apply not only to the IS

181

group but to the organization in general and to the senior executives in particular. In this respect, returning to the ten norms identified and validated in Study I, some patterns emerge that require further consideration.

Some IT Governance norms clearly align with the interests of the Top Management reference group. The following norms –"Top Management should regard IT as a strategic asset" (Norm No. 1), "There should be corporate insight into the benefits of IT" (Norm No. 9), and Top Management should be responsible for the realization of the value of IT" (Norm No 3) – support this conclusion. However, the following norms that shift responsibility to the business managers –"IT investments should be linked to business" (Norm No. 1), "The IT agenda should be established top-down" (Norm No. 4), and "Costs should be allocated with business unit autonomy" (Norm No. 10) – point to a more nuanced view of IT Governance.

Thus CIOs have a dual responsibility in IT Governance. They need to draw Top Management's attention to IT related issues and they also need to deal with the business risks associated with the management of IT. These risks that are related to uncontrolled spending and a lack of investment formalization may be directly handled by the norms that call for formalization of the IT investment process and better performance management.

Loyalties, logics and identities

On the issue of the dual loyalties, logic and identities that Stonequist (1935) describes, the marginal man concept is a way to bridge the gap between cultural organizational studies and institutional theory (Strandgaard Pedersen and Dobbin, 2006).

Regarding the loyalties of the CIOs in this research, there are very few instances where the CIOs try to save face by pointing to the failings of other individuals. In those instances, they never directly finger point at Top Management (occasionally, blame is implied). Rather, the CIOs blame the business managers in the organization. In general, the CIOS praise Top Management for its understanding and support of the IT function. In these accolades, they often single out the CEO (or the equivalent). My interpretation is that the CIOS are loyal to Top Management because of their identification with this group. Middle managers (i.e., the business managers) are not the primary role models for the CIO.

In relation to the unpackaging of IT Governance related norms, this entails that the organizational structure that the CIO works within consists of a clear focus on faith in the top cadre of management, while at the same time down-playing the understanding of the business managers. This might at first glance seem rather counter-intuitive, given the strong norms related to the raison-d'être of

IT being that of a support function for the business as a whole. Or to put it bluntly: IT is regarded as a support for *business*, not *business areas*.

The implications are that the CIO is more likely to prioritize IT Governance related norms relevant for corporate level governance structures than norms that are more operatively formulated. As a result, the focus of the CIO is increasingly with norms related to the interests of the boardroom rather than with the norms related to the business level interests.

IT Governance, in this respect, is a double-edged sword for the organization. IT Governance leads to better control and alignment of IT with the rest of the organization (as advocated by its promoters), and yet it is increasingly an activity conducted exclusively in the boardroom, distanced from the essential purpose of IS.

The CIO's loyalties are primarily with Top Management, secondarily with the organization as a whole, and thirdly with IS. Some observers may disagree with this hierarchy of loyalties, but there is high support for this ranking. In the respondents' interviews, the relationships between the norms and the recurring norm conflicts both show that not all norms are equal. The highest-ranking norm, the trump card, if you will, is Norm No. 1: "IT investments should be linked to business." If IT must always directly support the business, then it is allowable to discredit technology, such as the IT Balanced Scorecard, and to justify battles with the business managers. (However, the CIOs note that Top Management supports them in these conflicts).

It is interesting that no norm directly supports discrediting such technology or justifying such battles. Yet implicitly the norms offer this support by emphasizing the role of the CIO as a corporate creature who works for the good of the organization and who deals routinely and cooperatively with the internal conflicts of the job. Several respondents state their gatekeeper role is particularly important for the success of their work.

Despite the theoretical dichotomy between legitimacy and identity, I note that the two are intimately intertwined in the everyday work of the CIO. The CIO identifies herself as a top manager in the organization, establishes a sense of legitimacy by acting as the gatekeeper for IT related initiatives, and formalizes the processes in such detail that they are purely mechanical with little or no room for personal involvement. She is a gatekeeper with a high level of risk aversion, who may hold others responsible for failed investments.

The CIO fits into the construct of the marginal professional role described by Wardwell (1952). As noted previously, CIOs are involved in both division and amalgamation (the maintenance of abstraction). The CIO, who moves between two professional groups, is in a marginal profession.

183

Theoretical Conclusions

The CIO is a marginal man in a marginal professional role. The reference group for the CIO is Top Management, and the CIO is inclined to institutionalize and support the norms of this particular group.

The consequences of this are mainly two-fold. First, the CIO's loyalties are with Top Management rather than with the organization as a whole or IS in particular. Second, the CIO is biased towards a particular type of content of IT Governance. The norms with a clear correspondence to the norms of Top Management are likely favored over the norms with a clear correspondence to IS.

Conclusions and Contribution to Theory

I have arrived at three overall conclusions:

1. The unpackaging of IT Governance related norms is closely tied to the securing of legitimacy. Hence, the personal and professional agenda of the CIO influences an instrumental unpackaging of IT Governance related norms.
2. CIOs use different forms of motive talk to justify and excuse their stance towards IT Governance. These different strategies of legitimization offer the CIOs a means for upholding legitimacy without problematizing or following the norms to the letter. This facilitates heterogenic adoption of the management idea.
3. The unpackaging of IT Governance related norms displays variance on account of the strategies of legitimization that the CIOs employ. This variance is observed on a per-norm basis.

Below, these conclusions are further developed in relation to previous literature and contribution to theory. To aid the reader, I have divided the contribution to theory into three areas, where the first two are directly tied to the conclusions and the third is tied to the description of unpackaging as a sub-process of translation.

Table 22 offers a summary of the contribution to theory.

Area	Related literature
Motive talk as facilitator for translation	Czarniawska and Sevon, 2005; Sahlin-Andersson, 1997; Semin & Manstead, 1983; Creed, Scully & Austin, 2002
Variance in strategies of legitimization	Austin, 1961; Schönbach, 1980
Unpackaging as a sub-process of Translation	Sturdy, 2004; Lervik et al, 2005; Czarniawska and Sevon, 1996, 2005; Trägårdh and Lindberg, 2004; Callon, 1986; Strandgaard Pedersen and Dobbin, 2006; Holm Pedersen, 2007

Table 22. An overview of contributions to theory

The first area of contribution to theory is related to the identification *of motive talk as a facilitator for translation* of management ideas. This finding builds on a perspective from Scandinavian Institutional Theory that offers explanations for how organizations differ from one another, despite that they follow the same recipes for success (Sahlin-Andersson, 1996; Czarniawska and Sevon, 2005; Røvik, 2005).

This (following of the same recipes) has in previous research been regarded as occurrences of imitation. As Hedmo, Sahlin-Andersson and Wedlin (2005) describe it, this phenomena has been addressed under the heading of recombination, accretion, translation, editing and hybridization, yet they all point to the same thing: It is not the management ideas that are transferred, but the accounts and materialization of practices.

Through focusing in particular on the accounts as occurrences of motive talk, I have followed a perception of the purpose of translation being legitimization (Røvik, 2005).

Legitimacy is as previously noted seen as somewhat of a "pillar" of institutional theory (Suchmann, 1995). Through applying a cross-sectional approach towards the study of unpackaging, together with a personal level of analysis, I

have contributed to this tradition. As I have found, motive talk is a central element in how translation is conducted on the personal level.

In this respect, I feel that the imitation metaphor can be somewhat misleading as a means for approaching the intricate interplay of personal translation. Individuals do not imitate, as I have found; they relate and legitimize their standpoint.

Motive talk opens up for a certain degree of freedom when it comes to the unpackaging of IT Governance related norms. Without challenging norm compliance, the different strategies of legitimization that I have seen employed by the CIOs, offer a means for them (the CIOs) to stay legitimate without strictly following the norms to the letter. Hence, motive talk opens up for heterogenic norm adoption, thereby facilitating translation without direct imitation[26].

Motive talk and strategies of legitimization as applied in this thesis offer a unique perspective for studying the process of translation. The consequences of the findings, when joined with the analysis of the professional agenda of the CIO, offer a new take on the role of the executive manager as an individual that uses the translation of management ideas instrumentally in her own professional development.

The second area of Contribution to Theory is related to the conclusion that there is *variance in strategies of legitimization* on the norm-level. This contributes to previous theory development (Austin, 1961; Schönbach, 1980) through offering an alternative typology of strategies of legitimization from a perspective on norms and executive managers.

The typology was found to have a clear link to that of Schönbach (1980), with some slight modifications in terms of which strategies were most prevailing among the CIOs. For instance, the finding that there were only rare cases of scapegoating going on[27], differed directly from previous findings.

The conclusion that the distribution of strategies employed by the CIOs varies between the different norms in focus is also a further development of theory. Following Creed, Scully & Austin (2002:475) towards understanding the intricate interplay between how accounts at the same time are *"…neither strictly borrowed or idiosyncratically tailored…"*, I have offered a conclusion that contributes to previous theory. There is a difference between how

---

[26] See Brown (1978:375) for a discussion on the negotiation of reality and its building materials.

[27] And in these accounts the object of blame was never the senior management of the organization.

different norms are legitimated, and this may prove to be of value for future research.

As the third area of Contribution to Theory, this thesis adds to previous descriptions of *Unpackaging as a sub-process of translation* (Czarniawska and Jorges, 1996; Erlingsdóttir and Lindberg, 2005).

While Lervik et al (2004) consider the implementation phase of the travel of ideas as the one deserving of the most interest, this thesis takes a stance away from action[28]. Instead, the description offered is one with a strong focus on the personal level of analysis, where the object of analysis is legitimization through natural language.

This personal focus is, as previously noted, a result of inspiration from amongst others Djelic (2007), where mediation and (re-)construction of the management idea becomes the most interesting aspect of the translation process. This is also supported by Strandgaard Pedersen and Dobbin (2006) and Johnson and Hagström (2005) where the latter highlights the personal, receiving-end of translation (construction-as-process) as the most fruitful point of departure for future research.

The personal level of analysis is complemented by an analysis on the level of profession. With the links between the management idea (as constituted of a set of norms) and the profession (being the bearer of norms), the emphasis on understanding the professionalization of the CIO further adds to the uniqueness of this account.

The description offered in this thesis further differs from previous descriptions through a strong focus on the phase of unpackaging. This phase has previously been depicted in general terms, yet no cross-sectional study of this particular phase has to my knowledge been conducted. This focus could be seen as going against the overall logic of translation studies where there is a strong emphasis on understanding the (whole) process (Callon, 1986; Czarniawska and Sevon, 2005). I have focused solely on unpackaging, whereby this adds to the uniqueness of the descriptive account of translation.

Through offering a description of how executive managers of large, Swedish organizations unpackage IT Governance related norms; I have come to regard the management idea of IT Governance very much along the lines as depicted in Trägårdh and Lindberg (2004:397) as "*points of departures rather than powerful tools in the hands of management*". This is closely related to the

---

[28] This stance is somewhat problematic provided that Austin (1962) and his "How to do things with words" is one of the fundamental outsets for the analysis. Through stating that I do not have a focus on action, I am referring to physical action, not speech acts and the prescriptive aspects of language. See Foucault (1972): "To talk is to do".

instrumental aspects of IT Governance translation addressed later on in this section.

To summarize this last area of contribution to theory, this thesis adds to previous theory through offering a unique account of translation. Traditional translation studies focus on the action/implementation of management ideas at the organizational field level of analysis with a strive towards understanding the entire process of translation. My descriåtion, on the other hand, focuses on the legitimization through natural language at the personal and professional level of analysis with a strive towards understanding a sub-process of translation in a cross-sectional setting.

Discussion, limitations and future research

Discussion

After first focusing on IT Governance and the role of the CIO, I address the IT Governance related norms and then the unpackaging of IT Governance related norms. The discussion focuses on the problem area addressed in this thesis.

IT Governance and the role of the CIO

As concluded in this thesis, the CIO can be regarded as being part of a marginal profession. The marginal professional status is signified by a mix of loyalties and logics that transcends that of a single professional role. In the case of the CIO, the image that has evolved throughout this thesis is that of an individual torn between different de-facto roles.

The role of the CIO has undergone changes before. As noted by Rockart et al (1982) the 1980's displayed a shift from a technological focus to more business

alignment and what Grover et al (1993) discuss as the liaison-role between business and IT.

The academic debate during the early 2000's brought with it a questioning of the entire idea of having a CIO with technology becoming pervasive (Facio Maruca, 2000). This idea of the CIO having become obsolete as a corporate role is constantly present and to some extent it brings with it an identity crisis for the CIO (IDG, 2009-07-05).

The future role of the CIO that comes from the theoretical analysis provided in this thesis is one of three scenarios.

The first of these scenarios is a stalemate of the current situation with the CIO as a marginal man. This would entail a continued identification and display of primary loyalties with the Top management of the organization. This would lead to a continued bias when it comes to the unpackaging of organizational ideas, with a clear focus on selecting norms that correspond to the ones institutionalized by Top management. This is not, however, done with full disclosure and transparency, which in turn leads to a continued risk of CIOs with less than clear-cut motives compromising the business of the organization.

The second scenario is that the CIO falls into the category of a corporate man. Through moving more and more towards Top management, this leads to a development as envisioned by Rockart et al (1982) and creates the need for a re-conceptualization of the CIO concept as well as the authority patterns of IS.

According to this scenario there is a risk that the move towards a corporate man is done without taking into consideration the void of responsibility that this exit of the CIO from IS would entail. This would primarily be seen through certain issues and tasks that traditionally have befallen the CIO either becoming down-prioritized or simply avoided. This would lead to direct risks for the operations of both IS and the organization as a whole, given the high degree of IT dependency in most large organizations.

The response to this would most likely be that of moving traditional CIO tasks to other roles within IS, such as Enterprise Architects, CTOs and IT Strategists. Provided that the current operations of IS are slimmed and the work-load of the people currently occupying these roles is substantial, this might lead to disgruntled IS workers. If, on the other hand this is done in conjunction with the introduction of new positions and hires in IS, this might be regarded as more positive and even lead to a re-structuring of the professional sphere of IS workers.

The third scenario is that of the CIO moving into the category of professional man. This would entail a re-focusing from regarding Top management as a

191

reference group towards seeing IS as the primary professional homestead of the CIO.

This would, as I see it, require an increase in status attributed to IS and IT by the rest of the organization. Following along the lines of Abbott (1988), this needs to be preceded by an increased exclusivity when it comes to the knowledge possessed by the CIO, and a decrease in the tendency for routinization of the tasks of the CIO. Increased focus and occurrence of formal certifications and ultimately licensing through governmental mandate would also be needed in order to give a push towards the status of the CIO as a profession, yet at present this is not a development that I regard as feasible.

Instead, the tendencies to formalize and avoid responsibility in the investment process points to a development in the diametrically opposite direction. One might even be so bold as to say that the existence of formalization as an element of IT Governance related norms is a hindrance for the development of the role of the CIO towards this third scenario.

These three scenarios raise the question of what I see as a tendency to regard professions and occupational groups as homogeneous. Despite not really having any sound ground for stating that this is not the case based on the demographics of the CIO role, I have the feeling that it would be a false pre-conception to regard the CIOs in large, Swedish organizations as members of a homogeneous group. The CIOs may have more in common with the other managers in their particular organization than they do with the overall body of Swedish CIOs.

Based on this, the three are and will most likely be able to function in parallel with one another. Hence, I am not sure that one of these scenarios will become dominant for all CIOs, at least not in the near future.

Another discussion point that surfaced during the analysis in this thesis was the role of the CIO as a gate-keeper. This could be illustrated through a parallel to the Roman god Janus.

According to Roman mythology, Janus is the patron of concrete and abstract beginnings. At the same time he is the god of gates, doors and beginnings and endings and the usher of change. With his two faces faced in opposite directions, Janus was granted the ability to see both the past and the future (Encyclopedia Britannica, 2009). Hence, the traditional roman perception of Janus has little to do with the current application into *Janus-faced* as being directly related to deliberate deceitfulness. As have become apparent throughout Study II, some of the Roman characteristics also apply to the CIO.

First off, the CIO is very much facing two different directions at the same time, the most obvious of these being the general business (the purpose of her

function) and IT (the content of her function). Both of these directions require a separate vernacular and means of communication, something that is highlighted in many of the accounts in Study II.

Secondly, the CIO is very much the usher of change and the gatekeeper when it comes to IT related investments. Hence the role of the CIO as a bridge/gate-keeper makes her take on the role of the person ultimately responsible for giving the go-ahead (even though many of the CIOs in this study had been successful in pushing the operative responsibility over to individuals more involved in the daily operations) for change.

According to the Roman poet Martial (Epigram 10.28.5-6), another interpretation of the persona of Janus was created by the emperor Domitian, this time with a four-faced Janus in the form of a statue. The statue was overlooking Rome's four forums: the Forum of Peace, Transitorium, Julius Caesar, and the Roman Forum (being the political and religious centre). With this interpretation of the CIO as Janus, we would see him or her facing Operations (Peace), Change (Transitorium), the CEO (Julius Caesar) and the Executive Board (Roman).

Regardless of the practical (or for that, theoretical) value of bringing forth this analogy of the CIO as Janus, I feel that it encompasses some of the many threads that have emerged related to the role of the CIO.

IT Governance related norms

As found in the thesis, the supply-side of IT Governance related norms is highly homogenous. None of the norms found within the consulting study (Study I, Sub-study A) were found to be unique and un-validated by the subsequent sub-studies.

This could either be interpreted in a somewhat derogatory way through seeing the consulting genre as devoid of innovative ideas and new findings. On the other hand, with the basic idea behind intellectual development being that of "standing on ye shoulders of giants" as Isaac Newton so eloquently put it (Jones, 2009), it should be clear that no intellectual development occurs in a vacuum. Instead, it could be regarded as a show of strength for the consulting genre that they are so inter-related with the rest of the ecosystem of ideas surrounding IT Governance.

Much has been written about the un-reflected following of best-practices, recipes for success and critical success factors (Luhmann, 1986) and the self-fulfillment of theory (Ferraro, Pfeffer & Sutton, 2005), as well as the need for iconoclastic movements to tap into the full potential of new innovations and means of managing your company (Allio, 2003).

193

Hence, I have found an inherent dichotomy in my own thinking related to the homogenous supply-side of IT Governance related norms. On one hand (or *initially* I might add), I was prone towards seeing this as evidence of the blind following of fashion on the supply-side, with strong rhetoric (Latour, 1986) being produced and then re-produced in an unreflective manner by the different stakeholders.

On the other hand (or rather *after a while*), I started seeing the apparent opposite side of this argument, with the consultants, professional analysts and academics working in a joint environment with the re-interpretation of ideas and the re-packaging of this into whatever form best suited for the different genres. The original idea that the consultants were acting on opportunistic premises soon started to rumble.

There is a tendency to treat members of a different professional realm as passive and thereby necessarily unreflective (in practice, not essence) when we wish to make generalized comments about them. In management research, this tendency could be seen as a means through turning the object of inquiry and the subject of our research (management and managers) into something that is practically possible to study. Hence, it is a type of survival strategy for the researcher to aid her in the fulfillment of her research agenda.

Returning to the homogenous supply-side of IT Governance related norms; I see this as a sign of saturation when it comes to the organizational idea of IT Governance. There is at present a clear idea about what constitutes "good" IT Governance for the majority of organizations.

This verisimilitude (Barthes, 1982) does however bring with it apparent risks when we move towards looking at how the managers adopt and consume (implement) the organizational idea of IT Governance. In this respect, the conclusions presented in this thesis related to the balancing of the hierarchal stature of the norms and the interpretive viability of the organization could be seen as strategies to counter-act this "tyranny of fashion".

The differences in hierarchal stature of the IT Governance related norms provide one of these strategies allowing for the CIO to passively go against a norm. As noted previously, the CIOs only rarely went into direct conflict with the norm, questioning and problematizing it for their particular organization. Yet, for instance, in the norm of "*Performance management should be formalized*", the CIOs found a possibility of indirectly questioning it through letting another norm (IT can never be a means in itself) take precedence and allow for the CIO to avert direct norm inconformity.

This is just one of the examples where a hierarchal structure is found among the IT Governance related norms, yet it shows that it provides the CIO with a means of retaining legitimacy without directly following the norm. Hence, the

hierarchal stature of the norms could be seen as providing the CIO with a strategy that makes it possible to retain legitimacy without piously following the norms.

Another one of these strategies available for the CIO to maintain both legitimacy and avoiding possible counter-productive norm adoption is the interpretive viability of the organization as such. On answering the questions provided in the consulting questionnaire, the CIO employed a shift in focus from the norm as such to the organization as such.

Through stating that the organization was in compliance with the norm with the re-interpretation of the basic concept of the organization instead of the norm, the CIO had a means of upholding legitimacy despite not truly fulfilling it on an organizational level. If, for instance, the norm "*Top Management should be responsible for realizing the value of IT*" is in focus, the CIO might legitimize not fulfilling the norm through re-interpreting the organizational chain-of-command as Top Management always being responsible for what happens at the lower levels and hereby reach full norm compliance.

This alternative version of interpretative viability (Benders & Van Veen, 1988) could hence be regarded as the second strategy to maintain both legitimacy and freedom of practice for the CIO[29].

These thoughts are touched upon in Brown (1978) through a discussion on the true power of the executive manager. According to Brown, the trademark of true power is to have the option to choose *what* to follow, not merely *how*. Or in the words of Brown (1978:376):

> …"making decisions" is not the most important exercise of organizational power. Instead, this power is most strategically deployed in the design and imposition of paradigmatic frameworks within which the very meaning of such actions as "making decisions" is defined.

The Unpackaging of IT Governance related norms

As the conclusions of this thesis point out, the CIO uses the organizational idea of IT Governance instrumentally in a strive for increasing her professional status. Hence, the choices made in respect to which elements (what norms) of IT Governance that are pushed become important for securing both the legitimacy and identity of the CIO.

---

[29] See Benders and Van Veen (1988) for a discussion of interpretative viability as it relates to management fashions.

195

Provided this instrumental use of IT Governance, this gives rise to an inclination of the CIO to single out and select aspects of IT Governance (in this thesis norms) with a high correspondence to those predominant in the Top Management of the organization. Hence, a potential bias was identified in which organizational ideas and elements of organizational ideas that actually become adopted by CIOs.

That is not, however, to say that the CIOs are regarded as being simple subjects to whims of fashion or strong, dominating logics. Instead, as I have noted, the CIO is *instrumental* in her choices, and there is a high level of insight as to what will actually benefit the CIOs agenda. With the findings that the CIO highlights the organization and the well of the organization, the motive talk as displayed by the CIOs in this thesis often functions as a means of ratifying the choices made.

This line of thought does however bring up some potentially less than flattering aspects of the CIOs in large, Swedish organizations.

> "*At the moment of granting the assignment, His Majesty saw before him the bowed head of the one he was calling to an exalted position. But even the far-reaching gaze of His Most Unrivaled Majesty could not foresee what would happen afterward to that head. The head, which had been bobbing up and down in the Hall of Audiences, lifted itself high and stiffened into a strong, decisive shape as soon as it passed through the door. Yes, sir, the power of the Emperor's assignment was amazing. An ordinary head, which had moved in a nimble and unrestrained way, ready to turn, bow, and twist, became strangely limited as soon as it was anointed with the assignment. Now it could move in only two directions: down to the ground, in the presence of His Highness, and upward, in the presence of everyone else. Set on that vertical track, the head could no longer move freely.*" Kapuscinski, (1989 :34)

The quote above is taken from the travel-writer Ruszchyard Kapuscinski's descriptions of the everyday life in the court of the Ethiopian Emperor Haile Sellasie I in the early 1970's. I find that the description, as offered by one of the servants of the court, is a thought-provoking illustration of some of the aspects of the life and times of the CIO in large, Swedish organizations.

The risk of fixating your head on the "vertical track" as Kapuscinski so eloquently puts it, could very well prove to be detrimental for the CIO. Being responsible for IS and moving more and more to the higher levels of abstraction in terms to responsibilities and accountabilities creates a potential void of responsibility that may very well influence the organization in a negative way.

That is not to say that this type of behavior and strive is by default a negative one. While pushing IT related issues into the board room, the CIO is very much making the previously disregarded subject of IT more and more the focus of Top Management attention.

At the same time, this rise within the corporate hierarchy opens up for the risk of the CIO distancing him- or herself from the everyday operations of IT, something that may prove to be detrimental for IS in the long run.

Following on the issue of the potential bias in adoption patterns as identified in this thesis, this could lead to what Meyer & Rowan (1977) refer to as the tendency for organizations to adopt behavior that is less than optimal for the organization as a whole. This negative aspect of the biased adoption, leads to a potential risk appearing as a consequence of the strive for increased status of IT, namely one of imperfect fit between the IT Governance and the objectives of the organization.

If the instrumental value of IT Governance is directly dependent upon the increased status of IT, the personal stature of the CIO will depend on how well the CIO can push IT Governance related issues up towards Top Management. This becomes particularly interesting when looking at the present situation with an economic recession and a strong focus on cutting the operational costs of organizations (Raynor, 2008).

At a seminar that I held with 60 CIOs in Stockholm in May 2009, the overall perception among the CIOs was that with the increased focus on cost-cutting for the organization as a whole, Top Management's interest in IT Governance related issues had started to soar. IT was regarded as a technology that (if correctly governed) would enable the organization to gain a higher effect from their cost-cutting initiatives. This is also supported by some of the initial findings from the Professional analysts in their analysis of how the overall macro-economic development is impacting IT and IS (Raynor, 2008).

If this observation stands true, then the increased interest from Top Management in IT Governance would bring with it an increase in the speed with which the status of IT is increasing. This would lead to an increased push towards the second scenario of the future role of the CIO as a Corporate Man and a further tendency of the CIO to advocate norms that are in direct tune with those of Top Management. If this happens, there might come a time when IT Governance as a concept needs to be re-conceptualized as a tool for Top Management rather than IS in securing the efficiency and effectiveness of IT as a resource. To clarify: The perception of IT Governance as the settings for IT Management would need to focus on the demand-side, and let go of all attempts at governing the supply-side (IS).

197

Limitations of the study

I have made a number of choices that necessarily limits the study. In this section, I describe these limitations.

The *first limitation* concerns my methodological decision to view the unpackaging of IT Governance as a process of legitimization. My reason for focusing on the strategies of legitimization relates to the research setting. When I asked the respondents of this research to state their level of maturity vis à vis the norm-related questions, I discovered their accounts were very similar to the "legitimating accounts" studied by Creed, Scully, and Austin (2002). I conducted my study of unpackaging using the strategies of legitimization in which legitimacy is the "anchor point" of institutional theory (Suchman, 1995) and is defined as in tune with the norms of other stakeholders (Ashforth and Gibbs, 1991).

Despite the support for the link between the unpackaging phase and the role of legitimization, the choice of a proxy for legitimization limited my study. The focus on strategies of legitimization may explain only how CIOs legitimize their choices. However, I argue that my combined work with strategies of legitimization, legitimating accounts, and the links to the unpackaging phase of translation, contributes to the understanding of unpackaging. My focus on the strategies of legitimization is a unique perspective to *one* aspect involved in the unpackaging of IT Governance related norms.

The *second limitation* concerns the across-firm variability related to the cross-sectional field study approach. Bowen and Wiersema (1999) note that one deficiency of the cross-sectional approach is the accounting for across-firm variability. In this thesis, my objective was to direct the attention away from the organizational level of analysis and towards the personal level. As the subject of study is the individual CIO, the impact of across-firm variability is dependent upon the strength of the CIO profession. As noted previously, there are questions regarding the CIO's professional identity. A weak professional identity makes the across-firm variability more problematic.

The *third limitation* concerns the use of triangulation for validating the findings in Study I. Since the triangulation is not bi-directional, I made no attempt to identify additional norms. I explain this approach by noting the empirical limitations in Study II. Since the empirical data of Study II was necessarily circumscribed by the consulting firm's research design, I was very practical in my approach in Study I. I could only identify and validate the ten norms of this research based on the parameters of the consulting firm's design. I could not include any other norms that the Professional Analysts or Academics might have proposed. As a result, my identification of IT Governance related norms might be incomplete.

A related issue is whether this study makes the case for triangulation. According to Jick (1979), there are a number of different approaches to triangulation. These vary from the quite simple introduction of multiple scales to the "holistic description" (Jick, 1979: 603). In my use of triangulation, I aimed at cross-validation by combining different methods and different data sets to investigate the same constructs. Because of this practical approach, there are empirical restrictions. I did not use triangulation to its full potential by "allowing for new or deeper dimensions to emerge." (Jick, 1979: 604).

The *fourth limitation* concerns the criteria for establishing consensus on the supply side of IT Governance related norms. Each consulting firm's norm was validated if one of the two external sources (Professional Analysts and Academics) validated it. As a result of this process, I validated all ten norms. Had I required that norms be validated by both sources, I would have validated only seven norms. However, in my analysis of the three norms not unanimously validated, I did not find any substantial differences in the patterns of strategies of legitimization. It is unclear what this second analysis means. Does a norm require a certain critical mass to be considered valid? Is the interview setting itself sufficient that the respondent accepts the validity of the norm? The different implications of these two alternative interpretations are problematic. If the answer to the second question is yes, then the implication is that Sub-study B (Professional Analysts) and Sub-study C (Academics) in Study I may have been unnecessary – a norm identified by the consulting firm, by default, is valid. If, however, we accept Ross's (1968) definition of a norm, a true norm requires validation by other sources.

This discussion may expand to possible inconsistencies in the norms based on the literature. For example, Gupta's (2001) research may directly conflict with the norms of formalization. Gupta believes the personal relationship between the CEO and CIO is a critical factor that outweighs the formalization in structures and processes. This alternative conclusion may challenge the validity of the norms in my study. Based on the literature reviews and the archival studies supporting this thesis, I argue, however, that the ten norms are valid. IT Governance is in one sense highly homogenous, but this homogeneity does not necessarily exclude contradictions. My conclusion that IT Governance is generally a homogenous field derives from my analysis of my empirical data. Alternative interpretations need not invalidate norms that have empirical support.

The *fifth limitation* concerns the choices of theories. As explained in the Method chapter, I did not select the theoretical support for this thesis at the beginning of my research. Instead, I adopted the theories based on various channels of inspiration and by a hermeneutic process of re-design that largely set the tone for this study. For the links between the strategies of legitimization and professionalization, my inspiration was Neo-Institutional Theory and DiMaggio and Powell's (1983) concept of normative isomorphism

and its links to professions. The use of the Marginal Man and the theories related to marginal professions resulted from my attempt to find a sociological basis to explain how a professional role exists at the periphery. Hence, I chose theories by a pragmatic and utilitarian process.

The *sixth limitation* concerns a common interpretation by the readers of this thesis in its draft stage. They concluded that my assumption is that all norms are external for IT Governance in large, Swedish organizations. This is an erroneous assumption. I focused on the norms from external sources since those norms provided the starting point of my investigation. It was not my intent to exclude other norms as possibilities or to make the CIO a passive manager, subject to a set of externally imposed norms.

Following on the same note, I have tried to refrain from getting into polemics in regards to the sender/receiver idea of translation. This simplification based on basic models of communication does not amply reflect my own perception of the translation process. Management ideas are constantly re-produced by both sides of the sender/receiver divide, and the intricate relationships between the two parties cannot be accurately summed up in such a simplified model. The model is, however, a valuable starting point for the research question of this thesis.

Future research

In this research, I had the opportunity to review and apply a number of different methodological and theoretical considerations to the study of translation. In my work, I identified several avenues for future research that I discuss next.

On methodology

The methodological alternative in using secondary analysis of qualitative material was found to be a highly usable and valuable alternative when studying the process of translation. Contrary to previous findings (Lervik et al, 2005) I found that the critique of studying organizational ideas from a ready-made perspective to be substantiated, yet the advocacy of longitudinal case studies is as I feel somewhat of a narrow path. On one hand, this leads to a bias in respect to what type of organizational ideas that are studied (since ideas that are not successful in their diffusion would tend to be forgotten, much like Sturdy, (2004) notes), while at the same time this leads to a less than efficient means of targeting particular phases of the process of translation.

Instead, I found that the cross-sectional approach taken by this thesis to be a viable one, particularly in combination with the use of secondary material.

This use of secondary material as a (in this thesis the *only*) source of empirical data is regarded as sustainable since it both utilizes previously conducted studies (and hence saves precious time and resources) and provides an important contribution in itself. Through using a consulting study as both a means for securing access to data *and* as a means for securing the relevance of the data itself (through the assumption that what the consulting profession deems as relevant has a close relationship to what the market for the consultants deems as relevant), the researcher is supplied with a valuable starting point for further research.

The use of secondary material leads us to a potential alternative design of the research process based on retrospective reflection and interpretation. If we want to use a previously constructed and conducted study, we would need to address the issues related to the loss of control over the research setting and design of the study and open up for a retrospective construction.

Inspiration for this retrospectively constructed approach of the research process could be found within the field of Sociology of Knowledge and Science (see for instance Pickering, 1992). Gooding (1992: 78p) summarizes the question of agency in observation and the aspect of all constructions in essence being retrospective:

"In more familiar language, judgments about the reality of an entity or about the directness of an observation are retrospective. Their status reflects confidence based on certain representations being made and tried, on distinctions being drawn, skilled practices established, and so on…it is well known that most logically crucial experiments acquire crucial status through retrospective constructions (often in textbooks) which give a false view of the actual status experiments had when proposed or when performed."

Apart from the relativist rationale behind post-study reconstructions, the need for methodological heterogeneity as a means to escape what Hacking (1992:30) calls the "self vindication" of studies becomes relevant when looking at the field of Scandinavian Institutional theory.

"A theory inconsistent with an observation can always be saved by modifying an auxiliary hypothesis, typically a hypothesis about the working of an instrument… It is my thesis that as a laboratory science matures, it develops a theory and types of apparatus and types of analysis that are mutually adjusted to each other…They are self-vindicating in the sense that any test of theory is against apparatus that has evolved in conjunction with it – and in conjunction with modes of data analysis. "

201

The latter part of this quote could be used as rationale for introducing a new set of methodological standards (*apparatus*) into an existing theoretical field.

Continuing on the issue of research methodology, previous researchers have commented on the need for more in-depth studies on the receiving-end of translation (Djelic, 2007). This calls for a different analytical focus than the majority of previously conducted research (Strandgaard Pedersen & Dobbin, 2006), and this thesis is one example of how this could be designed. The study of the cognitive aspects on a personal level of analysis for the receiving end of the process of translation is an approach that I feel should be subject to more research.

The application of theories spanning the areas of sociology and psychology is another interesting aspect that has arisen during my work with this thesis. I have throughout my work tried to be as open as possible to theories that could be of value for my own increased understanding of this particular area of research, and this has also brought with it a need for transgressing the personal level of analysis.

The literature surrounding the sociology of work and occupations offers a different level of analysis that given the focus on norms was deemed necessary for the completion of my analysis. I feel that future research within the field of translation should be open to expand the level of analysis to encompass the profession as well as the person. Despite my best intentions, I feel that this is an area where a lot of interesting results are still waiting to be found and where research could be valuable.

Potential projects

A number of potential research projects have occurred to me that could increase the knowledge of IT Governance, the role of the CIO, and the process of translation.

(1) - I suggest that the role of the CIO be studied by focusing on the aspects of identity and loyalty as well as on the relationship between the CIO and her colleagues. Such studies would be of particular interest at large organizations whose IT operations are large enough to employ a CIO. SME organizations are probably too small. This research may involve ideas from the sociology of work and professions and the theory of the Marginal Man and answers to the call of Strandgaard Pedersen and Dobbin (2006).

(2) - I also suggest more study related to the norm system for IT. Possible sources of inspiration are the following: Boxenbaum and Battilana's (2005) study of the importation of ideas as a source of innovation; Friedland and Alford's (2001) study of the use of dominant institutional logic and field

frames; and Lounsbury, Ventresca and Hirsch's (2002) study of mapping the causal relationships between dominating logics. The field frame in particular is deemed useful in the mapping of interrelationships of management ideas such as IT Governance and the underlying logics (and norms).

(3) - Furthermore, the results of Study 1 provide an interesting approach to further investigation of the supply side of IT Governance. Through looking not only at supply from one source (such as in Mazza & Alvarez, 2000; Carson et al, 2000), but through triangulating sources from different actors, new insights may be possible. These actors may include the three types as in Study I, but additional actors such as users, government and standard organizations could also prove to be of interest.

(4) - I recommend the study of the instrumental and symbolic aspects of management ideas (such as IT Governance). Possible sources of inspiration are the following: Zilber's (2006) study of the ritualistic adoption of management ideas; research following on Meyer and Rowan's (1977) work in Neo-Institutional Theory. Such research may help us understand how a CIO selects IT Governance norms instrumentally with motives not wholly related to the good of the organization and where the CIO's professional status is a factor.

Garfinkel (1967) suggests a methodology for this research[30]. Garfinkel initiated field-based experiments that are known as "breaching experiments". In such experiments, the researcher exposes subjects to norm-breaching actions in order to study their reactions. Examples of such experiments are Milgram's study of commuters and Goffman's study of littering. I have not found any examples in which the subjects of the experiments are managers.

(5) - Finally, I see a need for a purely profession-focused approach to the study of the changing role of the CIO. Such study should be directed to Abbott's (1988) prerequisites for system disorder or to the instigators of change in a professional system. There are several developments of interest in technology, management ideas, and frameworks as well as in corporate governance, accounting, and organization structure changes. In the context of today's economic realities, study of these developments may provide insights into the CIO role. In such studies, the researcher may compare, for example, the CIO's role to that of other senior executives.

---

[30] A careful consideration of the ethical issues involving such work in any given situation is highly recommended.

References

Abbott, A. (1988). *The system of professions: an essay on the division of expert labor*. The University of Chicago Press, Chicago

Abbott, A. (1993). "The sociology of work and occupations". *Annual review of sociology*, **19**: 187-209

Abbott, A. (1997). "Seven types of ambiguity". *Theory and society*, **26**(2/3): 357-391

Abrahamson, E. (1991). "Managerial fads and fashions: The diffusion and rejection of innovations". *Academy of Management Review*, **16** (3), 586-612

Abrahamson, E. (1996). "Management Fashion". *Academy of Management Review*, **21**:254-285

Accenture. (2006). *Executive summary of findings from the IT Governance maturity study.*

Agar, M. (1986). *Speaking of ethnography*. London: Sage

Agarwal, R. and Wambamurthy, Z. (2002). "Principles and models for organizing the IT function". *MIS Quarterly Executive*, **1**(1):1-16

Ahityv, N., Neumann, S. and Zviran, M. (1989). "Factors affecting the policy for distributing computing resources". *MIS Quarterly*, **13**(4):388-402

Ahuja, M.K., Chudoba, K.M., Kacmar, C.J., McKnight, D.H. and George, J.F. (2007). "IT Road warriors: balancing work-family conflict, job autonomy, and work overload to mitigate turnover intentions". *MIS Quarterly*, **31**(1):1-17

Aldrich, H.E. (1979). *Organizations and environments*. Upper Saddle River, NJ: Prentice Hall

Allio, R.J. (2003). "Russell J. Ackoff, iconoclastic management authority, advocates a 'systemic' approach to innovation". *Strategy and Leadership*, **31**(3):19-26

Alvesson, M., Ashcraft, K.L., and Thomas, R. (2008). "Identity Matters: Reflections on the construction of identity scholarship in organization studies". *Organization*, **15**(5):5-28

Alvesson, M. and Kärreman, D. (2007). "Constructing mystery: empirical matters in theory development". *Academy of Management Review,* **32**(4):1265-1281

Applegate, L.M. (1998). In search of a new organizational model: lessons from the field. In *Communication technology and organizational forms*. De Sanctis, G. and Fulk, J. Sage Publications: Berkeley, CA.

Arksey, H. and O'Malley, L. (2005). "Scoping studies: towards a methodological framework". *International journal of social research methodology*, **8**(1):19-32

Ashforth, B.E. and Gibbs, B.W. (1990). "The double-edge of organizational legitimization". *Organization science*, **1**(2), 177-194

Ask, U., Björnsson, H. , Johansson, M., Magnusson, J. and Nilsson, A. (2007). "IT Governance in the light of Paradox – A Social Systems Theory Perspective".

Hawaiian International Conference on Systems Science, Conference Proceedings, Hawaii, USA.

Austin, J.L. (1961). "A plea for excuses". In Austin, J.L. *Philosophical papers*, Clarendon: Suffolk, GB.

Austin, J.L. (1961). *Philosophical papers*, Clarendon: Suffolk, GB.

Austin, J.L. (1962). *How to do things with words*. Oxford University Press: Oxford

Avison, D., Cuthbertson, C. and Powell, P. (1999). "The status of the IS function". *Journal of strategic information systems*, **8**

Avison, D., Jones, J., Powell, P., and Wilson, D. (2004). "Using and validating the strategic alignment model". *Journal of strategic information systems*, **13**:223-246

Ax, C. and Bjørnenak, T. (2005). "Bundling and diffusion of management accounting innovations – the case of the balanced scorecard in Sweden". *Management Accounting Research*, **16** (1):1-20

Baas, L. Boons, F. (2000)."Inventing the intervention: how organizations deal with alternative approaches to eco-management". *Eco-Management and Auditing* **7**: 67-73

Baets, W. (1992). "Aligning information systems with business strategy". *Journal of strategic information systems*, **1**(4):205-214

Baily, M. (1986). "What has happened to productivity growth?". *Science*, **234**: 443-451

Bannister, F. and Remenyi, D. (2000). "Acts of faith: instinct, value and IT investment decisions". *Journal of information technology*, **15**:231-241

Bardhan, I., Bagchi, S. and Sougstad, R. (2004). "Prioritizing a portfolio of information technology investment projects". *Journal of Management Information systems*, Fall, **21**(2):33-60

Baronov, D. (2004). *Conceptual foundations of social research methods*. Paradigm Publishers: London

Baroudi, J.J. (1985). "The impact of role variables on information systems personnel work attitudes and intentions". *MIS Quarterly*, **9**(4):341-356

Barthes, R. (1998). *Criticism and truth*. London: Athlone

Bartol, K.M. and Martin, D.C. (1982). "Managing information systems personnel: a review of the literature and managerial implications". *MIS Quarterly* Special issue: 49-70

Barua, A. and Lee, B. (1997). "The IT productivity paradox revisited: a theoretical and empirical investigation in the manufacturing sector". *The international journal of flexible manufacturing systems*, **9**: 145-166

Barua, A., Konana, P. and Winston, A.B. (2004). "An empirical investigation of net-enabled business value". *MIS Quarterly*, **28**(4):585-620

Barua, A., Kriebel, C. and Mukhopadhayay, T. (1991)."Information technology and business value: an analytical and empirical investigation". *Working paper*, University of Texas, Austin

Benaroch, M., Jeffery, M., Kauffman, R.J. and Shah, S. (2007). "Option-based risk management: a field study of sequential information technology investment decisions". *Journal of Management Information Systems*, Fall, **24**(2):103-140

Benders, J. and Van Veen, K. (2001). "What's in fashion? Interpretative viability and management fashions". *Organization*, **8**(1):33-53

Benjamin, R.I., Dickison, C., Rockard, J.F. (1984). "Changing role of the corporate information systems officer". *CISR WP* #113, *Sloan WP* #1551-84

Benjamin, R.I., Rockart, J.F. and Scott Morton, M.S. (1984)." Information technology: a strategic opportunity". *Sloan management review,* **35**(3):3-14

Berg, B. (1998). *Qualitative research methods for the social sciences*. Boston, MA: Allyn and Bacon

Berger, P.L. and Luckman, T. (1967). *The social construction of reality.* New York: Doubleday Anchor

Bergeron, F., Raymond, L. and Rivard, S. (2004). "Ideal patterns of strategic alignment and business performance". *Information and Management,* **41**:1003-1020

Berry, A., Loughton, E., Otley, D.T. (1991). "Control in a financial services company (RIF): a case study". *Management Accounting Research*, **2**: 109–139

Bharadwaj, A.S. (2000). "A resource based perspective on information technology capability and firm performance: an empirical investigation". *MIS Quarterly*, **24**(1):169-196

Birnberg, J.G., Shields, M.D. and Young, S.M. (1990). "The case for multiple methods in empirical accounting research (with an illustration from budget setting)". *Journal of Management Accounting Research*, **2**:33-66

Bjørnenak, T. and Olson, O. (1999). "Unbundling management accounting innovations". *Management accounting research,* **10**(4):325-338

Bourguignon, A. Mallaret, V. and Norreklit, H. (2004). "The American balanced scorecard versus the French tableau de bord: the ideological dimension". *Management Accounting Research,* B(2):107-134

Boxenbaum, E. and Battillana, J. (2005). "Importation as innovation: transposing managerial practices across fields". *Strategic organization*, **3**(4): 355-383

Boyer, R. , Charron, E., Jürgens, U. and Tolliday, S. (1998). *Between imitation and innovation. The transfer and hybridization of productive models in the international automobile industry*. New York, Oxford University Press

Boynton, A.C., Jacogs, G.C., and Zmud, R.W. (1992)." I Whose responsibility is IT management?". *Sloan management review*, **33**(4): 32-39

Brancheau, J.C., Janz, B.D. and Wetherbe, J.C. (1996). "Key issues in information systems management: 1994-95 SIM Delphi results". *MIS Quarterly*, **20**(2):225-242

Briers, M. and Chua, W.F. (2001). "The role of actor-networks and boundary objects in management accounting change: a field study of an implementation of activity-based costing". *Accounting, Organizations and Society,* **26**:237-269

Brint, S. and Karabel, J. (1991). "Institutional origins and transformations: the case of American community colleges". In Powell, W.W. and DiMaggio, P.J. (Eds.). *The new institutionalism in organizational analysis*. The University of Chicago Press: Chicago and London

Broadbent, M, Weill, P. and St.Clair, D. (1999). "The implications of information technology infrastructure for business process redesign". *MIS Quarterly*, **23**(2):159-182

Broadbent, M. and Weill, P. (1993). "Improving business and information strategy alignment: learning from the banking industry". *IBM systems journal*, **32**(1): 162-179

Brown, A.E. and Grant, G.G., (2005). "Framing the frameworks: a review of IT governance research". *Communication of the Association for Information Systems*, **15**: 696-712

Brown, R.H. (1978). "Bureaucracy as Praxis: Toward a Political Phenomenology of Formal Organizations". Administrative Science Quarterly*, 23:365-382*

Brown, C.V. and Magill, S.L. (1994). "Alignment of the IS functions with the enterprise: towards a model of antecedents". *MIS Quarterly*, **18**(4):371-404

Brownell, P. (1995). *Research methods in management accounting*. Coopers and Lybrand and the accounting association of Australia and New Zeeland.

Bruns, Jr., W.J. and Kaplan, R.S. (1987). "Introduction: field studies in management accounting". In Bruns and Kaplan (eds.). *Accounting and management: field study perspectives*. Harvard University Press. Cambridge, MA.

Brynjolfson, E. and Hitt, L. (1996). "Paradox lost? Firm-level evidence on the returns to information systems spending". *Management science*, **42**(4):541-558

Brynjolfsson, E. and Hitt, L. (1995). "The productive keep producing". *Information week*, September 18.

Brynjolfsson, E. and McAfee, A. (2008). "Investing in the IT that makes a difference". *Harvard Business Review,* **86**(7/8):98-1107

Buck, T. and Shahrim, A. (2005). "The translation of corporate governance changes across national cultures: the case of Germany". *Journal of International Business Studies* **36**: 42–61

Buckley, W. (1967). *Sociology and modern systems theory*. Upper Saddle River, NJ: Prentice Hall

Burn, J.M. and Szeto, C. (2000). "A comparison of the views of business and IT management on success factors for strategic alignment". *Information and Management*, **37**:197-216

Byrd, T.A., Lewis, B.R. and Bryan, R.W. (2006). "The leveraging influence of strategic alignment on IT investment: an empirical examination". *Information and Management,* **43**:308-321

Callon, M. (1991). "Techno-economic networks and irreversibility". In Law. J. (ed) *A sociology of monsters: Essays on power, technology and domination*. London:Routledge

207

Callon, M.(1986). "Some elements of a sociology of translation: domestication of the scallops of St Brieuc Bay". In Law, J. (ed). *Power, action, and belief: a new sociology of knowledge?* London: Routledge

Cameron, K.S. and Quinn, R.E. (1988). "Organizational paradox and transformation". In Quinn, R.E. and Cameron, K.S. (Eds.) *Paradox and transformation: toward a theory of change in organization and management.* 12-18. Cambridge, MA: Ballinger

Camillus, J. and Lederer, A.L. (1985). "Corporate strategy and the design of computerized information systems". *Sloan management review* **26**(3):35-42

Carson, P.P., Lainer, P.A., Carson, K.D. and Guidry, B.N. (2000). "Clearing a path through the management fashion jungle: some preliminary trailblazing". *Academy of Management Journal,* **43**(6):1143-1158

Carr, N. (2003). "IT Doesn't matter". *Harvard Business Review,* **May**

Carr, N. (2008). *The big switch: rewiring the world, from Edison to Google*. New York: Norton and Co.

Cash, J.I. and Konsynski, B.R. (1985). "IS redraws competitive boundaries". *Harvard Business Review*, **81**(5):134-152

Chan, Y.E. Barclay, D.W. and Copeland, D.G. (1997). "Business strategic orientation, information systems strategic orientation and strategic alignment". *Information systems research,* **8**(2): 125-155

Chatfield, A, T. and Yetton, P. (2000). "Strategic payoff from EDI as a function of EDI embeddedness". *Journal of Management Information Systems*, Spring, **16**(4):195-224

Chen, A.N.K. and Edgington, T.M. (2005). "Assessing value in organizational knowledge creation: considerations for knowledge workers". *MIS Quarterly*, **29**(2):279-309

Chesebrough, P.H. and Davis, G.B. (1983). "Planning a career path in information systems". *Journal of systems management,* **34**(1):6-13

Chun, M. and Mooney, J. (2009). "CIO roles and responsibilities: Twenty-five years of evolution and change": *Information and Management,* **46**:323-334

CIO Sweden. (2009). *Statusrapport CIO Rollen 2009*. In Swedish. IDG Publishing

Clemens, E.S. and Cook, J.M. (1999). "Politics and institutionalism: explaining durability and change". *Annual review of Sociology*, **25**:441-466

Clemons, E. K. and Row, M. C. (1991). "Sustaining IT Advantage: the role of structural differences". *MIS Quarterly*, **15**(3):275-292

Collin, P.M. (2006). *Interorganizational dynamics for the manufacture of norms: the intriguing case of cybercrime.* Colloque 'Metamorphose des Organizations', Nancy, 23-24 November

Cragg, P., King, M. and Hussain, H. (2002). IT alignment and firm performance in small manufacturing firms. *Journal of strategic information systems*, **11**:109-133

Creed, W.E.D., Scully, M.A. and Austin, J.R. , (2002). "Clothes make the person? The tailoring of legitimating accounts and the social construction of identity". *Organization science,* 13**(**5):475-496

Cross, J., Earl, M.J. and Sampler, J.L. (1997). "Transformation of the IT function at British Petroleum". *MIS Quarterly,* **21**(4):401-424

Croteau, A-M. and Bergeron, F. (2001). "An information technology trilogy: business strategy, technological deployment and organizational performance". *Journal of strategic information systems,* **10**:77-99

Czarniawska, B. and Joerges, B. (1996). "Travel of ideas". In Czarniawska and Sevon (eds.) *Translating organizational change.* Walter de Gruyter, Berlin: New York

Czarniawska, B. and Sevon, G. (Eds.) (2005). *Global ideas: How ideas, objects and practices travel in the global economy.* Malmö: Liber and Copenhagen Business School Press.

Czarniawska, B. and Sevon, G. (Eds.). (1996). *Translating organizational change*. Walter de Gruyter, Berlin: New York

Czarniawska, B. (1995). *Narrating the organization. Dramas of institutional identity.* Chicago, The University of Chicago Press.

Czarniawska, B. (2005). "On Gorgon Sistes: Organizational Action in the face of paradox". In D. Seidl and K. H. Becker (eds*.). Niklas Luhmann and organization studies*, Liber and CBS, Malmö.

Daily, D.R., Dalton, D.R. and Cannella, A.A. (2003). "Corporate governance: decades of dialogue and data". *Academy of management review,* **28**(3):371-382

Davenport, T.H. (1998). "Putting the Enterprise into the Enterprise System". *Harvard Business Review,* **July-August**:121-131

Davern, M.J. and Kauffman, R.J. (2000). "Discovering potential and realizing value from information technology investments". *Journal of Management Information Systems,* Spring, **16**(4):121-143

Davis, K. (1949). *Human society.* New York: Macmillan

Day, G. (1994). "The capabilities of market-driven organizations". *Journal of marketing,* **58**(4):37-52

Dearden, J. (1965). "How to organize the IT function". *Harvard Business Review*, **May**.

Deephouse, D.L.. (1996). "Does isomorphism legitimate?". *Academy of management journal,* **39** (4):1024-1039

Denzin, N.K. and Lincoln, Y.S: (1994). *Handbook of qualitative research.* Thousand Oaks, CA: Sage

Denzin, N.K., (1978). *The Research Act. A Theoretical Introduction to Sociological Methods,* second ed. McGraw-Hill, New York.

Devaraj, S. and Kohli, R. (2000). "Information technology payoff in the health-care industry: a longitudinal study". *Journal of management information systems*, **16**(4): 41-67

Dickson, G.W., Leitheiser, R.L. Nechis, M. and Wetherbe, J.C. (1984). "Key information systems issues in the 1980s". *MIS Quarterly*, **8**(3):135-148

Diedrich, A. 2004. *Engineering Knowledge: How Engineers and Managers Practice Knowledge Management*. Göteborg: BAS.

DiMaggio, P.J. and Powell, W.W. (1983). "The iron cage revisted: institutional isomorphism and collective rationality in organizational fields". *American sociological review*, **48**: 147-160

Djelic, M-L. (2008). Sociological studies of diffusion is history relevant? *Uppsala Lectures in Business* 2007 – Lecture II.

Dooreward, H. and van Bijsterveld, M. (2001). "The Osmosis of Ideas: An Analysis of the Integrated Approach to IT Management from a translation theory perspective". *Organization*, **8** (1): 55-66

Durkehim, E. [1893] (1949). *Division of labor in society.* Glencoe, Il: Free Press

Earl, M.J. (1993). "Experiences in strategic information systems planning". *MIS Quarterly,* **17**(1):1-24

Ein-Dor, P. and Segev, E. (1978). "Organizational context and the success of management information systems". *Management science*, **24**(10):1064-1078

Ein-Dor, P. and Segev, E. (1992). "Organizational context and MIS Structure: some empirical evidence". *MIS Quarterly*, **6**(3):55-69

Eisenhardt, K.M. (1989). "Building theories from case study research". *Academy of management review*, **14**:532-550

Eisenhardt, K.M. (2000). "Paradox, spirals, ambivalence: the new language of change and pluralism". *Academy of Management Review*, **25**(4):703-705

Elsbach, K.D. and Sutton, R.I. (1992). "Acquiring organizational legitimacy through illegitimate actions: a marriage of institutional and impression management theories". *Academy of management Journal,* **35** (4), 699-738

Eriksson-Zetterquist, U. and Lindberg, K. (2002). "Organizational effects of e-business in companies". *GRI rapport*: **2002**:10. University of Gothenburg

Erlingsdóttir, G. and Lindberg, K. (2005). "Isomorphism, isopraxism, and isonymism: Complementary or competing processes". In Czarniawska, B. and Sevon, G. (eds.) *Global ideas: How ideas, objects and practices travel in the global economy.* Malmö: Liber and Copenhagen Business School Press.

Facio Maruca, R. (2000). "Are CIOs obsolete?". *Harvard Business Review,* **March-April.**

Fearon, C. and Philip, G. (1999). "Self assessment as a means of measuring strategic and operational benefits from EDI: the development of a conceptual framework". *European journal of information systems,* **7**:5-16

210

Feeny, D.F. and Willcocks, L.P. (1998). "Core IS capabilities for exploiting information technology". *Sloan Management Review,* **39**(3): 9-21

Ferraro, F., Pfeffer, J. and Sutton, R.I. (2005). "Economics language and assumptions: how theories can become self-fulfilling". *Academy of Management Review*, **30**(1), 8-24.

Fiedler, K., Grover, V. and Teng, J. (1996). "An empirically derived taxonomy of information technology structure and its relationship to organizational structure". *Journal of management information systems* **13**(1): 9-34

Fligstein, N. (1991). "The structural transformation of American industry: an institutional account of the causes of diversification in the largest firms, 1919-1979". in Powell, W.W. and DiMaggio, P.J. (Eds.). *The new institutionalism in organizational analysis.* The University of Chicago Press: Chicago and London

Foucault, M. (1972). *The Archaeology of Knowledge*. Tavostock: London.

Francalanci, C. and Galal, H. (1998). "Information technology and worker composition: determinants of productivity in the life insurance industry". *MIS Quarterly*, **June**: 227-241

Freidson, E. (1986). *Professional Powers: A Study of the Institutionalization of Formal Knowledge*. The University of Chicago Press, Chicago

Friedland, R. and Alford, R. R. (1991). "Bringing Society Back in: Symbols, Practices, and Institutional Contradictions", in W. Powell and P. J. DiMaggio (eds*) The New Institutionalism in Organizational Analysis*, pp. 232–63. Chicago, IL: The University of Chicago Press

Fujimura, J.H. (1992). "Crafting Science: standardized packages, boundary objects and translation". In Pickering, A. (Ed) 1992. *Science as practice and Culture.* Chicago: The University of Chicago Press

Galliers, R.D. (1991). "Strategic information systems planning: myths, reality and guidelines for successful implementation". *European journal of information systems,* **1**(1):55-64

Garfinkel, H. (1967). *Studies in ethnomethodology.* Englewood Cliffs, NJ: Prentice-Hall

Garrity, J.T. (1963). "Top management and computer profits". *Harvard Business Review*, **41**(4):6

Gerrard, M. (2006). "Defining IT Governance: The Gartner IT Governance demand/supply model". *Gartner Group*.

Giddens, A. 1979. *Central problems in social theory: Action, structure, and contradiction in social analysis.* Berkeley, CA: University of California Press

Goffman, E. (1971). *Relations in public: micro-studies of the public order.* Harmondsworth: Penguin

Goldberg, M.M. (1941). "A qualification of the marginal man theory". *American sociological review,* **6**(1):52-58

Golden, B.R., Dukerich, J.M. and Fabian, F.H. (2000). "The interpretation and resolution of resource allocation issues in professional organizations: a critical

examination of the professional-manager dichotomy". *Journal of Management studies*, **37**(8):1157-1187

Goldstein, D.K. and Rockart, J.F. (1984). "An examination of work-related correlates of job satisfaction in programmer/analysts". *MIS Quarterly*, **8**(2):103-115

Golovensky, D.I. (1952). "The marginal man concept: an analysis and critique". *Social forces*, **30**(3):333-339

Green, A.W. (1947). "A re-examination of the marginal man concept". *Social forces*, **26**(2):167-171

Greimas, A.J. (1987). *On meaning: selected writings in semiotic theory.* Minneapolis, University of Minnesota Press

Groff, R. (2004). *Critical realism, post-positivism and the possibility of knowledge.* Routledge Studies in Critical realism. Routledge.

Grover, V. Segars, A.H. (2005). "An empirical evaluation of states of strategic information systems planning: patterns of process design and effectiveness". *Information and Management,* **42**:761-779

Grover, V., Jeong, S-R., Kettinger, W.J. and Lee, C.C. (1993). "The Chief Information Officer: a study of managerial roles". *Journal of Management Information Systems,* 10**(**2):107-130

Gupta, Y.P. (1991). "The chief executive officer and the chief information officer: the strategic partnership". *Journal of Information technology*, **6**:128-139

Hacket, G. (1990). "Investments in technology – the service sector sinkhole". *Sloan management review*, **31**(2):97-103

Hacking, I. (1992). "The self-vindication of the laboratory sciences". In Pickering, A. (ed*). Science as practice and culture*. The University of Chicago Press, Chicago

Hacking, I. (1999). *The Social Construction of What?,* Cambridge, MA: Harvard University Press.

Halpern, S.A. (1992). "Dynamics of professional control: internal coalitions and cross-professional boundaries". *The American journal of sociology,* **97**(4): 994-1021

Hammersley, M. (1996). *The dilemma of qualitative method: Herbert Blumer and the Chicago tradition.*

Hannan, M.T. and Freeman, J.H. (1984). "Structural inertia and organizational change". *American sociological review,* **49**:149-164

Haug, M.R. (1977). "Computer technology and the obsolescence of the concept of profession". In *Work and Technology*. Haug and Dophny (Eds.) Beverly Hills, CA: Sage

Haunschild, P. (1993). "Interorganizational imitation: the impact of interlocks on corporate acquisition activity". *Administrative science quarterly*, **38**: 564-592

Haveman, H.A. (1993). "Follow the leader: mimetic isomorphism and the entry into new markets". *Administrative science quarterly*, **38**:593-627

Hawley, A. (1968). *Human ecology. In international encyclopedia of the social sciences*. Sills, D.L. (Ed) New York: Macmillan

Hedmo, T., Sahlin-Andersson, K. and Wedlin, L.. (2005). "Fields of imitation: the global expansion of management education". In Czarniawska, B. and Sevon, G. (eds.) *Global ideas: How ideas, objects and practices travel in the global economy*. Malmö: Liber and Copenhagen Business School Press.

Henderson, J. and Venkatramen, N. (1989). "Strategic alignment: a model for organizational transformation", in Kochan, T. and Unseem, M. (eds.) *Transforming organizations*, OUP, New York.

Henderson, J.C. and Venkatraman, N. (1993). "Strategic alignment: leveraging information technology for transforming organizations". *IBM Systems Journal*, **32**(1): 427-485

Hilbert, R.A. (1992). *The classical roots of ethnomethodology.* University of North Carolina Press

Holm Pedersen, L. (2007). "Ideas are transformed as they transfer: a comparative study of eco-taxation in Scandinavia". *Journal of European Public Policy,* **14**(1):59-77

Huberman, A.M. and Miles, M.B. (1994). "Data management and analysis methods". In Denzin and Lincoln (eds.) *Handbook of qualitative research*. Thousand Oaks, CA: Sage

Hughes, E.C. (1939). Institutions. In Park, R.E. (ed). *An outline of the principles of sociology.* New york: Barnes and Noble

Hussin, H., King, M. and Cragg, P. (2002). "IT alignment in small firms". *European journal of information systems,* **11**:108-127

Hwang, H. and Suarez, D. (2005). "Lost and found in the translation of strategic plans and websites". In Czarniawska and Sevon (eds). *Global ideas: how ideas, objects and practices travel in the global economy*. Liber and Copenhagen Business School Press. Malmö

IDG. (2009-07-05). *Identitetskris för CIOer?* In Swedish.

Irani, Z. and Love, P.E.D. (2001). "The propagation of technology management taxonomies for Evaluating investments in information systems". *Journal of Management Information Systems*, Winter, **17**(3):161-177

Jarvenpaa, S.L and Ives, B. (1994). "The global network organization of the future: information management opportunities and challenges"*. Journal of management information systems,* **10**(4): 25-57

Jarvenpaa, S.L. and Leidner, D.E. (1998). "An information company in Mexico: extending the resource based view of the firm to the developing country context". *Information systems research*, **9**(4): 342-361

Jayatilaka, B., Schwarz, A. and Hirschheim, R. (2003). "Determinants of ASP choice: an integrated perspective". *European journal of information systems,* **12**:210.224

Jeffrey, M. and Leliveld, I. (2004). "Best practices in IT portfolio management". *MIT Sloan Management Review,* **45**(3):41-49

Jelinek, M. (1977). "Technology, organizations and contingency". *Academy of management review*, **2**(1):17-27

213

Jeperson, R.L. (1991). "Institutions, institutional effects, and institutionalism". Powell, W.W. and DiMaggio, P.J. (Eds.). *The new institutionalism in organizational analysis.* The University of Chicago Press: Chicago and London

Jiang, J.J. and Klein, G. (2000). "Effects of downsizing policies on IS survivors' attitude and career management". *Information and Management,* **38:**35-45

Jick, T.D. (1979). "Mixing qualitative and quantitative methods: triangulation in action". *Administrative science quarterly,* **24**:602-611

Johnson, B. and Hagström, B. (2005). "The translation perspective as an alternative to the policy diffusion paradigm: the case of the Swedish methadone maintenance treatment". *Journal of Sociology and Policy,* **34**(3):365-388

Jones, B.F. (2009). "The burden of knowledge and the 'Death of the Renaissance Man': Is innovation getting harder?" *Review of Economic Studies*, **76**(1):283-317

Kaplan, R.S. (1986). "The role of empirical research in management accounting". *Accounting, organizations and society,* **11**: 429-452

Kapuscinski, R. (1989). *The Emperor: downfall of an autocrat.* USA: Vintage International

Karahanna, E., Agarwal, R. and Angst, C.M. (2006). "Reconceptualizing compatability beliefs in technology acceptance research". *MIS Quarterly,* **30**(4):781-804

Karimi, J., Bhattacherjee, A., Gupta, Y.P. and Somers, T.M. (2000). "The effects of MIS Steering committees on information technology management sophistication". *Journal of Management Information Systems*, Fall, **17**(2):207-230

Kayworth, T. and Sambamurthy, V. (2000). "Managing the information technology infrastructure". *Baylor Business Review,* **18**(1):13-15

Kearns, C.G. and Lederer, A.L. (2000). "The effect of strategic alignment on the use of IS-based resources for competitive advantage". *Journal of strategic information systems*, **9**:265-293

Kerkhoff, A., C. and McKormick, T.C. (1955). "Marginal status and marginal personality". *Social forces*, **34**(1):48-55

Kieser, A. (1997). "Rhetoric and myth in management fashion". *Organization* **4**(1):49-76

Kirk, J. and Miller, M. (1986). *Reliability and validity in qualitative research.* London: Sage

Klein, K.J., Tosi, H., and Canella Jr, A.A. (1999). "Introduction to Special Topic Forum: Multilevel Theory Building: Benefits, Barriers and New Developments." *The Academy of Management Review,* **24**(2):243-248

Knorr-Cetina, K. (1992). "The couch, the cathedral, and the laboratory: on the relationship between experiment and laboratory of science". In Pickering, A. (ed). 1992*. Science as practice and culture*. The University of Chicago Press: Chicago

Kumar, R.L. (2004). "A framework for assessing the business value of information technology infrastructures". *Journal of management information systems,* **21**(2):11-32

Lacity, M.C. and Willcocks, L.P. (1998). "An empirical investigation of information technology sourcing practices: lessons from experience". *MIS Quarterly, September*:363-408

Latour, B. (1986). *Science in action.* Stanford University Press: Stanford, CA

Lederer, A.L. and Sethi, V. (1988). "The implementation of strategic information systems planning methodologies". *MIS Quarterly,* **September**: 445-461

Lederer, A.L. and Mendelow, A.L. (1989). "Convincing top management of the strategic potential of information systems". *MIS Quarterly,* **12**: 525-534

Lee, J. and Bose, U. (2002). "Operational linkage between diverse dimensions of Information technology investments and multifaceted aspects of a firm's economic performance". *Journal of Information technology*, **17**:119-131

Lee, J.C. and Myers, M.D. (2004). "Dominant actors, political agendas, and strategic shifts over time: a critical ethnography of an enterprise systems implementation". *Journal of strategic information systems*, **13**:355-374

Lervik, J.E., Hennestad, B.W., Amdam, R.P., Lunnan, R. and Nilsen, S.M. (2005). "Implementing Human Resource Development Best Practices: Replication or Re-creation?". *Human resource development international*, **8**(3): 345-360

Levy, M., Powell, P. and Yetton, P. (2001). "SMEs: aligning IS and the strategic context". *Journal of information technology,* **16**:133-144

Lewis, B.R., Snyder, C.A. and Rainer Jr, R.K. (1995). "An empirical assessment of the information resource management construct". *Journal of management information systems,* **12**(1):199-223

Lewis, M. W. (2000). "Exploring paradox: toward a more comprehensive guide". *Academy of Management Review*, **25**(4):760-776

Lillis, A.M. and Mundy, J. (2005). "Cross-sectional field studies in management accounting research – closing the gaps between surveys and case studies". *Journal of management accounting research,* **17**:119-141

Lin, C. and Pervan, G. (2003). "The practice of IS/IT benefits management in large Australian organizations". *Information and Management,* **41**:13-24

Lindsay, R.M. (1995). "Reconsidering the status of tests of significance: an alternative criterion of adequacy". *Accounting, Organizations and society,* **20**: 35-53

Lopes, A.B. and Galetta, D. (1997). "Resource based theory and a structural perspective of strategy applied to the provision of internet services". In *Proceedings of the thrird Americas conference on information systems*, Indianapolis, IN.

Lounsbury, M., Ventresca, M. and Hirsch, P. M. (2003). "Social Movements, Field Frames and Industry Emergence: A Cultural-Political Perspective on US Recycling". *Socio-Economic Review* **1**: 71–104

Luftman, J.N. (1996). "Applying the strategic alignment model". In *Competing in the information age* (liftman, J.N. ed) OUP, New York.

Luhmann, N. (1983). "Insistence on Systems Theory: Perspectives from Germany – an Essay". *Social Forces*, **61**(4), 987-998

215

Luhmann, N. (1995). *Social Systems.* Stanford University Press, Stanford, CA.

Lukka, K. and Granlund, M. (2002). "The fragmented communication structure within the accounting academia: the case of activity based costing". *Accounting, Organizations and Society*, **1**: 165-190

Magnusson, J., Ask, U. and Björnsson, H. (2006). "Paradox and Deparadoxization: Studying IT Governance through Luhmann's theory of social systems". *Information Systems Research in Scandinavia Conference Proceedings*

Magnusson, J. and Nilsson, A. (2006). "Interorganizational collaboration among SMEs". (Licentiate Thesis). *Papers in Informatics*, Göteborg University

Magnusson, J. and Nilsson, A. (2006). "Infusing an Architectural Framework with Neo-institutional Theory: Reports from recent change management initiatives within the Swedish Public Administration". *Hawaii International Conference on Systems Science Conference Proceedings*

Magnusson, J. and Oskarsson, B. (2008). "Evasive maneuvers and guerilla tactics: a Scandinavian institutional perspective on Chief Information Officer's strategies for legitimization". *Hawaiian International Conference on Systems Science Conference Proceedings*

Main, T.J. and Short, J.E. (1989). "Managing the merger: building partnership through IT Planning at the next Baxter". *MIS Quarterly*, **13**(4):469-484

Malhotra, A., Gosain, S. and El Sawy, O.A. (2005). "Absorptive capacity configurations in supply chains: gearing for partner-enabled market knowledge creation". *MIS Quarterly,* **29**(1):145-187

March, J.G. (1999). "A learning perspective on the network dynamics of institutional integration". In Egeberg and Laegreid (eds.) *Organizing political institutions.* Oslo: Scandinavian University Press

Marx, K. [1844] (1972). "Economic and philosophic manuscripts of 1844: selections". In Tucker, R.J. (ed) *The Marx-Engels Reader*, New York: Norton

Mazza, C. and Alvarez, J.L. (2000). "Haute Couture and Prêt-à-Porter: The popular press and the diffusion of management practices". *Organization studies,* **21**(3):567-588

McFarlan, F.W. (1984). "Information technology changes the way you compete". *Harvard Business Review*, **62**(3):98-104

Meyer, J.W. and Scott, W.R. (1983). *Organizational environments: Ritual and Rationality.* Beverly Hills, CA:Sage

Meyer, J.W., and Rowan, B. (1977). "Institutionalized organizations: formal structure as myth and ceremony". *American sociological review,* **83**, 340-363

Miller, G. and Dingwall, R. (eds.) (1997). *Context and method in qualitative research.* GB. Sage publications

Miller, G., and Holstein, J.A. (1995). "Dispute domains: institutional contexts and dispute processing". *Sociological quarterly*, **36**:37-59

Min, S.K., Suh, E.H and Kim, S.Y. (1999). "An integrated approach toward strategic information systems planning". *Journal of Strategic Information Systems*, **8**:373-394

216

Miner, A.S. and Haunschild, P.R. (1995). "Population level learning". In *Research in organizational behaviour*, **17**:115-166. Baum J.A.C. and Singh, J.V. New York: Oxford University Press

Mintzberg, H. (1971). "Managerial work: analysis from observation". *Management Science*, **18**(2): B97-B110

Mitchell, W. J. T. (1986). *Iconology, image, text, ideology*. Chicago. The University of Chicago Press.

Mitra, S. (2005). "Information technology as an enabler of growth in firms: an empirical assessment". *Journal of management information systems*, **22**(2):279-300

Mizruchi, M.S. and Fein,L.C. (1999). "The social construction of organizational knowledge: a study of the uses of coercive, mimetic, and normative isomorphism". *Administrative science quarterly*, **44**:653-683

Modell, S. (2005). "Triangulation between case study and survey methods in management accounting research: an assessment of validity implications". *Management accounting research,* **16**: 231-254

Modell, S. (2009). "Bundling management control innovations". *Accounting, Auditing and Accountability Journal*, **22**(1):59-90

Mukherjee, K. (2001). "Productivity growth in large US commercial banks: the initial post-regulation experience". *Journal of banking and finance,* **25**(5):913

Neirotti, P. and Paolucci, E. (2007). Assessing the strategic value of information technology: an analysis on the insurance sector. *Information and Management,* **44**:568-582

Newkirk, H.E. and Lederer, A.L. (2006). "The effectiveness of strategic information systems planning under environmental uncertainty". *Information and Management,* **43**:481-501

Newkirk, H.E., Lederer, A.L. and Srinivasan, C. (2003). "Strategic information systems planning: too little or too much". *Journal of strategic information systems,* **12**:201-228

O'Connor, N.G. and Martinsons, M.G. (2006). "Management of information systems: insights from accounting research". *Information and Management,* **43**: 1014-1024

Oliver, C. (1991). "Strategic responses to institutional processes". Academy of management review, **15**(1):145-179

Oliver, C. (1992). "The antecedents of deinstitutionalization". *Organization studies,* **13**(4):563-588

Olson, M.H. and Chervany, N.L. (1980). "The relationship between organizational change characteristics and the structures and the information service function". *MIS Quarterly,* **4**(2):57-68

Online, Encyclopedia Brittanica. (2009). S.v. "Janus"

Online. Merriam Webster. (2009). S.v. "Universe of Discourse"

217

Orlikowski, W.J. and Baroudi, J.J. (1988). "The information systems profession: myth or reality?". *Working paper series CRIS* #180/GBA #88-32, Center for Research in Information Systems, New York University.

Ortmann, G. (1995). *Formen der Produktion; Organisation und Rekursivität.* Opladen: Westdeutscher Verlag.

Örtenblad, A. (2008). *Making sense of vague management ideas.* Doctoral dissertation, Halmstad University Sweden.

Osterman, P. (1986). "The impact of computers on the employment of clerks and managers". *Industrial and labor relations review* **39**:175-186

Palmer, J.W. and Markus, M.L. (2000). "The performance of quick response and strategic alignment in specialty retailing". *Information systems research,* **11**(3): 241-259

Panko, R.R. (1991). "Is office productivity stagnant?". *MIS Quarterly,* **15**(2): 191-204

Papp, R. (2001). *Strategic information technology: opportunities for competitive advantage.* IDEA publishing group

Park, R.E. (ed). (1939). *An outline of the principles of sociology.* New York: Barnes and Noble

Park, R.E. (1928). "Human migration and the marginal man". *The American journal of sociology,* **33**(6):881-893

Parsons, T. (1937). *The structure of social action.* New York: McGraw-Hill

Parsons, T. (1956). "Suggestions for a sociological approach to the theory of organizations". *Administrative Science Quarterly* **1**:63-85

Peacock, E. and Tarriru, M. (2005). "Activity-based justification of IT investments". *Information and Management*, **42**:415-424

Peppard, J. and Ward, J. (1999). "Mind the gap: diagnosing the relationship between the IT organization and the rest of the business". *Journal of Strategic Information Systems,* **8**:29-60

Peppard, J. and Ward, J. (2004). "Beyond strategic information systems: towards IS capability". *Journal of strategic information systems*, **13**:167-194

Peppard, J. (1999). "Information management in the global enterprise: an organizing framework". *European journal of information systems*, **8**:77-94

Pfeffer, J. (1981), *Power in organizations.* Marshfield, MA: Pitman

Piccoli, G. and Ives, B. (2005). "IT dependent strategic initiatives and sustained competitive advantage: a review and synthesis of the literature". *MIS Quarterly,* **29**(4):747-776

Pickering, A. (ed) (1992). *Science as practice and culture.* The University of Chicago Press: Chicago

Pinsonneault, A. and Rivard, S. (1998). "Information technology and the nature of managerial work: from the productivity paradox to the Icaros paradox?" *MIS Quarterly*, **22**:287-307

Poole, M. S. and Van de Ven, A.H. (1989). "Using Paradox to build management and organization theories". *Academy of Management Review*, **14**(4):562-578

Porter, M. (1985). *Competitive advantage.* Free Press, NY

Porter, M.E. (1996). "What is strategy?" *Harvard Business Review,* **Nov-Dec**:61-78

Potter, J. and Wetherell, M. (1987). *Discourse and Social psychology.* SAGE publications: London.

Powell, T.C. and Dent-Micallef, A. (1997). "Information technology as competitive advantage: the role of human business and Technology resources". *Strategic management journal,* **18**(5):375-405

Powell, W. W., Gammal, D.L. and Simard, C. (2005). "Close encounters: the circulation and reception of managerial practices in the San Francisco Bay area nonprofit community". In Czarniawska, B. and Sevon, G. (eds.). *Global ideas: How ideas, objects and practices travel in the global economy.* Malmö: Liber and Copenhagen Business School Press.

Powell, W.W. and DiMaggio, P.J. (Eds.). (1991). *The new institutionalism in organizational analysis.* The University of Chicago Press: Chicago and London

Prahalad, C.K. and Bettis, R.A. (1986). "The dominant logic: a new linkage between diversity and performance", *Strategic Management Journal,* **7**, 485-501

Prahalad, C.K. and Krishnan, M.S. (2002). "The dynamic synchronization of strategy and information technology". *MIT Sloan Management Review*, **43**(4):24-33

Propp, V. (1968). *Morphology of the Folktale.* Bloomington, IN: American Folklore Society and Indiana University Press

Quan, J.J., Hu, Q. and Hart, P.J. (2004). "Information technology investment and firms' performance: a duopoly perspective". *Journal of management information systems*, **20**(3):121-158

Quist, J. (2003). *Att översätta TQM: - en longitudinell studie kring reflekterande aktörer* (In Swedish). Doctoral dissertation, University of Karlstad.

Raelin, J.A. (1989). "Unionization and deprofessionalization: which comes first?". *Journal of organizational behavior*, **10**(2): 101-115

Ragin, C.C. (1987). *The comparative method: moving beyond qualitative and quantitative strategies.* Berkeley University Press: Berkeley. CA

Raynor, N. (2008). "Technology issues for the CFO, and how IT can help". *Gartner Group*

Reich, B.H. and Benbasat, I. (2000). "Factors that influence the social dimensions of alignment between business and IT objectives", *MIS Quarterly,* **24**(1): 81-113

Richardson, A.J. (1985). "Symbolic and substantive legitimization in professional practice". *Canadian journal of sociology*, **10**:139-152

Roach, S.S. (1991). "Services under siege: the restructuring imperative". *Harvard Business Review,* **Sep-Oct**:82-92

Rockart, J.F., Ball, L. and Bullen, C.V. (1982). "Future role of the information systems executive". *CISR WP # 101, Sloan WP #1431-83*

219

Rockart, J.F., Earl, M.J. and Ross, J.W. (1996). "Eight imperatives for the new IT organization". *Sloan management review,* **38**(1):43-56

Rogberg, M. (2006). *Den modeföljande organisationen* (in Swedish). Doctoral dissertation, Stockholm School of Economics.

Rogers, E.M. (2005). *Diffusion of innovations*. New York: Free Press

Rorty, R. (1991). *Objectivity, Relativism and Truth: Philosophical papers, 1.* Cambridge: University Press

Rosenau, P.M. (1992). *Post-modernism and the social sciences.* Princeton University Press: Princeton, NJ

Ross, A.(1968). *Directives and norms.* Routledge and Kegan Paul, London

Ross, J., Beath, C. and Goodhue, D. (1996). "Develop long-term competitiveness through IT assets". *Sloan management review* 31-42

Ross, J.W. and Vitale, M.R. and Beath, C.M. (1999). "The untapped potential of IT chargeback". *MIS Quarterly,* **23**(2):215-237

Ross, J.W. and Weill, M. (2005). "A matrixed approach to designing IT Governance". *MIT Sloan Management review*, **46**(2):49-60

Ross, J.W. and Weill, P. (2002). "Six IT devisions your IT people shouldn't make". *Harvard Business Review,* **80**(11):84-92

Ross, J.W., Beath, C.M., Goodhue, D.L. (1996). "Developing long term competitiveness through IT assets". *Sloan management review,* **38**(1):31-42

Rothman, R.A. (1984). "Deprofessionalization: The case of law in America". *Work and occupations.* **11**:183-206

Rottenburg, R. (1996). "When organization travels: on intervultural translation". In Czarniawska and Sevon (eds.) *Translating organizational change.* Walter de Gruyter, Berlin: New York

Røvik, K-A. (2005). *Moderna organisationer* (in Swedish). Liber.

Ryan, B., Scapens, R.W., Theobald, M., (2002). *Research Method and Methodology in Finance and Accounting*, second ed.Thomson, Padstow.

Ryan, S.D. and Harrison, D.A. (2002). "Considering social subsystem costs and benefits in information technology investment decisions: a view from the field of anticipated payoffs". *Journal of Management Information Systems*, Spring, **16**(4):11-40

Røvik, K.A. (1996). "Deinstitutionalization and the logic of fashion". In Czarniawska and Sevon (eds.) *Translating organizational change*. Walter de Gruyter, Berlin: New York

Sabherwal, R. and Chan, Y. (2001). "Alignment between business and IS strategies". *Information systems research* **12** (1):11-33

Sahlin-Andersson, K. (1996). "Imitating by editing success: the Construction of organizational fields". In Czarniawska and Sevon (eds.) *Translating organizational change*. Walter de Gruyter, Berlin: New York

Sambamurthy, V. and Zmud, R. W. (1999). "Arrangements for information technology governance. A theory of multiple contingencies", *MIS Quarterly* **23**(2):261-290

Sambamurthy, V. and Zmud, R.W. (2000). "Research commentary: the organizing logic for an enterprises IT activities in the digital era – a prognosis of practice and a call for research". *Information systems research* **11**(2):105-114

Sambamurthy, V., Bharadwaj, A. and Grover, V. (2003). "Shaping agility through digital options: reconceptualizing the role of information technology in contemporary firms". *MIS Quarterly,* **27**(2):237-263

Samuel, S., Dirsmith, M.W. and McElroy, B. (2004). "Monetized medicine: from the physical to the fiscal". *Accounting, Organizations and Society*, **30**(3):249-278

Sandelowski, M. and Barroso, Julie. (2006). *Handbook for synthesizing research.* Springer Publishing

Santhanam, R. and Hartono, E. (2003). "Issues in linking information technology capability to firm performance". *MIS Quarterly*, **27**(1):125-153

Sarup, M. (1993). *An introductory guide to post-structuralism and postmodernism* (2ed). Harvester, Wheatsheaf: New York

Schein, E.H. (1967). "Attitude change during management education: a study of organizational influences on student attitudes". *Administrative Science Quarterly,* **11**: 601-628

Scheurich, J.J. (1997). *Research method in the postmodern.* GB. The Falmer Press

Schönbach, P.A. (1980). "A category system for account phases". *European journal of social psychology*, **29**:1-15

Schwartz, A. and HIrschheim, R. (2003). "An extended platform logic perspective of IT governance: managing perceptions and activities of IT". *Journal of strategic information systems* **12**:129-166

Scott, M.B. and Lyman, S.M. (1968). "Accounts". *American Sociological review,* **13**: 46-62

Scott, W.R. (1987). "The adolescence of institutional theory". *Academy of management review,* **32**:493-511

Scott, W.R. (2001). *Institutions and organizations.* Sage Publication: USA

Scott, W.R. (2003). *Organizations: rational, natural, and open systems*. London, UK: Prentice-Hall

Seidl, D. and Becker, K.H. (eds.). (2005). *Niklas Luhmann and organization studies*, Liber and CBS, Malmö.

Selznick, P. (1957). *Leadership in administration.* New York: Harper Row

Semin, G.R. and Manstead, A.S.R. (1983). *The accountability of conduct: a socio-psychological analysis*, London: Academic Press

Serres, M. (1982). *Hermes: Litterature, science, philosophy.* Baltimore, MD: John Hopkins University press

221

Sethi, V. and King, W.R. (1994). "Development of measures to assess the extent to which an information technology appliocation provides competitive advantage". *Management science*, **40**(12):1601-1628

Sevon, G. (1996). "Organizational imitation in identity transformation". In Czarniawska and Sevon (eds.) *Translating organizational change.* Walter de Gruyter, Berlin: New York

Shin, N. (2001). "The impact of information technology on financial performance: the importance of strategic choice". *European Journal of Information Systems*, **10**:227-236

Silverman, D. (2005). *Doing qualitative research : a practical handbook.* Oxford, Radcliffe.

Simon, H. A. (1962). "The Architecture of Complexity". *Proceedings of the American Philosophical Society* **106**(6): 467-482.

Simon, H.A. [1945] (1997). *Administrative behavior: a study of decision-making processes in administrative organization*. 4th ed. New York: Free Press

Sircar, S., Turnbow, J.L. and Bordoloi, B. (2000). "A framework for assessing the relationship between information technology investments and firm performance". *Journal of management information systems,* **16**(4):69-97

Slaughter, S.A. Levine, L. Ramesh, B. Pries-Heie, J. (2006). "Aligning software processes with strategy". *MIS Quarterly*, **30**(4): 891-918

Smaczny, T. (2001). "IS and alignment between business and IT the appropriate paradigm to manage iT in today's organization?". *Management decision,* **39**(10):797-802

Smith, M., Gomoslki, B., Roberts, J.P. and de Souza, R. (2008). "IT spending and staffing report 2008". *Gartner Group*

Sohal, A.S. and Fitzpatrick, P. (2002). "IT Governance and management in large Australian organizations". *International Journal of Production Economics*, **75**(1-2):97

Sohal, A.S. and Ng, L. (1998). "The role and impact of information technology in Australian business". *Journal of Information Technology,* **13**:201-217

Staples, D.S., Wong, I. and Seddon, P.B. (2002). "Having expectations of information systems benefits that match received benefits: does it really matter?". *Information and Management*, **40**:115-131

Star, S.L. and Griesemer, J.R: (1989). "Institutional ecology, 'Translations' and boundary objects: amateurs and professionals in Berkeley's Museum of Vertebrate Zoology". 1907-39. *Social Studies of Science,* **19**:387-420

Stinchcombe, A.L. (1968). *Constructing social theories,* Chicago: The University of Chicago Press

Stonequist, E.V. (1935). "The problem of the marginal man". *The American journal of Sociology*, **41**(1):1-12

Stonequist, E.V. (1937). *The marginal man.* Charles Scribner's Sons, New York

Strandgaard Pedersen, J. and Dobbin, F. (2006). "In Search of Identity and Legitimization: Bridging Organizational Culture and Neoinstitutionalism". *American Behavioral Scientist*; **49**; 897-907

Sturdy, A. (2004). "The adoption of management ideas and practices: theoretical perspectives and possibilities". *Management learning,* **35**(2):155-179

Sturdy, A., Brockelhurst, M., Winstanley, D. and Littlejohns, M. (2006). "Management as a (self) confidence trick: management ideas, education and identity work". *Organization*, **13**(6):841-860

Subramani, M. (2004). "How do suppliers benefit from information technology use in supply chain relationships?". *MIS Quarterly*, **28**(1):45-73

Suchman, M.C. (1995). "Managing legitimacy: strategies and institutional approaches". *Academy of management review*, **20**(3):571-610

Sumner, W.G. (1906). *Folkways.* Boston: Ginn and Co

Sundaramurthy, C. and Lewis, M. (2003). "Control and collaboration: paradoxes of governance". *Academy of management review*, **28**(3):397-415

Susarala, A. Barua, A. and Whinston, A.B. (2003). "Understanding the service component of application service provision: an empirical analysis of satisfaction with ASP services". *MIS Quarterly,* **27**(1):91-123

Symons, C. (2006). "Topic overview: IT Governance". *Forrester research.*

Tallon, P. and Kraemer, K. (2003). *Investigating the relationship between strategic alignment and business value*, IDEA publications, Heshy, PA.

Tallon, P.P., Kraemer, K.L. and Gurbaxani, V. (2000). "Executives' perceptions of the business value of information technology: a process-oriented approach". *Journal of management information systems,* **16**(4):145-173

Tarde, G. (1979). *The laws of imitation.* Gloucester, MA: P.Smith

Taudes, A., Feurstein, M. and Mild, A. (2000). "Options analysis of software platform decisions: a case study". *MIS Quarterly*, **24**(2):227-243

Tavakolian, H. (1989). "Linking the information technology structure with the organizational competitive strategy: a survey". *MIS Quarterly,* **13**(3):308-318

Thatcher, M.E. and Oliver, J.R. (2001). "The impact of technology investments on a firms production efficiency, product quality, and productivity". *Journal of management information systems*, **18**(2):17-45

Thomas, G.M. (1989). *Revivalism and cultural change: Christianity, nation building, and the market in the nineteenth century united states.* Chicago: The University of Chicago Press

Tillquist, J., King, J.L. and Woo, C. (2002). "A representational scheme for analyzing information technology and organizational dependency". *MIS Quarterly*, **26**(2):91-118

Tinker, T. (1991). "The accountant as partisan". *Accounting, Organizations and Society,* **16** (3):297-310

Tolbert, P.S. and Zucker, L.G. (1983). "Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform". 1880-1935. *Administrative science quarterly,* **28**:22-39

Trägårdh, B. and Lindberg, K. (2004). "Curing a meager health care system by lean methods – translating 'chains of care' in the Swedish health care sector". *International journal of health planning and management,* **19**:383-398

Tucker R.J. (ed). (1972. *The Marx-Engels Reader,* New York: Norton

Van der Zee, J.T.M. and De Jong, B. (1999). "Alignment is not enough: integrating business and information technology management with the balanced business scorecard". *Journal of management information systems,* **16**(2):137-156

Van Grembergen, W. (2002). "Introduction to the minitrack: IT Governance and its mechanisms". In *Proceedings of the 35th Hawaiian International Conference on System Sciences.*

Van Grembergen, W. and De Haes, S. (2009). *Enterprise Governance of Information Technology.* Springer, USA.

Van Grembergen, W., Saull, R. and De Haes, S. (1999). "Linking the IT balanced scorecard to the business objectives at a major Canadian financial group". *Journal of Information Technology Cases and Application.*

Venkatraman, N. (1997). "Beyond outsourcing: managing IT resources as a value center". *Sloan management review*, **38**(3):51-64

Von Wright, G.H. (1954). *Norm and action: a logical enquiry.* Routledge and Kegan Paul, London

Wade, M. and Hulland, J. (2004). "The resource based view and information systems research: review, extension and suggestions for future research". *MIS Quarterly,* **23**(1):107-142

Wardwell, W.I. (1952). "A marginal professional role: the chiropractor". *Social forces*, **30**(3):339-348

Warren, R.L. (1967). "The Interorganizational field as a focus for investigation". *Administrative Science Quarterly*, **12**:396-419

Washington, M. and Ventrasca, M.J. (2004). "How organizations change: the role of institutional support mechanisms in the incorporation of higher education visibility strategies, 1874-1995". *Organization science*, **15** (1):82-97

Watson, R.T., Kelly, G.G., Galliers, R.D. and Brancheau, J.C. (1997). "Key issues in information systems management: an international perspective". *Journal of management information systems,* **13**(4):91-115

Watts, R. and Zimmermann, J. (1978). "Towards a positive theory of the determination of accounting standards". *The accounting review, 53*:112-134

Weber, M. [1924] (1968). *Economy and society: an interpretative sociology.* New York: Bedminster Press

Weill, P. and Aral, S. (2006). Generating premium returns on your IT investments. *MIT Sloan Management Review, 47*(2)

Weill, P. and Broadbent, M. (1998). *Leveraging the new infrastructure.* Harvard Business School Press.

Weill, P. and Ross, J.W. (2004*). IT Governance: How top performers manage IT decision rights for superior results*. Watertown, MA. Harvard Business School Press

Weill, P. (1992). "The relationship between investment and information technology and firm performance: a study of the valve manufacturing sector". *Information systems research*, **3**(4):307-333

Weill, P. (2004). "Don't just lead, Govern: How top performing firms govern IT". *MIS Quarterly Executive,* **3**(1):1-17

Westney, D.E. (1987*). Imitation and innovation: the transfer of western organizational patterns to Meiji Japan*. Cambridge, MA: Harvard University Press

Wood, L.A. and Kroger, R.O. (2000). *Doing discourse analysis.* Sage Publications: London

Wright, R.D. and Wright, S.N. (1972). "A plea for further refinement of the marginal man theory". *Phylon,* **33**(4): 361-368

Young, O.R. (1986). "International regimes: toward a new theory of institutions". *World politics* **39**:104-22

Zammit, J.H. (2004). *A nice derangement of epistemes: post-positivism in the study of science from Quine to Latour.* The University of Chicago Press, London

Zilber ,T.B. (2006). "The work of the symbolic in institutional processes: translations of rational myths in Israeli high tech". *Academy of management Journal,* **49**(2):281-303

Zimmerman, D.H. Wieder, D.L. (1970). *Ethnomethodology and the problem of order. In Understanding everyday life,* 287-95. Walton, R.E. and Lawrence, P.R. (Eds.). Boston: Harvard Business School Press

Zittrain, J. (2007). "Saving the internet". *Harvard Business Review*, **85**(6):49-59

Zucker, L.G. (1987). "Institutional theories of organization". In W.R. Scott and J.F. Short, Jr. (Eds) *Annual review of sociology*, Vol 13, 443-463, Palo Alto, CA: Annual reviews