Developing an understanding of IT governance and its relationship with corporate governance.

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A thesis submitted in fulfilment of the requirements of the degree of Doctor of Philosophy.

Submitted to the Office of Research Services, Central Queensland University,

August 2013.

Declaration

The research and discussion presented in this thesis are the original work of the author and have not been submitted at any tertiary institute or University for any other award. Any material that has been presented by any person or institute is duly referenced, and a complete list of all references is presented in the list of references.

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Abstract

IT governance, or the governance of information and technology, has become an issue of importance for senior managers, those charged with undertaking corporate governance, and academics. Within the academic literature, its conception has changed from the recognition of appropriate decision-making patterns for the acquisition, management and use of information and technology, to large-scale enterprise governance systems. As the research and literature responded to changing needs and interpretations, it has done so without a developed theory or ontology to understand the form, nature and scope of IT governance. Consequently, IT governance has been referred to as an "ephemeral and messy phenomenon" (Peterson 2004, p.8).

This research project is a response to the perceived lack of theory and ontology in IT governance research, and it seeks to complement and extend the literature. It does this by offering an interpretivist perspective of a large ERP project at an Australian university. The research involved reviewing and analysing archival documentation concerning the project and its antecedent issues, which were then reported in a single, in-depth case study. When the case study was analysed using the IT governance literature, the normative nature of that literature meant that it was useful for identifying weaknesses in the University's governance structures. However, the literature was less useful for explaining the complexities of power relations, knowledge inequalities and organisational discourse that were evident in the case study.

Using social theory and the work of Michel Foucault, the analysis of the case study was able to show that the prime role of IT governance was to construct and defend a social reality, or what Foucault would call a "regime of truth". This truth, supported by knowledge and power relations, is used to support the decisions and actions ne-

cessary to achieve stated project objectives. Therefore, the thesis finds that the objective of IT governance is not to achieve outcomes such as the alignment of technology with organisational outcomes, but to create the conditions for what will be possible, and for what can exist.

Foucault's work on discursive formations was used to construct a discursive framework of IT governance, showing IT governance to be a discursive construct used to create the regime of truth. At the discursive level, IT governance is wrapped around all management communications and conversations concerning the acquisition, management and use of information and technology. It is governance that allows those specific conversations to exist, and not others, and it is governance that sets the conditions for what is possible.

In addition to the discursive framework, this thesis provides a set of analytical questions, or interpretive analytics, for an analyst to use to discover IT governance as it exists at particular time and place. This is a useful first step before determining what IT governance should be in the future.

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Acknowledgements

I humbly and sincerely thank my supervisors, Dr Greg Whymark and Dr Lynn Zelmer, for agreeing to take on my candidature, and for stubbornly sticking with me, even when I had become hopelessly mired in the dark alleys and pitfalls of reading Foucault. There were many times when it was the fear of wasting the many hours that they had dedicated to my supervision, rather than the fear of failure, that drove my pursuit of this thesis onwards. And I would also like to acknowledge Dr Jessica Kennedy for providing fresh eyes during final editing and undertaking the critical review of my chapters that made the final stages of this endeavour possible.

I would also like to thank CQUniversity and in particular Ms Jenny Roberts, University Secretary, for her generous assistance in allowing access to the University archives. Without this extraordinary support, it would not have been possible to research and construct such an interesting and useful case study.

Finally, I thank my family—my wife and son—for their patience and understanding. After so many years, I hope that I may now be able to go home free of M. Foucault's wily distractions. And my son may no longer have to ask whether Daddy has chapters to do today.

Here he lies where he longed to be;
Home is the sailor, home from the sea,
And the hunter home from the hill.

Robert Louis Stevenson

Chapter 1: Introduction

> All enterprises have IT governance. The difference is that enterprises with effective governance have actively designed a set of IT governance mechanisms (e.g., committees, budgeting processes, approvals, IT organizational structure, chargeback, etc.) that encourage behaviors consistent with the organization's mission, strategy, values, norms, and culture. In these enterprises, when the "desirable behaviors" change, IT governance also changes (Weill 2004, p.3).

IT governance has been an important topic of research within the academic literature since at least 1997. From its beginnings in the information systems literature, the concept of IT governance has grown to overlap information systems management, corporate governance and enterprise risk management. Yet for the most part, IT governance research has been on normative[1], "best practice" specifications for IT governance, and—with some exceptions—little theoretical development of an ontological view of its form, scope and nature. Consequently, as Table 1.1 shows, there have been a range of criticisms of the IT governance concerning its form, nature and scope.

This thesis was begun as an exercise in exploring the ontology[2] of IT governance in two ways that differ from the extant literature. First, as the literature often alluded to important social elements within IT governance (power, relationships and knowledge in particular), social theory and organisation theory was used as a lens through which IT governance could be viewed. Second, to contrast with the normative approach of much of the literature, an interpretivist approach was used in this thesis. A case study

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1. For the purpose of this thesis, as defined by the Oxford Companion to Philosophy, "normative" is used to denote a standard rule or principle used to direct human conduct, being something to be complied with (Dent 2005).
2. For the purpose of this thesis, the view of ontology provided by the Oxford Dictionary of Sociology is used: ontology is a way of understanding conditions of existence, relations of dependency and so on for things that can exist in a certain domain ("ontology" 2009).

describing the governance of an ERP implementation project was constructed, and interpreted using aspects of social and organisation theories. Finally, questions regarding the ontology of IT governance were answered through the construction of a theoretical framework of IT governance.

While this thesis is critical of the extant literature, its purpose is not to reject that literature, but rather to provide a deeper understanding of the form, nature and scope of IT governance.

1.1 Criticisms of the IT governance literature

Managers and IT practitioners have recognised the growing importance of IT governance in recent years. Nevertheless, its literature has been criticised for having insufficient clarity, for inconsistencies and for not adequately reflecting or informing commercial practice. Such criticism has resulted in IT governance being referred to as an "ephemeral and messy phenomenon" (Peterson 2004, p.8).

These criticisms have extended to the scope and application of IT governance, such as whether it concerns the board of directors or only management. Does IT governance have any relationship with corporate governance, and why, or why not? Of concern are criticisms and questions of inconsistencies in the very form and nature of IT governance. Is IT governance simply the patterns of decision-making authority for the domains of information technology (IT)? Is it a collection of mechanisms for directing and controlling IT? Is it both? Is IT governance primarily systemic, structural, or behavioural in nature? As the academic literature developed, different authors asserted that IT governance is all of these at various times. There are clear contradictions driven by selectively adopted assumptions. For example, some later authors have emphatically stated that IT governance was an essential component of enterprise or corporate governance—a proposition never considered by the early authors, coming as they did from and information systems management background. Table 1.1 provides a summary of the relevant criticisms of the IT governance literature.

The criticisms in Table 1.1 indicate a core deficiency in IT governance research. A lack of theory has resulted in little agreement on the form, nature and scope of IT governance. Table 1.1 suggests that much of conceptual development of IT governance has been driven by imperatives of the time. Early researchers were responding to the growing complexities inherent in modern information systems management, while later authors responded to government and community foci on controls and transparency.

This of course presents difficulties for academics wishing to contribute theories or or further research into IT governance. How is knowledge of "effective" IT governance advanced (as, for example, in Rau 2004; Ali and Green 2005), when there is little consensus of what IT governance is? Similarly, how does research inform practice (which is known as praxis) when there is no consensus on the form of IT governance, or its relationship with corporate governance?

It is not surprising to find that there are many stakeholders interested in IT governance research. These include managers, IT professionals, directors and academics. It should not surprise anyone, therefore, that each group comes to IT governance with different needs and different views. However, while the literature lacks a strong theory of the nature and form of IT governance, it will become fragmented. A critical review of the literature (presented in Chapter 2) suggests that this has happened.

Chapter 2 shows that when the IT governance literature is critically analysed, it is revealed as a collection of assumptions (supported or not) and differing perceptions of IT governance among the authors. There is also evidence that the literature has developed and changed in response to important world events, such as the advent of the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley 2002) in the United States. There is nothing unusual about this, which probably suggests a healthy academic discourse. The problem is that the discourse is largely uninformed by theory, and especially ontological theory. This thesis will therefore seek to address the question "what is IT governance?" by identifying the critical and common elements within the academic literature and using aspects of social theory to explain them. The result is a theoretic-

al framework that lays out the ontology of IT governance. This framework will help to explain what it means for IT governance to exist, and how it does so. The framework will explain the form and nature of IT governance, who is responsible for it, and what it can achieve.

This thesis is not undertaken as a repudiation of the extant literature. On the contrary, and as this thesis notes in Chapter 6, the literature offers a valuable "best practice" guidance for practitioners. However, its value is reduced without a stronger understanding of the underlying ontology. This thesis seeks to provide that service. It is not a situation unique to the study of IT governance. As Mintzberg et al. (2005) writes of corporate strategy, 'Top managers of big firms devote the bulk of their efforts to formulating strategy though there is remarkably little agreement about what it is' (Mintzberg et al. 2005, p.19).

To develop an ontology of IT governance, this thesis proposes a response to these criticisms that looks beyond the strictures of the IT governance literature. The use of conceptual abstraction to achieve ontological understanding is a common practice in information systems research and practice: consider the now-common use of data flow diagrams or entity–relationship diagrams to model the nature of data and information flows.

The theoretical background support for the ontology is also sought beyond the IT governance literature. The IT governance literature reveals an implied acceptance of power, politics, knowledge and discourse within IT governance. These issues are also prominent topics in contemporary writings in social and organisation theory. Therefore, this thesis will explore the literatures of social and organisation theory, seeking a basis of an ontological view of IT governance.

Table 1.1: A summary of criticisms

Issue	Criticism	References
Definitions	Lack of consensus	Simonsson and Johnson (2005)
	The search for a "definitive definition" is futile.	Brown and Grant (2005) Webb et al. (2006)
Conceptual issues	The concept is messy & ephemeral	Peterson (2004)
	Too much reliance on out-dated and inadequate concepts of IT governance.	Peterson (2004) Peterson et al. (2000) Keyes-Pearce (2002)
Scope & praxis issues	Inadequate recognition of complex networks of relationships.	Peterson (2004) Peterson et al. (2000) Dahlberg and Kivijärvi (2006) Brown and Grant (2005) Simonsson and Ekstedt (2006)
	Inadequate recognition of the role of the board of directors.	Huff et al. (2004) Kambil and Lucas Jr. (2002) Mähring (2006) Nolan and McFarlan (2005) Trites (2004)
	Inadequate recognition of the relationship with corporate governance.	Musson and Jordan (2005) Premuroso and Bhattacharya (2007) Raghupathi (2007)
	Inadequate recognition of the importance of information and knowledge as an outcome.	Van Grembergen (2000) Wu (2006)

1.2 This thesis responds to the criticisms

Rather than responding to, and testing each criticism from Table 1.1 separately, this thesis takes a holistic approach and contends that the underlying problem is a lack of a guiding and unifying ontology for IT governance. Further, it contends that to follow a normative or deterministic research method—for the purpose of identifying an ontology— risks reproducing the same assumptions and inconsistencies that provoke these criticisms.

An analysis of Table 1.1 suggests that the question of what IT governance "is" is by no means settled. Chapter 2 responds to these criticisms by analysing the IT governance literature at the definitional, functional (the form and nature of IT governance) and relational (scope and relationship with corporate governance) levels. In essence, this thesis will become an ontological investigation, and the questions of the form, nature and scope of IT governance must be addressed. Therefore, this thesis proposes the five research questions presented in the next section.

1.2.1 Research questions

The thesis presents these research questions to assist in the exploration of the form, nature and scope of IT governance. It addresses these questions by developing a theoretical framework based on the social theories and concepts of French philosopher Michel Foucault—specifically the concepts of power, knowledge and organisational discourse. A brief introduction to Foucault is provided later in this chapter, in Section 1.2.4 (starting on page 13).

Research Question 1: What is IT governance?

The IT governance literature currently portrays IT governance as either a structure, a system, a function of corporate governance, or simply a set of declared responsibilities. Clearly this is a fundamental question that is of interest to academics and practitioners alike.

The research question, while brief, gives rise to a series of related research questions. To answer Research Question 1 (RQ1), this thesis must come to conclusions of IT governance's form and nature, scope, and the assignment of responsibility. The following chapter shows that the literature is weak or inconsistent about these important aspects. The research questions that follow on from RQ1 seek to clarify these important points. A theoretical framework can then be proposed that will answer RQ1 and provide a significant insight into the ontology of IT governance.

Research Question 2: What is the form and nature of IT governance?

The IT governance literature is divided over whether IT governance represents structure or process, rules or action. Is it something that you have, or is it something that you do? The literature has also been unclear on the nature of IT governance, focusing as it does on expressing governance as a formal framework, set of responsibilities, or mechanisms. After reviewing the literature and noting the implied and tacit acceptance of the issues of power, knowledge and discourse in IT governance, this thesis will test the importance of these issues in defining the nature of IT governance.

If a better understanding of the form and nature of IT governance can be gained from this thesis, then future researchers will be better able to seek out evidence of IT governance (effective or otherwise) in practice. That is, an analyst or researcher will be able to seek out the true form of IT governance.

Research Question 3: What is the scope of IT governance?

This research question is concerned with positioning IT governance in relation to corporate governance and management. The early writers on IT governance wrote from a management perspective, and the antecedent literature was entirely of a management nature. Yet since the advent of the Sarbanes–Oxley Act of 2002, the IT governance literature has moved towards an acceptance of corporate governance having a role. Beyond this, it is not clear from the literature whether IT governance is descended from corporate governance, shares a common governance construct with corporate governance, or whether they are related only by nomenclature.

This thesis contends that at the discursive level, a clearer understanding of the relationship can be discerned, and therefore the case study will be investigated for evidence of a governance or governing discourse that can indicate the scope of IT governance.

A related issue is what IT governance can achieve. Chapter 2 will show that the literature implies that IT governance can achieve a number of outcomes, such as the alignment of technology with organisational objectives or strategies. However, some authors are more cautious and suggest that IT governance is motivational, and establishes the conditions by which such objectives can be met. This issue also needs to be tested for this research question to be answered.

Research Question 4: Who is responsible for IT governance?

The literature varies in this regard, from no assignment of responsibility for IT governance, to responsibility resting with management or the board of directors. This thesis contends that a discursive theoretical framework will identify those in responsibility by the importance assigned to their “voice” within a governing discourse.

Research Question 5: Does a theoretical framework for understanding IT governance assist the understanding of the role of IT governance and its relationship with corporate governance?

The literature suffers from a lack of over-arching theory and theoretical frameworks which help to make sense of individual publications and which shows how they relate to one another. The proposed theoretical framework for IT governance seeks to rectify this situation, and in turn this provides further insights into the form and nature of IT governance.

This thesis contends that IT governance is not restricted to either structure or function. It exists whether a formal IT governance plan or framework is adopted or not. As a consequence, IT governance is emergent and evolutionary, and not dependent on an adoption decision. Such decisions are, however, influenced, enabled and inhibited by the governing discourses occurring within the institution.

These insights into IT governance are only possible by pursuing a theoretical framework on a more abstract level than the normative, structured level of the extant literature.

1.2.2 The structure of this thesis

To respond to these research questions, the thesis arrives at the theoretical framework by a step-wise process, which is briefly explained here. Chapters 2 to 4 provide the introductory information that provided the motivation and method for constructing the theoretical framework. Chapter 2 reviews the extant IT governance literature, and its antecedent literature. It concludes that the literature contained important elements of social and behavioural issues that may have been identified by some key authors, yet have not been properly investigated. The consistent presence of these elements, however, suggests the possibility of IT governance being a social construct rather than a procedural, structural or systems-based one.

In response to the conclusions from Chapter 2, Chapter 3 reviews the literature for the relevant issues in social theory (as identified in Chapter 2). Given the central importance of these issues to the construction of the theoretical framework, and the subsequent focus on the work of Michel Foucault, this literature is summarised later in this chapter, in sections 1.2.3 and 1.2.4.

Chapter 4 provides the methodology used to construct the theoretical framework. It describes the justification for basing this thesis on an interpretivist method and a single historical case study (presented in Chapter 5). Interpretivist methods such as hermeneutics have traditionally been considered lacking in formal methods, a fact acknowledged by the German philosopher Gadamer, who nevertheless refuted the idea that this was a weakness (as expressed in the chapter "The problem of method" in Gadamer 1989). However, the interpretivist paradigm has been used successfully in information systems research and to some extent codified by Klein and Myers (1999) for use in that discipline. The principles described by Klein and Myers (1999) have been broadly followed throughout this research project.

Single case studies have been found to be appropriate for “revelatory” or longitudinal purposes (Yin 2003). The subject of the case study is a major ERP project in an Australian university; covering both an antecedent period of 1997–1999 and the project period of 1999–2001. Using a single case study approach contains inherent weaknesses, but also important benefits, which makes this method particularly useful for this thesis. The weaknesses and benefits are summarised in Table 1.2 and also discussed in Chapter 4.

Although the case study is constructed from empirical data[3], it is interpreted using the interpretivist paradigm. The work of Foucault is used as the lens through which to interpret the case.

3. Empirical meaning it is based on observations ("empirical" 2009)

Table 1.2: Summary of case study issues

Weaknesses	Benefits
It is a single case study.	A single case study is suitable for developing a deep understanding of a concept.
The events occurred more than a decade ago.	Although the events occurred a considerable time ago, the case study contains relevant and contemporary issues. By investigating a historical project, this study was able to access an extensive archive of sensitive material. It would be unlikely that such access would have been granted if the events were recent. Another benefit is that the subject of this study did not reflect a pre-conception of an IT governance implementation. Although many standard elements of IT governance could be identified, this study did not have to deal with the complications of any specific methodology.

The historical case study is provided in Chapter 5, which provides a basis for a deeper analysis of the ontology of IT governance. Within that case study, the organisation under review had not declared any formal IT governance framework or plan. This provided a "green field" to examine how governance was conducted without having to first counter any preconceptions of IT governance. The focus of the case study is a major ERP implementation project: not an example of enterprise-wide IT governance in itself, but a vital part of IT governance nevertheless.

Following the case study, the subsequent chapters provide an analysis, first by using the relevant IT governance literature in Chapter 6. This chapter concluded that although the literature was useful for examining deficiencies in the governance of the ERP project, and for constructing plans for what *should* have been, it was not as useful analysing the dynamism that had been displayed. Unexpected variations in power relations, and the differences between identified objectives and the actual outcomes indicated that domains of complexity existed in the governance of the project. These domains indicated that undercurrents of power, knowledge and discourse ran through IT governance, and these needed a more detailed investigation.

The investigation of IT governance as a social construct is conducted in Chapter 7. Foucault's concept of the discursive formation is used to construct a discursive framework for IT governance, with its accompanying set of analytics. In the concluding Chapter 8, this framework is then used to answer the research questions that have been posed in this chapter, before its value for further research is explained.

Due to the importance of social theory to this thesis, and particularly the work of Michel Foucault, the following two sections provide a quick introduction to their relevance for the remainder of this thesis.

1.2.3 Social and organisational issues in IT governance

The IT governance literature takes a normative and functionalist approach. IT governance is something that is specified and planned. Effective IT governance occurs when the plan is followed in practice and planned outcomes are achieved (see, for example, Peterson 2004); but there are problems with this approach. It is a sound approach to specifying "best practice" for IT governance, but it is not sufficient for an ontology. It assumes that an IT governance plan is in place at each organisation—but what if such a plan does not exist? The opening quotation for this chapter states that all organisations have IT governance. Therefore, there must be more to the existence of IT governance than the plan.

This study performed a detailed and critical review of the IT governance literature (referred to hereafter as the literature) in Chapter 2. The review found that issues of power, knowledge and organisational discourse were constantly implied within the discussions of IT governance arrangements, mechanisms and outcomes. The disciplines of social and organisation theory have explicitly recognised the importance of these issues.

The consistent presence of social aspects in IT governance opened the possibility of using social and organisation theory to build a theoretical framework. Studies in power, knowledge and discourse each command a large body of publications. Chapter 3 provides a brief overview of the most relevant studies. Each of these topics eventually led to the work of French philosopher Michel Foucault, one of the few scholars who could offer the possibility of a comprehensive framework that incorporated each of these topics.

1.2.4 Foucault's contribution

Foucault has made a considerable contribution to the study of power, knowledge and discourse within the social theory literature, and much of this has been adopted within the management, information systems and organisation theory literatures. His approaches to these topics, while not always clear, offers the opportunity to study IT governance in new ways. It becomes possible to construct an ontology that explains both the extant literature and the complexities that exist within actual instances of IT governance.

This thesis makes use of three aspects of Foucault's work (Foucault never considered his work as consisting of theories): power, knowledge (which Foucault considered to be inseparable) and discursive formations. The latter forms the basis of the theoretical framework explained in Chapter 7, while power and knowledge is used to explain the dynamics of IT governance within the discursive formation.

Following deep reflection on Foucault's work and its application to IT governance, this thesis concludes that beyond the discursive formation, there is a further contribution to be made by Foucault's work, one that informs the scope and capabilities of IT governance. With Foucault's work on power and knowledge came the associated concept of *truth*. When applying these three concepts, IT governance is revealed as having the prime outcome of establishing and defending a *regime of truth*. This is further explained in Section 7.8 Foucault's regime of truth (starting on page 295). The regime of truth reflects the extensive efforts at producing a formal project narrat-

ive reported in the case study, but also reflects on the nature and scope of governance. The regime of truth is the socially constructed truth that makes actual outcomes possible. The role of governance (specifically IT governance) is to create the conditions of possibility and conditions of existence for desired outcomes. This is a significant departure from the literature: IT governance cannot achieve outcomes such as the alignment of technology with corporate strategy, but instead creates the conditions that make it possible to achieve those outcomes.

1.3 Outcomes from this research

By analysing IT governance at the discursive level, important insights into the ontology of IT governance are gained. These include the extent to which IT governance can achieve organisational objectives, and the true nature of its relationship with corporate governance. In this way, this research will benefit future researchers and practitioners in the fields of IT governance, corporate governance and governance in general.

The immediate "deliverable" from this thesis is a theoretical framework[4], constructed and presented to allow the governance researcher or practitioner to recognise IT governance as a social construct, where power, knowledge and discourse are more important than debates about structure, roles, or responsibilities. The framework, to be called a discursive framework for IT governance, will provide two "tools" for guiding such an analysis: an ontological insight into the form, nature and scope of IT governance, and a set of analytical questions (referred to as analytics) by which the analyst might begin to recognise IT governance in its actuality (as distinct from what it is prescribed as). In this way, this research provides a complementary approach to the normative approach in the literature, as an understanding of what IT governance *is* is always a useful prerequisite to determining what it *should be*.

4. This is described throughout this thesis as a theoretical framework, to distinguish it from a fully formed and tested theory (a description which Foucault himself refused to apply to his own work). However, in Chapter 7 it is also described as a *discursive* framework to acknowledge the source of its development.

1.4 Conclusion

This thesis seeks to fulfil a role that has been overlooked by previous research. Instead of adding a new definition or augmenting definitions to serve the purpose of a single research project, this thesis asks the fundamental question, "What is IT governance?" To answer this question, the literature will be reviewed and IT governance's relationship with corporate governance and with management will be tested. IT governance will be viewed from an entirely different ontological viewpoint: as a discursive formation, and as the establisher of a regime of truth. Many of the concepts that are familiar to practitioners remain within this new conception, but they are stripped of the assumptions that currently categorise them and place them within a formal and normative framework.

This is not a radical approach to theorising. The objective of this thesis is not to disprove the IT governance literature, but to show it, and its component parts, from a new and quite different perspective. Perhaps Foucault himself describes the objective of this thesis most succinctly.

> I shall accept the groupings that history suggests only to subject them at once to interrogation; to break them up to see whether they can be legitimately reformed; or whether other groupings should be made; to replace them in a more general space which, while dissipating their apparent familiarity, makes it possible to construct a theory of them (Foucault 1971, p.26).

Chapter 2: IT governance

2.1 Introduction

> The lack of clarity of the concept of IT governance is not surprising given that information systems is a relatively new discipline that has emerged in an organic manner from a variety of different background disciplines including, but certainly not limited to, the social sciences and the computing sciences. The breadth and diversity of the background disciplines and emergent nature of the discipline has, perhaps naturally, resulted in many information systems terms and concepts being ill-defined and lacking consistent agreement on intent and definition by researchers and practitioners working within information systems (Webb et al. 2006, p.1).

Despite being a topic of academic investigation for the past 15 years, IT governance remains a contested field of study. A review of the common (and less common) definitions of IT governance reveal a degree of disagreement that suggests IT governance is lacking in theoretical development. As shown by the opening quote, Webb et al. (2006) point to the diverse nature of the underlying information systems discipline as a reason for this. This may be so, but the following review of the IT governance literature also suggests that researchers have consistently identified social characteristics that were not explored and which add considerable complexity to the concept. They have also made assumptions concerning the nature of IT governance and its relationship with corporate governance. These reasons, together with a lack of theoretical development, have led to IT governance representing a different concept to different stakeholders, depending on the need of the stakeholder. Other authors have also criticised the confusion within the IT governance literature:

> …IT governance, which has been the subject of much debate and speculation…remains an ephemeral and "messy" phenomenon, emerging in ever-new forms with increasing complexity (Peterson 2004, p.7).

Given the diversity that has developed within the literature, and the range of stakeholder interests surrounding it, it is important for any literature review to focus on a particular area of interest when developing a plan for investigation. This thesis is particularly interested in investigating the form and nature of IT governance, and its relationship to corporate governance.

The review of the IT governance literature that follows in this chapter is structured to provide the reader with a reading strategy that is pertinent to the research questions for this thesis. A guide to following this chapter in relation to those research questions is provided in Table 2.1. The alignment of sections with research questions is not a mutually exclusive classification; the material covered in these sections will touch on numerous research questions, and all of them seek to provide clarity in response to Research Question 1. The reader should always be mindful that this thesis does not set out to disprove or discredit any part of the literature, but to seek a deeper understanding of the ontology of IT governance.

Table 2.1: How to read this chapter

Research questions	Section
What is IT governance?	Section 2.2 Definitions of IT governance
What is the form and nature of IT governance?	Section 2.2 Definitions of IT governance Section 2.3 The antecedents of the IT governance literature. Section 2.4 Contingency theory, IT governance arrangements and mechanisms Section 2.6 IT governance archetypes Section 2.7 IT governance frameworks Section 2.8 Attempting a conceptual framework
What is its relationship with corporate governance?	Section 2.5 Peterson: stakeholders, configurations, coordination, and social dynamism. Section 2.7 IT governance frameworks Section 2.8 Attempting a conceptual framework Section 2.9 IT governance, corporate governance, and the board of directors
What is the scope of IT governance?	Section 2.10 IT governance, power and politics

2.2 Definitions of IT governance

What is IT governance? For a concept that has been studied and written about since 1997, this remains a surprisingly pertinent question. IT governance has become many things to different parties, which can be seen from a review of definitions. The concept of IT governance grew out of a need to better understand the growing complexities of managing information systems and technologies. In more recent times, IT governance is understood to be a necessary part of enterprise governance and risk management. Consequently, constructing a single definition of IT governance that is universally recognised and agreed upon has proven difficult (Brown and Grant 2005; Webb et al. 2006). The following definitions reflect several different views of IT governance, which perhaps reflect the different needs for what IT governance should be. The early definitions–which sometimes were not provided as definitions of IT governance *per se*, but were soon adopted as such–emerged from the information systems management literature, devised by IS management scholars. These definitions offered a minimalist view, restricting IT governance to arrangements (formal decision-making patterns) or mechanisms. As the concept of IT governance grew, and new academics contributed to the literature, definitions began to reflect whole-of-enterprise needs, and elements of systems thinking began to appear. Overall, the literature is still divided on what IT governance "is", which perhaps reflects a lack of theory in the literature, and especially ontological theory.

2.2.1 IT governance as formal arrangements

> IT governance arrangements refers to the patterns of authority for key IT activities in business firms, including IT infrastructure, IT use, and project management (Sambamurthy and Zmud 1999, p.261).

> Governance arrangements, hence, represent an organization's IT-related authority patterns (Sambamurthy and Zmud 1999, p.262)

The idea of IT governance as “patterns of authority” arose from the earliest publications dedicated to IT governance, being Brown (1997), and Sambamurthy and Zmud (1999). Brown (1997) had reviewed the development of IT governance thinking from its roots in organisational behaviour and organisation theory (with particular attention to the use of contingency theory) as well as the developing IT management literature of the 1970s and 1980s. From King (1983), Brown identified a "locus of decision-making" variable (which in turn came from earlier studies) as an important factor in identifying effective IT governance arrangements. These arrangements were described as structures, or patterns of authority and decision-making responsibility, existing on a continuum between "centralised" and "decentralised". Between these extremes, Brown identified "federal" and "hybrid" models. Sambamurthy and Zmud (1999) continued to develop this idea of IT governance by providing the cited definition of IT governance arrangements The authors made extensive reference to the "locus of responsibility" variable in their paper.

The definition cited above is often cited by other authors as a definition of IT governance, but in fact both Brown (1997), and Sambamurthy and Zmud (1999) were defining IT governance *arrangements*, and not IT governance itself. It may be that the authors believed that governance arrangements and governance to be the same concept, but this was never stated. Nevertheless, the importance of the “locus” variable was further entrenched by two conference papers by Peterson presented in 2000, which presented the “locus of decision-making authority” concept as a definition of IT governance itself (Peterson 2000; Peterson et al. 2000). At this point in the development of the IT governance literature, IT governance arrangements was equated to IT governance itself.

Strangely, given its centrality in the literature, the phrase “locus of decision-making”—it is also sometimes referred to as the “locus of responsibility”—is not adequately explained in the IT governance literature. The use of "locus" in this context has developed from the antecedent information systems literature and supporting organisation theory literature. Webster's Dictionary suggests that “locus” refers to the "home" or location of decision-making within the organisation ("Locus" 2009). The

IT governance literature sometimes refers to a “pattern” of decision-making, which could be used in place of “locus”. “Locus of decision-making” should not be confused with "locus of control", which is used in psychology to represent an individual's sense of personal control.

By 2000, authors such as Peterson were pushing against the limitations of the “patterns of authority” approach, which was by then representing the orthodox view of IT governance. Peterson saw a behavioural and social aspect of IT governance, and attempted to bring about recognition of stakeholders and relationships within IT governance.

> Information technology governance is generally defined as the locus of IT decision-making authority. This paper argues that IT governance also includes the capability to integrate IT decision-making between key stakeholders (Peterson 2000, p.667).

2.2.2 IT governance mechanisms

Peterson (2000) sought to consolidate two concepts of IT governance that had been developing in parallel: IT governance arrangements and IT governance mechanisms (presented by Brown 1999). IT governance mechanisms could be loosely defined as the enablers of organisational communications. Organisational theorists Galbraith (1973), Galbraith (1994) and Mintzberg (1979) saw such mechanisms (although they did not refer to them as governance mechanisms) as key facilitators of flexible, responsive, flatter organisations. The concept of mechanisms had also been adopted by information systems management authors (c.f. Venkatraman et al. 1994). Others saw such mechanisms as ‘a capability to integrate IT decision-making between key stakeholders’ Peterson (2000, p.9).

The next serious attempt at defining IT governance came from Peter Weill, as he sought to develop a view of IT governance that recognised the complexities of human decision-making, and the role that IT governance would play in this.

2.2.3 IT governance motivates behaviour

> We define IT governance as specifying the framework for decision rights and accountabilities to encourage desirable behavior in the use of IT' (Weill 2004, p.3).

Peter Weill, Director of the CISR at MIT Sloan, has been a very influential figure in the development of the IT governance concept. His definition has been widely acknowledged in the IT governance literature. What has not been generally recognised is how his view of IT governance represented a significant break from the prevailing view of the time. IT governance was no longer seen as a one-dimensional construct (a pattern of decision-making), In fact, even though others have taken Weill's definition as representing IT governance as a 'framework for decision rights and accountabilities', Weill had in fact moved beyond this. For Weill, IT governance is about *specifying* the framework, not the framework itself.

Weill's definition also moved the concept of IT governance into that of process and activity, and away from the IT governance–as–structure idea. The concept of IT governance as a process (mechanism) and capability was introduced by Peterson earlier, but Weill expanded on this, and now the activity was in specifying a holistic framework.

The final advance made by Weill's definition was in the area of what IT governance could achieve. This is discussed further in section 2.2.5 on page 24, where the idea of IT governance's scope is examined: what it can achieve directly, what environment it can establish, and how it can motivate desired behaviours. Weill, perhaps more than any other author, had recognised the behavioural and social aspects inherent in IT governance. Unfortunately, while Weill's definition is often cited, few authors investigated this advance in the concept. Global events overtook the IT governance literature, and in the wake of accounting scandals and the Sarbanes-Oxley Act, the literature moved to a stage of seeing IT governance in an organisational control and risk management perpective.

2.2.4 Governance systems: the IT Governance Institute

The IT Governance Institute (ITGI) was formed in 1998, 'in recognition of the increasing criticality of information technology to enterprise success.' It describes itself as a 'research think tank' (ITGI 2009). It has been very influential on corporate thinking on IT governance and has had an impact on academic research, by way of its various definitions of IT governance. There have been several over the years, reflecting an evolving appreciation of the role and nature of IT governance outside of academic research. The following are examples often cited in the academic literature.

> A structure of relationships and processes to direct and control the enterprise in order to achieve the enterprise's goals by adding value while balancing risk versus return over IT and its processes. (IT Governance Institute 2000a, p.3).

> IT governance is the responsibility of the board of directors and executive management. It is an integral part of enterprise governance and consists of the leadership and organisational structures and processes that ensure that the organisation's IT sustains and extends the organisation's strategies and objectives. (IT Governance Institute 2003, p.10).

There had clearly been a shift in the ITGI's appreciation of IT governance between 2000 and 2003. The latter definition expands the concept of IT governance considerably. For the first time, boards of directors and corporate/enterprise governance was invoked. Responsibility for IT governance has been assigned–to the corporate governance level.

This chapter will consider the impact of the ITGI and the Sarbanes-Oxley Act in a later section. For a review of definitions, the ITGI view is significant because it extends considerably the earlier orthodoxy of Sambamurthy and Zmud (1999), while also ignoring the motivational role proposed by Weill (2004). For the ITGI, IT governance is a vehicle for achieving outcomes, not motivating others.

The definitions included in this section clearly indicate a developing body of knowledge. However, there is also a fundamental challenge in these definitions. While there is clearly an evolution occurring from Brown and Sambamurthy and Zmud, to broader conceptions of Peter Weill and Ryan Peterson, the challenge comes from the view of the IT Governance Institute. Their 2003 definition encompasses a much broader scale of concept, and its own evolution from the ITGI's 2000 definition suggests a significant shift in the application of IT governance within businesses.

2.2.5 The outcomes of IT governance

IT governance, where it is effectively implemented, has been found to increase IT function's value to the to the corporation, to harmonise governance objectives with business objectives, and to align governance mechanisms with performance measurements (Weill and Ross 2004). It also provides safeguards for the technology interests of stakeholders and provides for the quality and structure of relationships between stakeholders (Korac-Kakabadse and Kakabadse 2001). Sambamurthy and Zmud (1999) assert that IT governance is central to supporting IT innovation in an organisation, because innovation is supported by IT infrastructure, IT management and IT project control.

IT governance also has a role to play in ensuring that organisations meet functional compliance obligations.The Australian standard on Corporate Governance of Information & Communication Technology AS 8015 – 2005 (Standards Australia 2005) takes a functional compliance view of IT governance. It lists both the benefits of conformance with obligations (whether legislated or contractual) and organisational performance as compelling reasons for adopting IT governance.

The literature shows that there are commonalities in what is considered to be desirable outcomes of effective IT governance. There are, however, differences between authors on how IT governance can support or achieve these outcomes.

The literature also suggests that IT governance is necessary for the achievement of a number of beneficial outcomes for organisations. Most authors saw IT governance as an enabling structure or process, *through which* real outcomes could be delivered. While some authors saw IT governance as providing a direct causal link to outcomes (IF the formal IT governance plan is followed, THEN desired outcomes are achieved), others recognised it as a motivational force, where IT governance establishes an environment within which best outcomes are *encouraged*. The following quotation effectively demonstrates this view.

> IT governance is the system of structures and processes for directing and controlling information systems (Sherer 2004, p.2).

Following this view, IT governance is so closely associated with the outcomes that the myriad of decisions, economic situations, or individual dynamics that must occur between governance and action are hardly considered. This viewpoint has probably developed from the functionalist views of IT governance provided in seminal publications such as Sambamurthy and Zmud (1999; 2000).

Although the "causal link" view has not been openly challenged, most authors limited the outcomes of IT governance to the establishment of an environment from which effective management can operate. Ryan Peterson provided a good example of this approach by defining IT governance as something that contributed to good decision making.

> IT governance is defined as:
> the distribution of IT decision-making rights and responsibilities among enterprise stakeholders, and the procedures and mechanisms for making and monitoring strategic decisions regarding IT (Peterson 2004, p.8).

Between these two views is the definition from the IT Governance Institute (ITGI):

> IT governance is the responsibility of the board of directors and executive management. It is an integral part of enterprise governance and consists of the leadership and organisational structures and processes that ensure that the organisation's IT sustains and extends the organisation's strategies and objectives (IT Governance Institute 2003, p.10).

Other authors extended the ITGI definition of IT governance—IT governance can direct and control an organisation's use of technology, thereby adding value—by seeing "effective" IT governance supported by a culture of ethics and compliance, together with an effective system of corporate communications (see, for example, Ali and Green 2005; Ali et al. 2009).

Some authors have recognised limits in what IT governance can directly achieve, and it comes to be seen as an enabling process: not able to directly achieve results or control operations, but is able to provide an effective environment that will, in turn, lead to the achievement of desired result:

> As a continuous process, effective IT governance provides transparent IT decision making, clear accountabilities, and acceptable and actionable IT measurements. That is, effective IT governance enables business and IT executives to integrate business and IT decisions, implement IT solutions, and monitor IT effectiveness (Bowen et al. 2007, p.195)

Authors such as Peter Weill have been instrumental in proposing that IT governance can impact on the behaviour of decision-makers and those charged with action in implementing IT strategies:

> We define IT governance as *specifying the framework for decision rights and accountabilities to encourage desirable behavior in the use of IT* (Weill 2004, p.2).

> IT governance is much more than processes, controls and standards: good IT governance specifies the decision rights and appropriate accountability frameworks that together encourage desirable behaviour in the deployment and use of information technology (Gillies 2005, p.6).

These differences, while appearing to be superficial when contained in a brief definition, can imply radical differences in the conception of IT governance. There is a significant difference between a construct that can *direct and control*, from one that can *encourage desirable behaviour*. This is an issue that this thesis will be testing as the scope of IT governance.

2.3 The antecedents of the IT governance literature.

Although the IT governance literature began in 1997, it drew from decades of IT and information systems management research. Issues such as the alignment of technology with strategic objectives, the emerging role of the Chief Information Officer (CIO), and the increasing management pressures for reliable information had been investigated since the 1960's, before being incorporated into the emerging body of IT governance knowledge. The catalysts for much of this change came from two stimuli: the fundamental change in organisational structure from highly centralised and controlled, to decentralised or a hybrid form, and the increasingly available advances in technology.

2.3.1 The post-modern organisation

Clegg (1990) offered a concise explanation of the post-modern organisation by showing what it is not. This was done by way of comparison with the rigid, modernist model. Where modernist organisations are dominated by rigid bureaucratic structures, by a deterministic technology model and by a highly specialised, demarcated workforce, the post-modern organisation is flexible, uses technology in whatever form suits its needs and encourages broad skilling of its workforce. Where modernist organisations rely on rigid authority structures for command and control, post-modern organisations implement governance and management mechanisms for coordination and control. Where modernist organisations make use of surveillance mechanisms for control, post-modern organisations use relational mechanisms for communication and co-operation. It is predominantly in the development and use of these relational mechanisms that the theorists Galbraith and Mintzberg based their work.

Galbraith (1994) focused on formal mechanisms, such as formal teams and management approaches, as well as the necessary communications and relationship mechanisms to make the organisation pull together. His earlier work (Galbraith 1973), and that of Mintzberg (1979), were focused on the design and implementation of a lateral organisation. Galbraith (1994) paid more attention to the integrating mechanisms, and to the role of information and technology in achieving organisational integration (Galbraith 1994). Consider the following quotes:

> Multidimensional organizations require multidimensional information systems. … The lack of integrated data bases and inconsistent systems across organizational units is a major barrier to integration (Galbraith 1994, p.95).

> An important power base of integrating roles is knowledge and competence in their strategic dimension. It takes continuous information to sustain that level of knowledge and expert power (Galbraith 1994, p.96).

Galbraith (1973), Galbraith (1994) and Mintzberg (1979) were extensively cited by Brown (1999) as she explained the importance of horizontal (lateral) mechanisms to IT governance. Importantly, it was these authors who most influenced the development of the IT governance concept from outside of the information systems and information technology disciplines. There was no commensurate influence coming from writers within the corporate governance literature.

2.3.2 Pressures on the management of the IT function

By the late 1970s, IT managers and academics were coming to realise that the dominant organisational model for information technology (IT), the centralised Electronic Data Processing (EDP) Department, was no longer capable of serving the demands being placed on it. From the 1980s onwards, there has been extensive literature exploring the issues which would eventually be adopted by the concept of IT governance. Principally, these issues referred to the optimal design for decision-making structures (centralised, decentralised, federal, hybrid, and others), and the evolving design of the IT function and management (and the role of the CIO in particular).

One of the earliest studies on the structure of the IT function and information services in the organisation was by Olson and Chervany (1980). As the authors noted, at that point there were studies on organisational design, but few had enquired into how organisational structure affected IT decision-making structures. Surprisingly, the authors found no conclusive link between organisational decision-making structures and those concerned with information services. However, the groundwork was laid and subsequent authors revisited the issue of the organisation of the IT function. For example, some found that a relationship existed between the type of organisational structure used and the degree of acceptance of information technology (see, for example Ein-Dor and Segev 1982).

King (1983) sought to broaden the debate on centralisation vs decentralisation. Whereas the weight of publications (at that time) sought to link the structure of IT decision-making with organisational structures, King (1983) added considerations of politics, economics and improved IT services as drivers of structures. He may also be the first to introduce the "locus of decision-making" term, but did not define it. It is therefore presumed to refer to the pattern, or distribution of decision-making authority. The work of both King (1983) and Ein-Dor and Segev (1982) was extended by Ahituv et al. (1989) when they recognised the complications from the availability of distributed computing, and the consequent need for appropriate policies. Through these authors, it is possible to see the pressures of an increasingly decentralised business environment impacting on the design of the IT function. Many organisations retained the centralist design, but others found it too restrictive. From an IT management perspective, IT was starting to respond to rapidly evolving environmental pressures (McNurlin and Sprague Jr. 2006).

The link between organisational structure and the form of IT decision-making was also starting to be felt within the domain of strategy. The configuration of IT decision-making structures was also found to influence an organisation’s competitive strategy Tavakolian (1989).

By 1989, most of the concepts linking IT decision-making patterns with organisational structures had been laid out in the information systems management literature, leading to two significant surveys of the field in Dixon and John (1989) and Earl (1989). The latter, being in book form, dedicated an entire chapter to a summary of the centralisation/decentralisation issues facing IT managers.

2.3.3 Design of the IT function

Rockart et al. (1982) was part of the literature investigating the emerging and evolving roles of those charged with oversight of the IT function. With the IT function moving out of the segregated data processing role, so too did the role of data processing manager start to evolve into the CIO. Further research found that this CIO role was rapidly evolving, devolving traditional IT management tasks and becoming more involved in corporate strategic planning (Benjamin et al. 1985).

The devolution of IT management responsibilities was also occurring at the same time as the IT function itself was being specialised into sub units in response to organisational demands (Zmud 1984). There were several design alternatives identified for the IT function: structural (functional basis, product basis or matrix), process (mechanistic or organic) and coordination (formal or informal) (Zmud 1984). Researchers such as Zmud (1984) were beginning to overlap research in both the role and design of the IT service function and the use of communication mechanisms.

Boynton and Zmud (1987) provided a review of the challenges facing the IT industry post-EDP era and offered ideas on likely issues for the following decade, particularly in IT planning. This was followed by further publications which explored issues in both structure and alignment of the IT function In doing so, they dealt with issues of both centralisation and of aligning the IT function with organisational objectives (Boynton et al. 1992, 1994).

The issue of IT outsourcing and how it is factored into the design of the IT function began to be recognised in the early 1990's, particularly by Loh and Venkatraman (1992a; 1992b). Whilst their research findings were limited to the benefits and costs of outsourcing, they are noteworthy to this research project as they may be the first to explicitly refer to "IT governance". The reference was brief, with no discussion of what they meant IT governance to be, and no discussion of its scope. Clearly, however, they intended IT outsourcing to be considered in an organisational context (referred to as governance) and not as independent economic decisions.

2.3.4 Bringing the antecedent literatures together: Brown and Magill (1994)

Following the summary of IT and IS management issues provided by Earl (1989), the research in the early part of the 1990's began to introduce the idea of hybrid designs in decision-making patterns (where "hybrid" meant that there was no uniform centralised or decentralised pattern of decision-making) (Brown and Magill 1994). The research by Brown and Magill (1994) had linked the design of the IT function and its expected outcomes, with IT decision-making structures. These were the foundations of what would become the IT governance literature, but at this point the authors did not use the term "governance". However, this publication is essentially a preview of Brown (1997)—the paper that generated awareness of IT governance in the research literature.

2.3.5 The significance of the antecedent literature: the inherent relationship with corporate governance

When seeking a better understanding of IT governance and its relationship with corporate governance, a review of the antecedent literature reveals no significant input from corporate governance scholars. It is likely, therefore, that when the dedicated IT governance literature began between 1997 and 1999, the early authors had no intent on linking IT governance with corporate governance, or supported any assumption that it should be linked. However, corporate governance was not ignored. The next section shows that the early IT governance authors saw corporate governance as a contingent factor in the design of IT governance, but not inherently related. A tight link between IT governance and corporate governance was not made until later in the literature, when IT governance came to be viewed in the context of enterprise risk management and internal control.

2.4 Contingency theory, IT governance arrangements and mechanisms

The concepts of IT governance arrangements and mechanisms came from a melding of organisation theory and information systems management research, particularly from the 1970s and 1980s. These components of IT governance were to be the focus of the early IT governance research. They were presented in the context of a contingency theory[5] view of IT governance, which has been the only concerted approach to theoretical development in the literature.

5. Contingency theory is a strand of organisation theory that holds that organisational structures are contingent on a number of factors, and that there can be no single optimal design ("contingency theory" 2009).

2.4.1 IT governance arrangements

The IT governance literature places a consistent focus on IT governance arrangements. First introduced as an IT governance construct by Brown (1997), governance arrangements are perhaps most effectively defined by Sambamurthy & Zmud:

> (IT) Governance arrangements represents an organisation's IT or IT-related authority patterns and decision structures. Such structures may be centralised, decentralised, federal or some hybrid structure (Sambamurthy and Zmud 1999, p.262).

IT governance arrangements, therefore, are not the same as the formal management and reporting hierarchies within organisations, although they are closely related because of the reliance of arrangements on decision-making authorities. IT governance arrangements refer to those elements of formal management structures that have been granted decision-making roles involving information technology. The literature refers to centralised and decentralised arrangements as being the extreme ends of a continuum. Between these extremes, authors have identified hybrid and federal patterns of IT governance arrangements.These patterns were explored in greater depth by Peter Weill, whose contribution will be discussed in the next section.

Centralised and decentralised IT governance arrangements represent the opposing extremes of patterns for the distribution of IT decision-making responsibilities. Centralised IT governance arrangements occur when a central, corporate business unit is totally responsible for all IT-related decisions. At the opposite extreme, decentralisation occurs when there is no central business unit responsible for IT decision-making. However, as Brown (1997) notes, situations of total centralisation or total decentralisation are rare:

> In practice, however, highly centralized or highly decentralized–rather than totally centralized or totally decentralized–solutions are common, in which either the corporate or business unit takes a lead role (Brown 1997, p.73).

A hybrid arrangement is one where some IT management functions are decentralised to some business units, but not to others (Brown 1997). This differs from a decentralised governance model, where all responsibilities for IT related decisions are decentralised away from a central business unit responsible for IT. A more structured form of decentralisation is the federal structure, where responsibilities for the management of IT remain in a central IT business unit, but responsibility for the use of IT is decentralised to the client business units. This structure was considered a "best of both worlds" approach (Brown 1997; Zmud 1984).

Brown (1997) investigated the reasons why some organisations turn to hybrid arrangements, rather than the more structured centralised or federal patterns. She found that social and political factors, including management attitudes to change, were strong predictors of hybrid patterns. Her findings were in line with the earlier work of King (1983), who found evidence of political motivations in IT decision-making. Hybrid, or "deviant" patterns were likely to emerge 'when deficiencies in IT capabilities are perceived and there is a culture that supports structural change at the business unit level' (Brown 1997, p.69).

Together with mechanisms, governance arrangements comprised the focus of early IT governance research. In a similar development to mechanisms, the research into governance arrangements has its genesis in the early IT structure and management literature (c.f. Brown and Magill 1994; Earl 1989; Ein-Dor and Segev 1982; Olson and Chervany 1980; Tavakolian 1989).

Sambamurthy and Zmud (1999) also recognised the important role the broader concept of corporate governance as an influence on IT governance structures. Although corporate governance is discussed in terms of a general enterprise governance (rather than the specific discipline of corporate governance), such a discussion highlights the linkages between IT governance and the broader enterprise.

Later researchers have questioned the nature of such authority patterns by considering them to be actually mechanisms (c.f. Martin et al. 2005).

Sambamurthy and Zmud (1999) stated that governance arrangements represent the authority patterns for decisions relating to IT infrastructure, IT use and IT acquisition. Within the IT use criteria, there is scope to consider that authority patterns are needed for the collection, amendment or deletion of data, and for the use of resulting information.

The work of Brown (1997, p.69) and Sambamurthy and Zmud (1999) effectively equated IT governance arrangements with IT governance. However, there was another important element of IT governance present in the literature: the concept of relational mechanisms came from the organisational theorists Galbraith and Mintzberg and was gradually incorporated into the IT governance literature. Although Brown (1999) did not explicitly propose that relational mechanisms were integral to IT governance, other authors were quick to make the linkage, and the conceptual scope and complexity of IT governance grew accordingly.

2.4.2 IT governance arrangements, mechanisms, and effectiveness

Brown (1999) sought to align the effectiveness of governance mechanisms with IT governance arrangements. Hence, formal, structural mechanisms such as groups and formal positions are highly favoured by centralised forms of IT governance. Similarly, horizontal mechanisms worked best in hybrid, or federal forms of IT governance. The purpose of horizontal mechanisms is to reduce the organisational barriers that result from hierarchical reporting arrangements Brown (1999). Some examples of these might be consultative committees or liaison officers.

2.5 Peterson: stakeholders, configurations, coordination, and social dynamism.

Ryan Peterson made a significant contribution to the IT governance literature by connecting the foundation concepts–arrangements and mechanisms–with the next stages of the literature: frameworks and governance systems. In a series of publications from 2000 to 2004 (either as sole or co-author), Peterson began to identify the richness and complexity of the IT governance environment. Building from Brown (1997), Peterson et al. (2000) found that hybrid decision-making arrangements were in fact more complex than had been reported . Like Brown (1999), Peterson et al. (2000) looked to organisation theory to identify the integrating mechanisms for a range of hybrid arrangements. These were categorised as structural integration, functional integration, and social integration mechanisms. From this point, the literature had moved beyond the Brown/Sambamurthy & Zmud (B/SZ) foundation. The shift came from the recognition of human interaction and complexities impacting on the form and function of IT governance. Humans were no longer static decision-makers assigned formal responsibilities, but complex actors that influenced the very design and function of IT governance. Human actors were now assigned the title of "stakeholders" (Peterson et al. 2000; Peterson 2000).

Before moving to a critical view of the stakeholders, behaviour, and social dynamism impacting on IT governance, Peterson (2001) first provided a model that sought to unify IT governance arrangements and mechanisms. For Peterson, arrangements represented the configuration aspect of IT governance, while mechanisms represented the coordination aspect.

2.5.1 Centralisation vs. decentralisation

Whereas Sambamurthy and Zmud (1999) and Brown (1997) asserted the primacy of IT governance arrangements in our understanding of IT governance, Peterson showed greater interest in the social aspects of IT governance, and governance mechanisms in particular.

Peterson noted that while the literature had focused on horizontal, or lateral mechanisms, the concept of mechanisms represented a broad array of dynamic types, constantly changing. This meant that IT governance itself was constantly changing. Peterson highlighted his argument by explaining how IT governance was changing as a concept, and as a social form:

> While the strategic role of IT…and the rise of new—e.g., virtual—organisational forms is documented, what has not been recognised are the associated changes occurring in the governance of IT (Peterson 2000, p.674).
>
> Often, an organization's official IT governance model is not a complete reflection of the actual decision-making for IT…the formally intended allocation of IT decision-making doesn't always coincide with the actual (realized) IT decision-making (Peterson 2004, pp.7–8).

2.5.2 Horizontal (lateral) mechanisms

Brown (1999) acknowledged the contribution of organisation theorists for informing the IS literature of horizontal mechanisms. In particular, to works of Galbraith (1973), Galbraith (1994) and Mintzberg (1979) were highly influential.

> Horizontal mechanisms are structural overlays (such as roles and groups) and non-structural devices (such as physical colocation) that are designed to facilitate cross-unit collaboration (Brown 1999, p.421).

From the organisation theorists, Brown identified common forms of horizontal mechanisms. These included integrator roles, formal groups and teams, liaison roles, linking managers, cross-unit groups, task forces, and standing committees (Brown 1999). She also identified the existence and importance of both formal and informal mechanisms.

> …a "fluid set" of both formal and informal mechanisms is required to achieve lateral integration, and that informal mechanisms offer the advantage of being easier to implement and redesign in highly complex, dynamic situations (Brown 1999, p.424).

The idea of informal mechanisms is necessarily vague, as the informal practices are, by nature, uncontrolled and possibly spontaneous. These could include the communications between managers in different business units. Informal mechanisms have been identified as being important for influencing behaviour, integrating work across business units, developing shared visions, and socialising workplace norms and values (Brown 1999).

Brown (1999) set out to determine whether the choice of coordinating, or horizontal mechanisms used in an organisation were contingent on the form of IT governance in place. She found some support for this proposition.

> This study attempts to expand our rather limited knowledge of mechanism usage for corporate/division coordination of the IS function under centralized and federal IS governance forms. The findings provide evidence that today's CIOs are indeed implementing multiple formal and informal mechanisms in order to facilitate cross-unit collaboration, as advocated by organization theorists (Brown 1999, p.446).

However, a contradiction between the conclusions from the early IT governance research those those of the literature that followed. Both Brown (1997; 1999) and Sambamurthy and Zmud (1999) saw IT governance as limited in form to the decision-making patterns, or arrangements, in place concerning information technology. Brown (1999) had discussed mechanisms from the perspective of management issues that were dependent, or largely contingent, on the choice of IT governance form. Later authors would not see this distinction and mechanisms would become a significant part of IT governance research.

2.6 IT governance archetypes

Through a series of publications in 2004 and 2005, the concept of hybrid arrangements was greatly expanded into a proposed set of archetypes, with a matrix model to match these to particular IT-related decision-making (Weill and Ross 2005, 2004; Weill 2004). This approach significantly increased the complexity in understanding IT governance. Although Peterson had already identified the complexities involved recognising stakeholders and political factors, Weill (2004) and Weill and Ross (2004; 2005) had provided the most complex model of the IT governance form so far. This was a significant extension from Brown and Peterson.

Brown (1997) had recognised the existence of hybrid patterns of IT governance, and Peterson (2001) recognised a continuum existing, from "low hybrid" to "high hybrid", the concept of a single pattern of IT decision-making authorities maintained IT governance as an elegant, simple concept. Even allowing for Peterson's continuum of hybrid patterns, an organisation could only represent one point on that continuum. Each organisation still maintained a single pattern. However, just as Peterson (2004) grew frustrated with the limitations of IT governance as patterns of authority and declared the organisation's capabilities for IT integration as the major issue for research, Weill (2004) rejected the idea of the simple, single pattern. Instead, the author proposed a matrix approach that proposed six forms of archetypes, or decision-making patterns, five different decision domains, and each domain having rights to have input to the decision as well as rights to making the decision. However, the real break with the accepted concept of IT governance at the time came with the proposition that an organisation can have more than one archetype, that each domain–and each set of rights within each domain–can be acted upon by a different archetype. This introduced a much greater level of complexity into the concept of IT governance.

2.6.1 The archetypes of IT governance:

Business monarchy: In a business monarchy, IT-related decisions for the whole enterprise are made by a group of the most senior business executives (perhaps some better terms could have been junta, cabal, or clique). Typically, this group accept input from a range of sources (Weill 2004).

IT monarchy: Instead of business executives, senior IT professionals make the IT-related decisions for the enterprise. There are a number of formations that could make up this group, and Weill (2004) identified an organisation that used an IT architecture group to advise the IT monarchy. However, the monarchy issues the rules for managing IT in the organisation.

Feudal: In a feudal system, the "ruler" of separate business units make their own decisions regarding IT. It was noted that this was not a common archetype in business (Weill 2004).

Federal: This archetype was defined as 'coordinated decision making involving both a center and its business units (Weill 2004, p.6). This was considered to be the most difficult archetype to implement, 'because enterprise leaders have different perspectives from business unit leaders. Enterprise-wide requirements can, and often do, clash with business unit requirements, requiring compromises…'(Weill 2004, p.6).

IT duopoly: Weill (2004, p.6) describes this as a two-party arrangement, where one or more IT executives are in one group, and one (only) business group. There may be more than one IT duopoly in the organisation, but each is responsible for its own decisions.

Anarchy: In an anarchy situation, individuals or small groups are making their own decisions. This arrangement can provide rapid response to needs, and perhaps support creative environments, but they are expensive and difficult to support, and make secure (Weill 2004, p.6).

2.6.2 Decision domains

Weill's IT governance archetypes were applied to five decision domains: IT principles, IT architecture, IT infrastructure strategies, business application needs, and IT investment. These represented an advancement on the IT governance domains of Sambamurthy and Zmud (1999), and reflect the flow of behavioral and strategic influence from corporate governance to IT governance as shown by Weill and Ross (2005).

IT principles reflect the principles and desirable behaviors that guide IT decision-making in the organisation. They also reflect on the role of IT in the business, and the funding mechanisms (Weill and Ross 2005).

IT architecture refers to the core business processes and activities within the organisation, and the technical capabilities and information flows that are needed to drive the these processes (Weill and Ross 2005).

IT infrastructure strategies identify those infrastructure services most critical to supporting the organisation's strategic objectives, and how those services are to be maintained, while **business application needs** refers to how applications can be used within the organisation, and who will "own" these application outcomes (Weill and Ross 2005).

The **IT investment and prioritisation** domain is concerned about identifying, prioritising, and investing in needed technologies, including how value is to be determined (Weill and Ross 2005).

Within each of these domains, Weill and Ross (2005) suggested that there are two levels of decision making rights: the input level and the decision level.

2.6.3 Decision making rights

Whereas previous authors had considered decision-making for IT to be single construct, Weill (2004) identified two components–input rights and decision-making rights–where each component could be served by a different archetype.

Input rights: Who has input into a decision, and who can influence its outcome? Decisions involving IT usually have a wide range of people contributing inputs, and this can include people outside of the organisation. Weill (2004) found that firms overwhelmingly used a form of federal rights for providing input rights, and duopoly being the second most common form.

Decision-making rights Weill (2004) suggested that archetypal pattern for decision-making rights varied across the range of decision domains concerning IT. These domains are: IT principles; IT architecture; IT infrastructure strategies; business application needs; IT investment. The archetypal pattern may be different for each of these, and different from the archetype used for decision inputs.

2.6.4 Contingent factors

Following from Sambamurthy and Zmud (1999), Weill (2004) suggested that the distribution of archetypes within an organisation is also subjected to contingent factors. In particular, the design of IT governance would be influenced by:

- strategic and performance goals
- organisational structure
- governance experience
- size and diversity within the organisation, and
- industry and regional factors.

2.6.5 Concluding comments on Weill

Weill provided a significant development to the conceptual understanding of IT governance. Among the important aspects highlighted in his work are that IT governance exists independently of formal manifestations; that there is a great deal of complexity involved in the previously simple concept of decision-making patterns; and politics is inherent within IT governance (as evident in the choice of names for the IT governance archetypes). Following Weill's contribution, the IT governance literature began to consolidate around the framework perspective: formal, rational, and deterministic. This approach allowed authors to respond to business concerns in a post-Sarbanes-Oxley world, where corporate leaders and directors focused on risk and control.

2.7 IT governance frameworks

By 2004, the only significant use of theory for analysis and investigation of IT governance had been contingency theory. Nevertheless, following Weill's matrix approach (Weill and Ross 2005), the literature became focused on IT governance frameworks: first as conceptual frameworks, then as control frameworks. In the former, Peterson (2004) and Weill (2004) attempted to portray IT governance as a functional, formal construct, while in the latter, authors referred to pre-existing control frameworks such as COBIT(for example, in IT Governance Institute 2004) to inform the IT governance literature.

2.7.1 Peterson and Weill: Conceptual frameworks

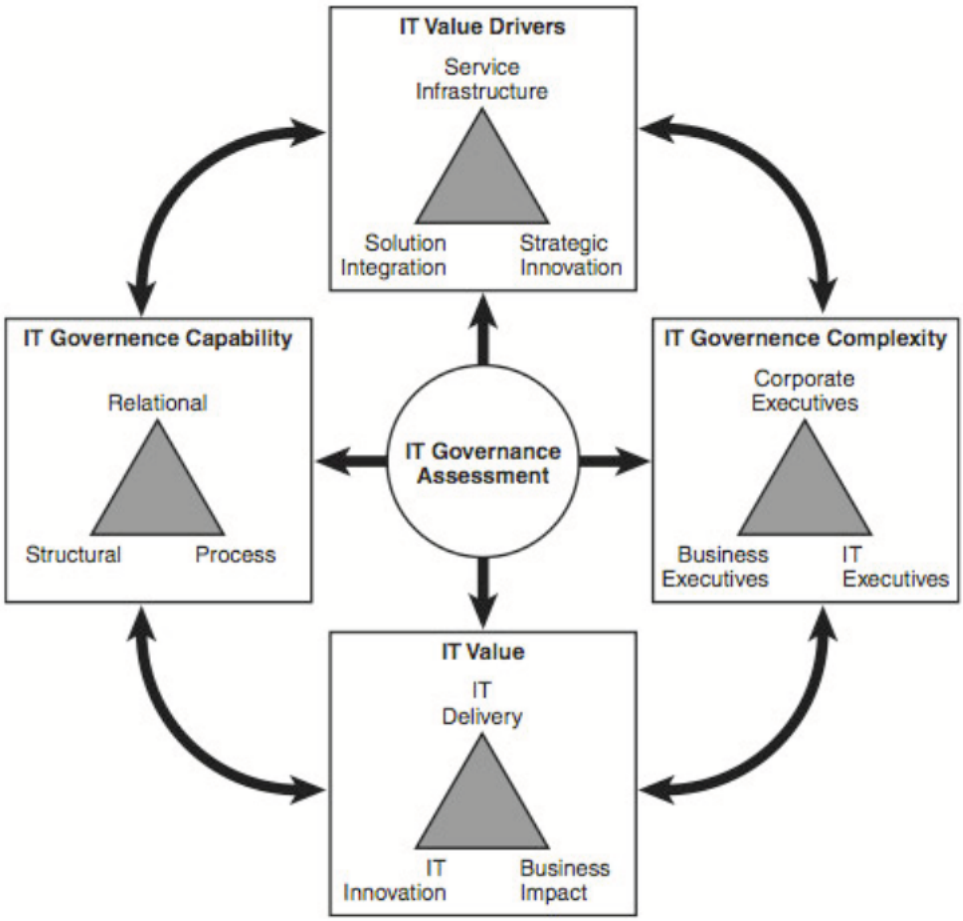
Having absorbed both arrangements and mechanisms into IT governance, and recognising the behavioural complexity of stakeholders and organisational capabilities, Peterson (2004) then introduced a framework for assessing the effectiveness of an organisation's design and implementation of IT governance.

> The…process of IT governance assessment describes a stepwise approach to diagnosing IT governance effectiveness in terms of IT governance value drivers, IT governance complexity, and IT governance capabilities. The IT Governance Assessment Process Model (ITGAP model; Peterson, 2001) describes a holistic, high-level assessment model of IT governance architecture and effectiveness (Peterson 2004, p.19).

Peterson's model is shown in graphic form in Figure 2.1. Like Weill, Peterson saw IT governance as a process for delivering business value, notwithstanding that, as discussed in the previous section, Weill saw IT governance as a motivator for achieving outcomes, not as something capable of achieving the outcomes directly.

Figure 2.1: Peterson's ITGAP model Source Peterson (2004, p.19).

FIGURE 6. IT Governance Assessment Process (ITGAP) Model



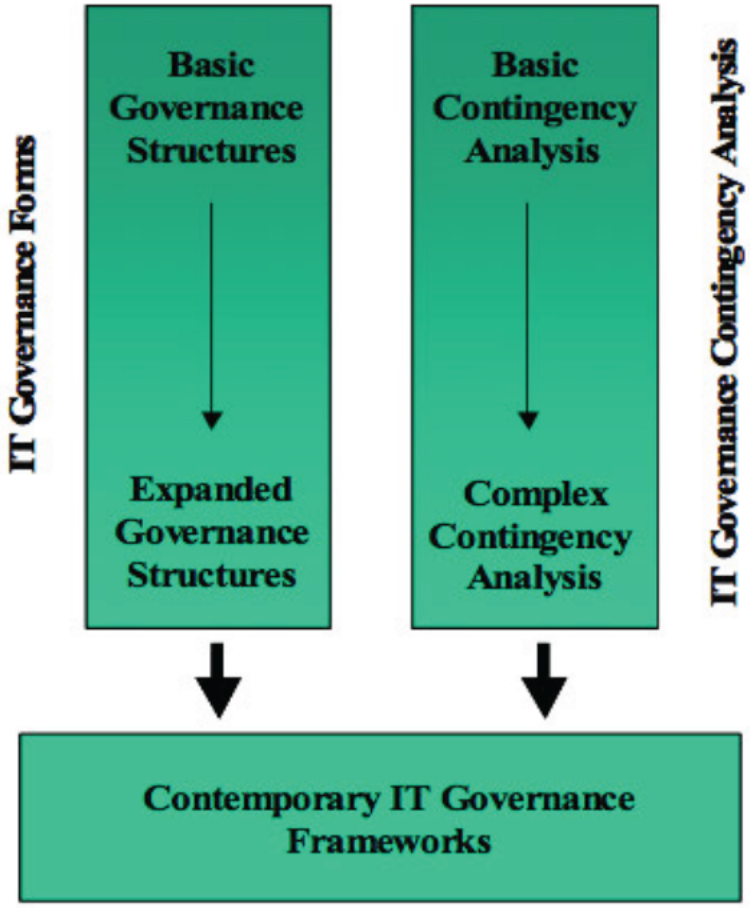
In contrast to Peterson, Weill adopted a matrix approach to designing his framework. This allowed an organisation to map multiple IT governance archetypes to each decision-making domain. An example of the matrix approach can be seen in Weill (2004, p.11). Both Weill's and Peterson's conceptual models could be used for an analysis of the present IT governance situation, as well as a tool for prescribing optimum IT governance design. Peterson's model recognised the variations that could occur around the complexity and capabilities within IT governance, while Weill allowed for a wide variation in arrangements at the decision-making level of IT governance.

2.8 Attempting a conceptual framework

Brown and Grant (2005) used the framework approach to summarise the approaches taken at that time to explain the concept of IT governance. The authors considered the amalgam of the contingency approach and other approaches, such as Peterson (2004), who was effectively the first to combine arrangements and mechanisms into a single concept of IT governance. They also considered the application of IT governance and IT governance structures within the organisation. For Brown and Grant (2005), an understanding of IT governance meant that forms and structures of IT governance had to be analysed in conjunction with the prevailing contingency theory approach, as they illustrated in Figure 2.2. However, the authors failed to advance or expand upon the use of theory to explain IT governance.

Scholars of social theory in general–and Giddens' structuration theory in particular (Giddens 1979, 1984)–would see a great deal of similarity with the contemporary account of IT governance in 2005; IT governance was in fact being described as a social construct of structures, rules, power relations, and discourse. Unfortunately, the opportunity to utilise a rich discipline of theoretical development passed, and the literature was overtaken by events in the corporate world. Post–Sarbanes-Oxley, the IT governance literature became focussed on control frameworks, and issues of compliance and control.

Figure 2.2: Brown and Grant's conceptual framework (source: (Brown and Grant 2005, p.700))



2.8.1 Frameworks for control and risk management

Sambamurthy and Zmud (1999) had recognised the active role of IT governance in organisations, which they called the "spheres of IT activities". They identified these as IT infrastructure management; IT project management and IT use management. The authors considered that these spheres were directed and controlled by the overall IT governance arrangements. In recognising these operational issues, the authors introduced the concept of the control framework to the study of IT governance. Such frameworks assisted the organisation in implementing best-practice processes for service delivery, information security, regulatory compliance and in achieving strategic goals (Violino 2005).

Post 2004, control frameworks began to emerge in the literature as a key tool for meeting the compliance and stakeholder requirements of IT. Academic and practitioner interest in this view of IT governance was prompted by the major corporate failures overlapping the turn of this century (Enron and WorldCom in the US, HIH in Australia). The resulting scandals triggered a strong regulatory response from several national governments. In the United States, this came in the form of the Sarbanes-Oxley Act of 2002, while in Australia, principles of Sarbanes-Oxley have been included in the CLERP9 (Corporate Law Economic Reform Program (Audit Reform and Corporate Disclosure) Act 2003) (Australian Government 2004) amendments to the Corporations Act (Australian Government 2001) and the Australian Stock Exchange (ASX) Principles of Good Corporate Governance (ASX Corporate Governance Council 2003). These regulatory responses have been manifest in academic research in various disciplines, and it should not be surprising that they have also appeared in IT governance research.

As a significant external influence, Sarbanes-Oxley must be incorporated into any study on IT governance, the board of directors, and corporate governance. Post Sarbanes-Oxley, boards of directors and executive officers became more focused on risk management and systems of internal control. IT governance authors began to introduce existing management control frameworks as IT governance frameworks. Compliance and control concerns were used to promote frameworks such as COBIT into the literature (c.f. Damianides 2005; Kaarst-Brown and Kelly 2005; Leih 2006).

The common frameworks are the COSO (Committee of Sponsoring Organisations of the Treadway Commission) Integrated Framework for financial reporting and COBIT for IT governance (Damianides 2005). COBIT was developed as a tool to assist management plan for disaster recovery and business risk (Hawkins et al. 2003). Although COBIT is primarily a framework for internal controls, it strongly supports the principles of IT governance by resulting in:

- Clearly defined and documented processes and policies,
- Clearly established responsibilities,
- Strong support from senior management,
- Appropriate communications to concerned stakeholders, and
- Consistent performance measures (Hawkins et al. 2003, p.28).

COBIT has continued to be used as a framework for linking business goals with IT governance (Ridley et al. 2004; Van Grembergen et al. 2007).

2.9 IT governance, corporate governance, and the board of directors

In the early development of IT governance in the academic literature, corporate governance was a significant contingent factor in the form of IT governance, but no direct relationship with it–or with the board of directors–was explored. However, since 2004 the IT governance rhetoric strengthened from “contingent on” to “integral to” corporate governance.

The extent to which IT governance research supports the board in its corporate governance role requires further investigation. The IT governance and IS management literature has been offering wide-ranging advice to corporate governance practitioners concerning what boards should be doing and why. Boards have been advised that they must oversee the IT function (Nolan and McFarlan 2005); boards should influence the management of IT (Kambil and Lucas Jr. 2002); and boards should engage in risk planning for IT (Huff et al. 2004). This level of research has failed to provide a theoretical bridge between corporate and IT governance, which may in some way explain the unwillingness of boards, chairpersons and directors to be involved in IT governance research (a good example of this is discussed in Jordan and Musson (2004)). Nevertheless, there is a real need for boards and those charged with corporate governance to be active participants in IT governance. Avison et al. (2006) provided a timely reminder, via a series of case studies of significant failed IS projects, of the dangers of directors and executive managers' remaining aloof and uninformed of IT/IS issues (managerial unconsciousness).

Regardless lack of alignment of corporate and IT governance in the literature, there are unifying elements in their respective concepts, particularly in the aspects of accountability and control. Whilst the board has corporate governance responsibilities set by national legislatures and policy makers, there are broad principles which are independent of national considerations. The OECD report into corporate governance practices (OECD 2004) detailed broad principles with which to build an effective corporate governance framework. These principles, according to the OECD (2004) include:

- corporate governance should promote transparency in its operation and its impact on the financial markets;
- material information is disclosed in a timely and accurate manner – the governance and management of the company should be transparent;
- The responsibilities of the board, which include the monitoring of management, providing strategic guidance and acting on a fully informed basis, with due care and diligence.

PricewaterhouseCoopers and CPA Australia summarised the principles of corporate governance into three basic principles (PriceWaterhouseCoopers 2005):

- Transparency – the board communicates a true and fair view of the organisation;
- Accountability – is the board acting responsibly, and is it taking responsibility?
- Control – are the board, management and the organisation doing the right thing?

The principles established by PricewaterhouseCoopers in particular provide a concise framework for further research investigating the relationship between corporate governance and IT governance. If IT governance has a role in corporate governance and can be relevant to a board of directors, then it would have to demonstrate its application to these principles. Korac-Kakabadse and Kakabadse (2001) recognised the need to seek a theoretical bridge between the two literatures. Using stakeholder theory, the authors argued that boards should take a greater interest in IS/IT issues.

Interest in bridging the literatures has also begun to grow in other disciplines, such as accounting (as in these Australian publications: Gillies 2005; Musson and Jordan 2005), where researchers have consistently argued for a greater integration between the two concepts.

2.10 IT governance, power and politics

Despite a lack of explicit recognition of power and politics within IT governance, these aspects have not escaped the attention of some authors within the literature. One of the writers to explicitly recognise the presence of political motivations affecting the effectiveness of IT governance was Ryan Peterson:

> A political view of IT governance suggests…that the debate concerning centralization versus decentralization is used primarily to further the goals of specific stakeholders, in ways that might not help to meet enterprise goals (Peterson 2004, p.10)

Following on from this recognition, Peterson recognised the likelihood of an emergent and/or deviant form of IT governance, that will differ from the intended, or expected form of IT governance.

> …the formally intended allocation of IT decision making doesn't always coincide with the actual (realized) IT decision making. Some executives may delegate their IT decision rights (deviated IT governance), whereas others outside the official structure may actually influence IT decision making (emergent IT governance). IT governance is thus not only defined by formal organizational positions, but also by the power and expertise to influence and participate in IT decision making (Peterson 2004, p.18).

A form of IT governance that differs from a formal, functional view holds problems for the academic view of IT governance, and also for professional practice. Differences from formal roles and relationships represent uncontrolled variances in behaviour, which are identified as variations from "desirable" behaviour.

> Over time, important gaps emerge between desirable and actual behaviors. Assessing and diagnosing IT governance can help close these gaps. Thus, a critical activity in designing effective IT governance architectures is devising a diagnostic system to assess the actual and intended IT governance model, and its effectiveness (Peterson 2004, p.18).

Peterson's view received limited support from Weill and Ross (2004) when they stated that IT governance encouraged desirable behaviour. All of these authors reflected a common philosophical and sociological view of power, which held that power flowed from the top of a social organisation, and was largely concerned with subjugation and central authority. They also reflected a view of politics that can be traced back to Machiavelli (1952), who saw politics as a set of manoeuvres within a power structure to bring about personal gain. A fuller discussion of power and politics will be presented in Chapter 3, but for now it is sufficient to recognise the context within which power is treated in the IT governance literature.

Rather than consider power to be in the essence of governance, some authors have recognised that the effectiveness of IT governance depends on the power of, and power relations between, senior decision-makers (see, for example, Wilkin and Chenhall 2010), or just as important, the relative powerlessness of IT staff (for example, Avison et al. 2006). The important point is that when power is identified and

discussed within the IT governance literature, it is considered *external* to IT governance, something that is in the wider organisation. This is especially the case for Johnstone et al. (2006), who discussed governance and power in a project situation. Even here, power is something that is held and exercised either outside of IT governance, or by decision-makers to whom IT governance applied, but still was not considered *internal,* or the essence of IT governance.

One serious attempt to investigate the role of power within the nature of IT governance was undertaken by Xue et al. (2008), where Weill's archetypes were analysed using a number of factors, one of which was the power of the IT function. It found that the level of influence that IT professionals can exercise, and the type of archetype that could be effective, has some dependency on the strenght of power held in the organisation's IT function.

The following chapter offers a useful review of the development of theories on power, especially within social and organisation theories. On reading these developments, a reader might conclude that while the use of power in the IT governance literature—formal, top-down and bureaucratic—follows a long tradition from other literatures, there are alternative views. The writings of French philosopher Michel Foucault offer a particular insight that could be useful to task of seeking further insights to IT governance, and these are reviewed in Chapter 3.

2.10.1 Power, politics, and information systems

The information systems and information technology literature has long recognised the importance of power and politics in their disciplines. An early case study in power and politics described how some stakeholders (accountants) of an accounting information system implementation tried to frustrate or modify the project to suit their own priorities and to retain the power they held using the old system: the shortcoming of that old system had actually reinforced the reliance the organisation had placed on these accountants, and this reliance would no longer exist to the same extent once the new system was implemented (Markus 1983)[6]. Much later, Jasperson et al. (2002) presented an extensive survey of the extant IS/IT literature concerning power. Although many of these publications involved aspects and domains that concern IT governance, they remained unreferenced in the IT governance literature.

2.10.2 IT governance as a social and behavioural construct

Although this literature review has identified instances of IT governance being recognised as a social and behavioural construct, the research has continued in the formal, functional approach, as evidenced by Bowen et al. (2007). The authors presented a deterministic model (shown in Figure 2.3 on page 56) that proposed that IT governance structures and processes lead to measurable outcomes. This is at odds with the social and behavioural view of IT governance proposed by Weill and Ross (2004). Instead of focusing on direct outcomes of IT governance, Weill and Ross (2004) proposed that IT governance influenced behaviour, which in turn resulted in outcomes.

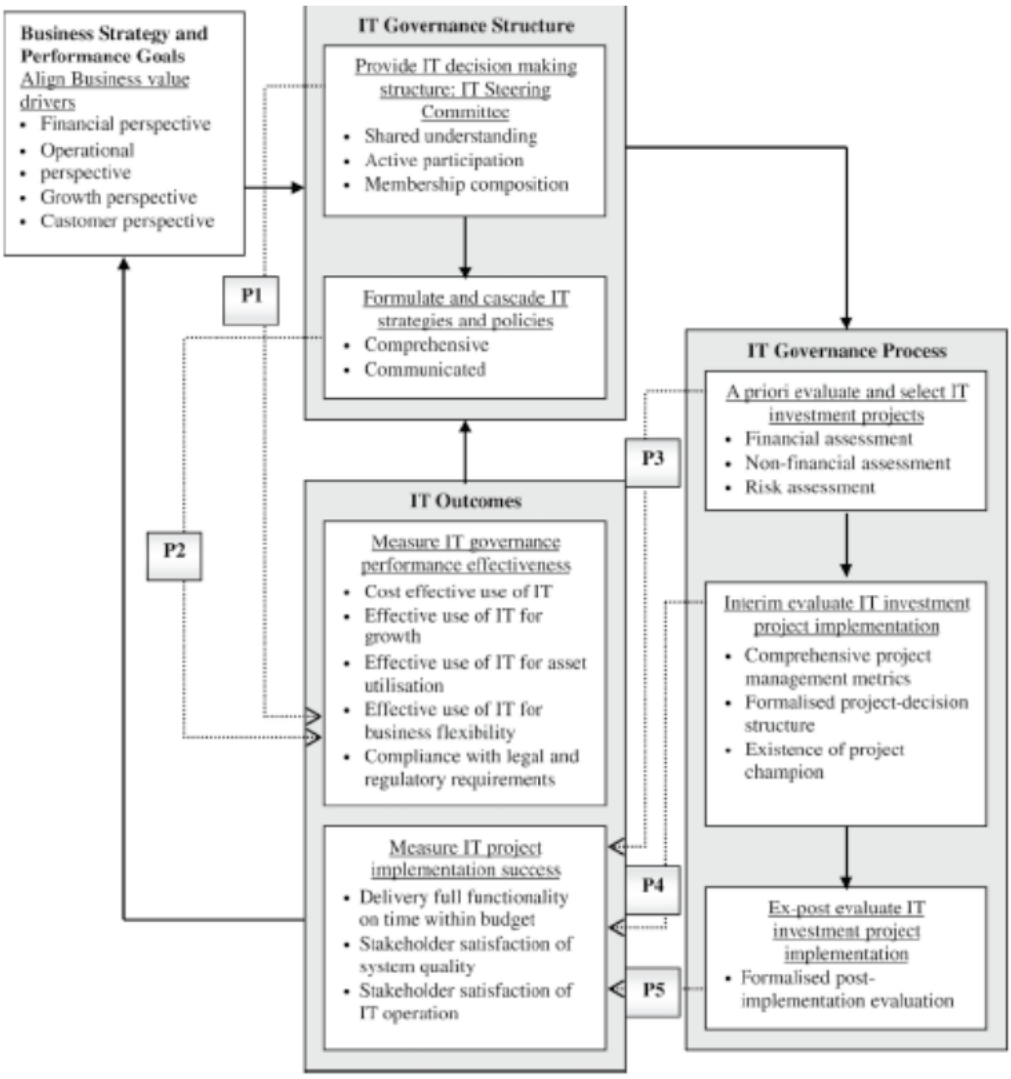
6. This case study was later praised by Lee (1989) as an exemplar in case study presentation.

Similarly, recent studies into the role and involvement of the board of directors in IT governance has returned to contingency theory, as evidenced by Bart and Turel (2010), rather than exploring issues of power and politics. Nevertheless, Bart and Turel (2010) did at least suggest that theoretical developments in agency theory could help to explain the degree of effectiveness in board involvement in IT governance:

> …several theories suggest that if board responsibilities are not executed optimally (i.e.,board members do not ask the *right* questions and put the *right* emphasis on IT related issues) a firm's performance may suffer. For example, agency theorists …and others representing a "knowledge based view of the firm"…posit that the reason board members are not asking the right questions of management may stem from either "principal/agent information asymmetry" or "motivational factors." Bart and Turel (2010, p.167).

There has been, therefore, a belated (and minimal) recognition of the role of *people*–agents, actors, decision-makers–in IT governance. This contrasts with the bland constructs offered by deterministic world views such as contained in contingency theory, which reduce individuals to mere constructs.

Figure 2.3: A functional view of IT governance Source: Bowen et al. (2007, p.196)



2.10.3 IT governance and other disciplines

It should not be surprising that the dominant formal, functional, and rational view of IT governance has continued in the literature as authors seek to align it with other disciplines. Such was the case with Wilkin and Chenhall (2010), which sought to align IT governance knowledge with the accounting and accounting information systems literature. With a heavy focus on the control aspects of IT governance and the control framework approach, the authors unsurprisingly found similar features within the accounting literature.

2.11 Future directions for the IT governance literature

Although there have been attempts to provide theories about IT governance, these attempts have been both very normative in their approach. The dominant themes in these attempts has been the use of contingency theory, and the willingness to view IT governance as a functional, procedural framework. Contained within these attempts—almost covertly—have been social and behavioural elements that have been important issues in social theory: knowledge (especially as portrayed in discussions of social and relational mechanisms), power, and discourse (again as protrayed as social and relational mechanisms—communications being the key element in building lateral mechanisms). This thesis takes these elements and uses them to build the foundations of a theoretical framework of IT governance. When IT governance is viewed as a social construct, it can be viewed as dynamic, emergent and evolutionary concept.

The literature review presented here has shown that the IT governance literature has need of a theoretical development involving the social and behavioural aspects of the concept. Such a development will benefit future researchers by allowing them to evaluate a dynamic—as opposed to a static—construct of IT governance. To do so requires a view of IT governance that is not deterministic. IT governance becomes a construct that can be constantly affected by its environment, and perhaps change its environment in turn.

This approach need not try and invalidate what has already been written; rather, a social view of IT governance supports much of what has been written and offers a greater depth of understanding. The following chapter provides a review of the relevant parts of social and organisational theory that will be necessary to construct a theoretical framework for IT governance.

Chapter 3: Relevant issues in social theory

3.1 Introduction

The previous chapter reviewed the literature for IT governance. It concluded that the literature was heavily weighted towards the normative and functionalist view of IT governance, and that the absence of an ontological framework of IT governance has contributed to diverse views of what IT governance is, and what it can achieve. The review also found that there is a tacit recognition of the social aspects of IT governance, particularly the presence of power, knowledge and discourse within the practice of IT governance. This chapter will now provide a brief review these social aspects, followed by a recognition of the approach of French philosopher Michel Foucault—a theorist whose work can provide important insights into the ontology of IT governance.

Social theory, for the purpose of this thesis, is understood to represent the theoretical imagining of social "things" (Elliott 2010). When placed in the context of a business organisation, social theory is referred to as organisation theory[7]. Organisation theory has developed from Silverman (1970), as he set out a framework for investigating and viewing business organisations. Of particular note for this research is Silver-

7. Organisation theory has been referred to as the *sociology of organizations* (Clegg et al. 2009b, p.7).

man's recognition of rules, roles and structures as "artefacts" of a deeper ontology, and not in themselves representative of an organisation. Organisation theory now represents a wide body of work, as evidenced by Clegg et al. (2006) and Clegg and Haugaard (2009b).

This chapter will briefly review the relevant social and organisation theory literature pertaining to power, knowledge and discourse. Due to the large body of publications available for review, only key authors will be covered in this chapter. The reader will then be introduced to the work of Michel Foucault who, most prominently in the literature, offers the possibility of a framework that covers the three relevant areas.

3.2 Studies in power and knowledge

The "classical" view of power viewed power as something that flowed from society as a whole to those who governed (see especially Hobbes 1952). Disciplinary power was held to be at the sole discretion of the monarch. This view led to the concept of "power over" others, a coercive power where the rights and liberty of many are subjugated to the few, for the benefit of all (Haugaard and Clegg 2009).

Nevertheless, there have been broad trends in the academic developments of the concept of power. The essentially modernist, hierarchical and bureaucratic form of power developed by Weber (1952) builds upon the economic and repressive model of power proposed by the monarchial commonwealth of Hobbes (1952). Production and wealth are the result of an imposed central will upon a social group (Weber 1952).

> In general, we understand by "power" the chance of a man or of a number of men to realize their own will in a communal action even against the resistance of others who are participating in the action (Weber 1952, p.135).
>
> Modern officialdom functions in the following specific manner:
>
> I. There is the principle of fixed and official jurisdictional areas, which are generally ordered by rules, that is, by laws or administrative regulations.
>
> 1. The regular activities required for the purposes of the bureaucratically governed structure are distributed in a fixed way as official duties.
>
> 2. The authority to give the commands required for the discharge of these duties is distributed in a stable way and is strictly delimited by rules concerning the coercive means, physical, sacerdotal, or otherwise, which may be placed at the disposal of the officials.
>
> 3. Methodical provision is made for the regular and continuous fulfilment of these duties and for the execution of the corresponding rights; only persons who have the generally recognised qualifications to serve are employed.
>
> In public and lawful government these three elements constitute "bureaucratic authority." In private economic domination, they constitute bureaucratic "management" (Weber 1952, pp.143–144).

A contrasting view of power is the political view of power, where power is the means to influence others to do your will (Machiavelli 1952). Some contemporary views of power interconnected with knowledge (such as Foucault's concepts of power relations and governmentality (Foucault 1978, 2002a)) have developed more from Machiavelli's concept of subtle power shifts and political intrigue than Weber's or Hobbes' view. Where Hobbes (1952) recognised "power over others"—the power of those higher in the hierarchy to subjugate those lower down—Foucault saw power as only existing within power relations, not individuals (Powell and Chamberlain 2011).

3.2.1 Who holds power?

The Enlightenment philosopher Hobbes (1952) identified the holder of true power: the monarch. Hobbes renounced the "divine right" of the monarch, finding instead that the monarch's power flowed from society upwards to the head of society. Whilst some power was subsequently delegated to court officers and nobles, the monarch help the true power — disciplinary power (in some cases, even the power to choose life and death) (Hobbes 1952). This model of power is a close proximation for the more recent modernist organisation — one that is characterised by centralised power, and a rational, top–down delegation of power (Clegg 1990). However, a contrary view of power soon developed from Niccolò Machiavelli, who saw power in the subtle influences and manipulations of others. Power belonged to the person who could persuade others to do their bidding (Machiavelli 1952).

3.2.2 Contemporary views: power is everywhere

The study of power, politics, governance, and government (the embodiment of governance) has been fundamental to our understanding of society. Since Aristotle categorised six systems of government[8] (see Book III, Chapter 7 of Aristotle 1952), this has proven to be a complex endeavour—and one that cannot escape associations with knowledge—as Henry Mintzberg noted in the opening to his book '*Power in and around organizations*':

8. Aristotle's six categories were kingship/monarchy, aristocracy and polity as "natural" forms, and tyranny, oligarchy and democracy as "deviant" forms.

> An expert has been defined as someone with no elementary knowledge. Power seems to require a good deal of elementary knowledge. This is perhaps why everybody seems to know what it is except the experts. They debate definitions of power endlessly, and how it differs from influence, control, authority, etc., etc. Yet ordinary people seem to have no trouble with the concept. They know what it means to have power and they can sense who has it. …
>
> …
>
> This book opens with the premise that … what is of interest in the study of power in and around organizations is who gets it, when, how, and why, not what it is. If you don't know what power is, then perhaps you should read another book (Mintzberg 1983, p.1).

Mintzberg may be correct, and perhaps power is something that is intrinsically understood, but ultimately there is no single idea of power (Haugaard and Clegg 2009). Studies in both organisation theory (for example, Hardy and Clegg 2006), and information technology reflect this view (for an excellent survey on the subject, see Jasperson et al. 2002). However, the study of power has not been dominant in the field of IT governance.

In a seminal work on power studies in organisation theory, Hardy and Clegg (2006) traced the development of power studies within organisation theory, noting that it followed the developments within social theory. They noted that Weber's concept of domination and the hierarchies considered essential to control organisations had developed alongside Marx's linking of economic production with class struggles and domination (as described in Marx 1952). Of particular interest to Hardy and Clegg (2006) was Foucault's different approach to power.

> One of Foucault's most telling blows on modernist assumptions was his observation that knowledge and power are inseparable. He regarded the concept of ideology…as a 'falsehood' whose relational opposition to 'truth' can never be too far away (Hardy and Clegg 2006, p.764).

With Foucault's contribution comes the idea of "truth" being joined to power and knowledge. For Foucault, truth, knowledge and power are not constructs that can be studied or considered separately. There is a circular relationship between power, knowledge, discourse and truth:

> Foucault showed that language cannot mask anything; it simply represents possibilities. No assumption of reality exists as anything more than its representation in language and, consequently, no situation is ever free from power. Moreover, with knowledge only comes more power (Hardy and Clegg 2006, pp.764–765).

3.2.3 Power and knowledge

The study of knowledge is vast and encompasses many disciplines over a long period of time. Knowledge has always been seen as correlating to an ontological sense of "being", making the recognition of knowledge essential in a framework of IT governance.

> Knowledge, like being, is a term of comprehensive scope. Its comprehensiveness is, in a way, correlative with that of being. The only thing which cannot be an object of knowledge or opinion…is that which has no being of any sort—in short, *nothing* (Adler 1993a, p.682).

Nevertheless, within organisation theory, the study of knowledge is never far from the study of power. From the earliest scholarly attempts to break from modernist assumptions of the organisation, studies of power and knowledge have coexisted. Mintzberg (1983) saw the control of bodies of knowledge (and technical knowledge in particular) and technical skills as two of the prime bases of organisational power. Knowledge, then, is something controlled by the powerful. This view has strong echoes of Nietzsche's definition: 'Knowledge works as a tool of power. Hence it is plain that it increases with every increase of power' (from Aphorism 480 (March–June 1888) Nietzsche 2010b, p.35574).

As organisation studies began to envisage the post-modern organisation, knowledge began to be viewed as "social capital", entrusted to the newly-defined knowledge worker. The dependence of organisations upon such workers highlighted the need for trust and "soft" power in order to exercise control over them. Trust had now become an issue of power and knowledge (Clegg et al. 2009a).

> In this view, trust and control relations are generative mechanisms that play a role in the production, reproduction, and transformation of expert power…Trust and control are closely associated (Clegg et al. 2009a, p.87).

This view of power and knowledge is particularly relevant to the study of IT governance. Many of the mechanisms attributed to IT governance are control and relational mechanisms, built upon the transfer of knowledge. As the previous chapter showed, IT governance mechanisms had their origins within the studies in lateral organisations by Mintzberg (1979), Galbraith (1973) and Galbraith (1994) where organisations overcome hierarchical barriers by allowing information and knowledge to flow across boundaries. Sambamurthy and Zmud (1999) built upon this and provided an early recognition of the importance of shared IT knowledge. Nevertheless, the actual role of knowledge lay hidden within the IT governance literature, making it necessary to imply its roles. A theoretical framework for IT governance must be able to recognise the role and importance of power, knowledge and trust within IT governance.

3.3 Studies in organisational discourse

The field of organisational discourse emerges out of many disciplines, including the philosophy of language and rhetoric (van Dijk 2011). With this heritage comes the tradition of interpreting the world through the close analysis of text. Adler (1993b) shows how the study of language claims a heritage from Saint Augustine (1961; Adler (1994) to Wittgenstein (1958). Until the 1970's, the study of language and discourse was still dominated by the study of linguistics (McHoul and Grace 1993; van Dijk 2011), and was not considered as a vehicle for social change.

By the late 1970's the study of sociology and organisational studies undertook what is referred to as the "linguistic turn", where language began to be seen as an active force in the constitution of societies and smaller organisations. Discourse in particular began to be seen as more than a linguistic construct, and instead as something that provides deep insights to the form and behaviour of society and organisations (Alvesson and Kärreman 2000a, b; van Dijk 2011).

Organisational discourse is currently attracting researchers from different disciplines, such as linguistics, philosophy, sociology and cognitive psychology. Discourse theorists are able to rethink and recast their understanding of the organisation. However, the popularity of organisational discourse for researchers has not been without problems. With its broad range of supporting disciplines, and applications to the study of organisations, organisational discourse has been difficult to define. Alvesson and Kärreman (2000b) classify the different applications of discourse analysis differently to van Dijk (2011), and both are quite different to Phillips and Hardy (2002). For the purposes of this thesis, however, it is useful to categorise the many aspects of organisational governance according to two dimensions – the focus of enquiry (the analysis of texts and language vs. the analysis of the organisation beyond language) and the perceived role of discourse (discourse represents the organisation vs. discourse constitutes and shapes the organisation).

3.3.1 The role of discourse

The field of discourse analysis appears to be split into those who view discourse as representative of an organisation, and those who believe that discourse constitutes, or creates the organisation (Alvesson and Kärreman 2000b). The two views are not necessarily exclusive to each other, with some analysts promoting methods of analysis that allow investigation into an organisation's structures and behaviour, and also into the importance of discourse on social change (Fairclough 1992, 2003; Searle 1969). Fairclough explained it issue this way:

> My own approach to discourse analysis has been to try to transcend the division between work inspired by social theory which tends not to analyse texts, and work which focuses upon the language of texts but tends not to engage with social theoretical issues. This is not, or should not be, an 'either/or'. On the one hand, any analysis of texts which aims to be significant in social scientific terms has to connect with theoretical questions about discourse (e.g. the socially 'constructive' effects of discourse). On the other hand, no real understanding of the social effects of discourse is possible without looking closely at what happens when people talk or write (Fairclough 2003, pp.2–3).

Grant et al. (2004) provided an excellent introduction to the increasing recognition of discourse in organisational studies, and quoted the following to support their interest in the idea of discourse constituting organisations:

> Organizations exist only in so far as their members create them through discourse. This is not to claim that organizations are 'nothing but' discourse, but rather that discourse is the principle means by which organization members create a coherent social reality that frames their sense of who they are (Mumby and Clair 1997, p.181).

The change in the perceived role of discourse is largely due to the entry of critical theorists into discourse analysis. Authors have seen discourse as the extension of power and power relations within an organisation, giving discourse the power to effect change (Graham 2005).

3.3.2 The focus of enquiry

Discourse analysis can be categorised by two types of enquiries – those that are based on the analysis of language, text or other forms of communications, and those that are not. Discourse analysis methods that are based on a linguistic-style of analysis are usually empirical and structuralist (searching for meanings in the structure of the text) (van Dijk 2011). There are many styles of analysis available to the researcher, such as Searle's Speech Acts method (Searle 1969, 1979) and Fairclough's text-oriented discourse analysis (TODA) (Fairclough 2003). With the increasing use of critical theory in discourse analysis, many prominent authors (Cynthia Hardy, for example) have incorporated a critical discourse analysis (CDA) style (Hardy and Phillips 2004).

By focusing on the role of power within discourse, the critical perspective has allowed researchers to use text-based discourse analysis for investigating the constitutive role of discourse (Hardy and Phillips 2004). This focus is also shared by studies that are not language-based. These studies are typically interpretive in approach, often involving critical analysis. In this approach, language is seen as being primarily constructive of social reality, '…through its effects on actor's thoughts, interpretations and actions, of social and organizational reality' (Heracleous and Hendry 2000, p.1255). The work of Giddens (Giddens 1984; Heracleous and Hendry 2000) and Foucault (Hardy and Phillips 2004; Mumby 2004) are representative of this style.

Two theorists who offered theoretical frameworks that incorporated—to varying extents—aspects of power and discourse were Giddens and Luhmann. Both offered a social theory that was a variation of systems theory. They are presented in the following section because the later period of the IT governance literature featured a systems approach to IT governance (see especially IT Governance Institute 2003).

3.4 The social systems approach

3.4.1 Giddens and Structuration Theory

Giddens (1979; 1984) is a sociologist who became frustrated with what he saw as the eternal competition between agency (function, actors, agents, action, activity) and structure. His theory of Structuration sees a duality between agency and structure where action forms and changes structures, while structures, in turn, inform agency. In forming his theory, Giddens saw discourse and its modalities as the enabling power to make these changes (Giddens 1984).

> By the duality of structure, I mean the essential recursiveness of social life, as constituted in social practices: structure is both medium and outcome of the reproduction of practices. Structure enters simultaneously into the constitution of the agent and social practices, and 'exists' in the generating moments of this constitution (Giddens 1979, p.5).

Giddens offers a link between systems theory and organisational discourse. Using structuration theory, IT governance becomes a recursive system, where structure is initiated and influenced by actors, who in turn are influenced by structure. As Stones (2009) notes, although structuration theory refers to the duality of structure, there is really a duality of both structure and agency. At the intersection, or hinge of this dual relationship lies power, communication and an interpretive method of understanding (Stones 2009).

Giddens' ideas on the role of power were complex but also innovative. Rather than confirming the critical theorists' view of power as a one-dimensional instrument of domination, Giddens envisaged power as being more pervasive and, importantly, a positive force, one that is necessary for production (Clegg 1989; Stones 2009). This broader view of power was influential on organisational theorists such as Clegg (1989) and was further developed by Michel Foucault (Boyne 1991).

Structuration theory offers much to the study of IT governance. Its introduction of power at the intersection of agency and structure provides a theoretical framework for understanding the relationships of structures, governance mechanisms and power relationships uncovered in the IT governance literature. However, its focus on power as a means of enabling and transforming structures, and of achieving outcomes (Stones 2009) suggests that this is a useful theory for IT governance. Giddens' theory has already been used and adapted in various studies of information systems management (see, for example, Askenas and Westelius 2000; Brown 1998; Caglio and Newman 1999; DeSanctis and Poole 1994). However, structuration appears to be less useful for finding that elusive point of difference between IT/IS management and IT governance.

3.4.2 Luhmann's Social Systems

Luhmann's theory of social systems (Luhmann 1986, 1995) appears to complement Giddens' Structuration theory, but it is derived from different disciplines and seeks different goals. Nevertheless, there are similarities. Luhmann (1995) refers to self-referential, autopoietic systems to describe social systems that are self-sustaining, self-organising, communicative systems. Like Giddens (1984), Luhmann's vision of a system centres on the concept of recursiveness and communication. However, while Giddens' motivation was to move beyond the debates of structure vs. agency, Luhmann's vision is of a general theory of all social systems. Where Giddens' theory centralises around the interaction of the actor and social structures, Luhmann (1995) ignores the actor entirely.

Luhmann (1986; 1995) perceives society as a social system where human actors are part of the environment, but not central in the system. It is this aspect of Luhmann's social systems theory that has drawn much criticism (Bechmann and Stehr 2002; Moeller 1996). However, as Bechmann and Stehr (2002) indicate, this controversial position is not as radical as it first appears. Rather, the authors argue that it is the continuance of a long tradition enquiry. Renaissance thinking removed man from the centre of universe. Darwin's theory of evolution deprived man from a special place

in evolution and Freud removed a belief in self-control and autonomy. Now Luhmann has removed humanity from the centre of society. In doing this, Luhmann has separated social systems from physical systems and reduced them to their barest representations. Social systems can now be analysed free of all of the complexities human physical and psychic systems (Moeller 1996).

Luhmann's social systems theory (Luhmann 1995) has much potential for further investigation of IT governance. It has the possibility of offering strong explanations of the role of communications and knowledge within IT governance as a system. Like Giddens (1984), the social systems theory is recursive and communication-centric, but is also self-organising and self-referential. However, at this point of theoretical development, a theory that does not explain the roles and interactions of individual actors would be difficult to propose.

3.4.3 Limitations in using a systems theory approach

Giddens and Luhmann represent, in their own way, advances in thinking on systems theory. They remove systems theory from the restrictions of formal, functional thinking and present social systems as consisting of complex interactions, communications and structures. Each, to varying extents, offers a potential view of IT governance that sets out its relationship with other systems and the complexities that exist within. However, with regard to seeking answers to this set of research questions, each approach suffers from one important limitation or another.

Structuration offers a model for explaining the interactions between actors and structures in a way that would address certain criticisms of the IT governance literature. Like Luhmann, Giddens' theory of structuration sees social systems as self-referencing and self-organising (referred to as the duality of structure) (Mouzelis 1989). However, unlike Luhmann (and as will be seen in the following section, unlike Foucault), Giddens' theory retains the subject/actor/agent as a central component of creating meaning within the social system (Leydesdorff 2010; Whittington 1992). When compared to Foucault's idea of the "double phenomenological reduction (see section

3.5.7, starting on page 81), which removes "meaning" from the analysis, Giddens' structuration theory would appear to be best suited to management rather than governance theorising. A review of the management literature reveals that structuration theory is being successfully used in management theory (as shown in Whittington 1992). This researcher has therefore concluded that structuration theory is less useful for developing an ontology of IT governance.

One critical aspect of Luhmann's social systems theory is problematic for this thesis. Luhmann's explanation of a self-referencing, self-correcting and self-maintaining social system, while containing many similarities to Giddens' structuration theory, essentially described a closed system (Leydesdorff 2010). The evidence of the case study presented in Chapter 5 does not support the idea of IT governance being a closed system, and therefore the researcher could not continue with Luhmann's social system as a basis for a theoretical framework.

One theorist who offered the possibility of a framework for IT governance that explores its power, knowledge and discursive aspects of its nature is Michel Foucault. Foucault offered an approach to discourse studies that is of particular relevance to this thesis. His work on discursive formations (Foucault 1971) was a radical approach, as it rejected any linguistic analysis or any search for truth or meaning within the discourse. Instead, Foucault searched for what allowed individual statements in a discourse to exist, come together into a formation, and then disappear. The remainder of this thesis is an exploration of this approach and its suitability as a lens for analysing IT governance.

3.5 Michel Foucault (1926–1984)

A reader of contemporary studies in power, knowledge, or discourse will inevitably find references to Michel Foucault, even from the many writers who disagree with his conclusions. His work has been labelled controversial and vague, yet he commands references in encyclopedias and reference works dealing with history, philosophy, sociology, medicine, social theory and organisation theory. Burrell provided a very good summary of Foucault's contribution and status:

> Michel Foucault was Professor of the History of Systems of Thought in Paris from 1970, publishing a series of texts…in which a number of common themes are discernible, but which were not designed to produce, in any programmatic way, a grand theoretical edifice. Rather, through the medium of a mass of detailed analysis, Foucault was often keen to confront and reject received opinion. In the place of widely-held views, he substituted tentative hypotheses which invite, indeed beg for, heated discussion and debate (Burrell 1988, p.222).

By the time of Foucault's death in 1984, he had left behind a confusing array of publications and lectures that few scholars have read and analysed deeply. Nevertheless, there is some level of consensus that his work could be divided into three broad themes: archaeology, genealogy and the 'care of the self' periods (Scheurich and McKenzie 2005). These are not distinct periods, and enough overlap occurs for some scholars to discern a developing framework or theme centred around power and knowledge, and society's use of power—both disciplinary and knowledge—to shape the individual (Scheurich and McKenzie 2005). Foucault came to see the individual as a product of discourse, of power, knowledge and the prevailing truth—the result of "correct training"(Foucault 1980a, 2010a; Townley 1993).

3.5.1 Foucault's approach to power

Foucault set about dismantling the traditional assumptions of power in society. While he grounded his analysis within a rich philosophical tradition, he was not afraid to challenge and re-conceptualise the very concept of power.

> My general project over the past few years has been, in essence, to reverse the mode of analysis followed by the entire discourse of right from the time of the Middle Ages. My aim, therefore, was to invert it, to give due weight, that is, to the fact of dominion, to expose both its latent nature and its brutality. I then wanted to show not only how right is, in a general way, the instrument of this domination…but also to show the extent to which, and the forms in which, right (not simply the laws but the whole complex of apparatuses, institutions and regulations responsible for their application) transmits and puts in motion relations that are not relations of sovereignty, but of domination (Foucault 1980b, pp.95-96).

One of Foucault's key contributions was to challenge the concept of power as being the preserve of a central holder. Instead, he held that power exists throughout society, with many manifestations. Power is everywhere.

> Moreover, in speaking of domination I do not have in mind that solid and global kind of domination that one person exercises over others, or one group over another, but the manifold forms of domination that can be exercised within society. Not the domination of the King in his central position, therefore, but that of his subjects in their mutual relations: not the uniform edifice of sovereignty, but the multiple forms of subjugation that have a place and function within the social organism (Foucault 1980b, pp.95-96).

The study of power has been referred to as Foucault's most compelling contribution to social theory (Farrar 2011). Foucault offered a broad re-conception that ranged from the importance of disciplinary power ("discipline" refers to both the knowledge disciplines, such as the sciences, accounting, engineering; and also to the concept of domination and subjugation of individuals to a common, accepted "truth" (Rey 2011)), to the inseparable nature of power and knowledge. Foucault rejected the Hobbesian notion of power flowing down from the central monarch, saying that power flowed both up and down, never in a uniform manner, and is dependent on relationships. Foucault's other contributions were that:

- Power is never held by a person or an institution, and can only be exercised through relationships.
- Power is not only a means of domination, but also a necessary mechanism for production and acquiring knowledge.

In these ideas, Foucault removes Machiavelli's Prince, while still accepting the reality of political relationships within power, and rejects the economic and rational

view of power put forward by Weber, Marx, and others, while accepting that power can be coercive and productive. It may be that Foucault's contribution to the study of power is to free it from the constraints of ideology assumption, so that it may be seen and analysed within its own operations.

3.5.2 The rejection of ideology

Foucault's ideas on power were radical in respect to their rejection of ideology, and also in their inversion of the dominant views of power as they had developed since Hobbes. In all aspects of commonly accepted beliefs regarding power in society, Foucault offered an alternative view. Not only was power not the preserve of the monarch, but in fact power cannot be held by anyone. Power is within the relations of people and groups, not invested in individuals. Power is not simply imposed in a top-down manner as held by the modernist, rationalist thinkers, but percolates through society, top–down, bottom–up, and sideways. Power is not only a means of domination, but also a necessary mechanism for production and acquiring knowledge.

> The exercise of power is not simply a relationship between "partners", individual or collective; it is a way in which some act on others. Which is to say , of course, that there is no such entity as power, with or without a capital letter; global, massive, or diffused; concentrated or distributed. Power exists only as exercised by some on others, only when it is put into action, even though, of course, it is inscribed in a field of sparse availabilities underpinned by permanent structures (Foucault 2002b, p.340).

Foucault outlined his ideas on power, power relations, and the role of knowledge, in a lecture given in Paris in 1976 (presented in Foucault 1980b). This lecture then formed a large part of the Method chapter of *The history of sexuality: The will to knowledge (Foucault 1978)*. Here, Foucault provides methodological propositions to guide the study of power in a social situation. The following observations of power are summarised from Foucault (1978, pp.94–95).

- Power is not something that can be seized, acquired or shared: it is the result of relationships, not an artifact that can be "owned" by an individual.

- Power relations do not exist separately from other relationships, such as knowledge, economic, or political relationships. Instead, power infuses all of these relationships.
- Rather than powerful leaders and rulers being opposed by those being ruled, power results from the relationship between the ruler and the ruled. And power always results in opposition, but this opposition is a natural manifestation of power, not something that is external to it.
- The exercise of power in relationships is always coherent, because it is always calculated: there is always a set of aims and objectives.

These propositions have informed the analytical direction of this thesis as it moves towards a theoretical framework for IT governance. The first step in understanding these propositions is to review Foucault's ideas against the previous developments on power as outlined earlier in this chapter.

3.5.3 Who has power?

> Power is not something that is acquired, seized, or shared, something that one holds on to or allows to slip away; power is exercised from innumerable points, in the interplay of nonegalitarian and mobile relations (Foucault 1978, pp.94-96).

As the previous quote said, power is not attained by anyone, nor is it exercised by individuals or groups, and nor is it lost. This overturns centuries of thought since Hobbes, yet is still grounded as a critique of the great philosophers. Hobbes' king had his power invested in him by his commonwealth of subjects (Hobbes 1952), while Machiavelli's Prince derived power from influence and the ability to establish powerful relationships (Machiavelli 1952).

> It is in this sphere of force relations that we must try to analyze the mechanisms of power. In this way we will escape from the system of Law-and-Sovereign which has captivated political thought for such a long time. And if it is true that Machiavelli was among the few … who conceived the power of the Prince in terms of force relationships, perhaps we need to go one step further, do without the persona of the Prince, and decipher power mechanisms on the basis of a strategy that is immanent in force relationships (Foucault 1978, p.97).

Foucault removed the individual from discussions of power. Power is strategic, but is active within relationships, not individuals. No-one and no group or institution 'has' power. To understand the shift that Foucault proposes, it is necessary to review the fundamental question from Foucault: what **is** power? In Foucault's analysis, power exists within relationships between individuals, groups, and institutions.

> But…power is apt to lead to a number of misunderstandings — misunderstandings with respect to its nature, its form, and its unity. By power, I do not mean "Power" as a group of institutions and mechanisms that ensure the subservience of the citizens of a given state. By power, I do not mean, either, a mode of subjugation which, in contrast to violence, has the form of the rule. Finally, I do not have in mind a general system of domination exerted by one group over another, a system whose effects, through successive derivations, pervade the entire social body. The analysis, made in terms of power, must not assume that the sovereignty of the state, the form of the law, or the over-all unity of a domination are given at the outset; rather, these are only the terminal forms power takes. It seems to me that power must be understood in the first instance as the multiplicity of force relations immanent in the sphere in which they operate and which constitute their own organization; as the process which, through ceaseless struggles and confrontations, transforms, strengthens, or reverses them; as the support which these force relations find in one another, thus forming a chain or a system, or in the contrary, the disjunctions and contradictions which isolate them from one another; and lastly, as the strategies in which they take effect, whose general design or institutional crystallisation is embodied in the state apparatus, in the formulation of law, in the various social hegemonies (Foucault 1978, pp.92-93).

Foucault changed the concept of power from being a brutal tool of subjugation—at the will of sovereign power—into the form of a ceaseless, necessary, and productive force. Foucault does not reject the idea of power as a force of domination or subjugation. Rather, he invests it with a more productive and fluid nature. There is also a challenge posed here for the analyst: where is power looked for? Clearly not in macro views of power as something invested in individuals or institutions. It would be of little use for this thesis, in using Foucault's ideas, to recognise a special power invested in leaders, such as Chief Information Officers (CIOs), or boards of directors. Foucault's work suggests that the analyst must look closer at individual cases, and by looking for instances of "truths" being produced—and defended.

> In any society, there are manifold relations of power which permeate, characterise and constitute the social body, and these relations of power cannot themselves be established, consolidated nor implemented without the production, accumulation, circulation, and functioning of a discourse. … We are subjected to the production of truth through power and we cannot exercise power except through the production of truth (Foucault 1980b, p.93).

> Power never ceases its interrogation, its inquisition, its registration of truth: it institutionalises, professionalises and rewards its pursuit. In the last analysis, we must produce truth as we must produce wealth, indeed we must produce truth in order to produce wealth in the first place. In another way, we are also subjected to truth in the sense in which it is truth that makes the laws, that produces the true discourse which, at least partially, decides, transmits and itself extends upon the effects of power (Foucault 1980b, pp.93-94).

Truth, discourse and knowledge are all intertwined within Foucault's power. Truth is essential to production and wealth, and discourse is intertwined with the relationships that are so necessary for power to work.

3.5.4 What can be done with power?

In the uses of power, Foucault was not so much revolutionary, as he was evolutionary. Where Hobbes (1952) and his successors focused on power as the pursuit of juridical force and the domination of others, and Machiavelli (1952) sought out the pursuit of outcomes through manipulation, Nineteenth and Twentieth Century philosophers such as Marx (1952) and Weber (1952) sought to explain power as an economic force. For Marx, the economic might of capital was attained through the subjugation of the working class (Marx 1952), while Weber saw capitalism as giving rise to rationalist and bureaucratic structures to support economic production (Drysdale 2011). Foucault moved the discussion of power closer to the German philosopher Nietzsche. Nietzsche (2010a) held that people's "will to power" created power relationships, a ceaseless process of organising and reorganising such relationships (Schacht 2005). However, where Nietzsche (2010a) saw power as the ability to alter reality , Foucault saw power as operating in an essential nexus of production —

power, knowledge and truth, all being necessary for the production of wealth. To arrive at this point, Foucault had to trace the development of power uses from sovereign and juridical uses, to the means of creating different individuals. He did this in his book *Discipline and Punish (Foucault 1995)*.

The idea of the "creation" of suitable individuals, or subjects, within an organisational context is not controversial. This is, of course, the objective of training and development regimes, of disciplinary polices and procedures, and of reward systems. Foucault's contribution is to recognise this pursuit as belonging within the study of power, power relations, and creating the regime of truth.

3.5.5 Truth and power

What, then, is truth? Foucault does not take a moralist or absolutist position on truth:

> The important thing here, I believe, is that truth isn't outside power, or lacking in power: contrary to a myth whose history and functions would repay further study, truth isn't the reward of free spirits, … nor the privilege of those who have succeeded in liberating themselves. Truth is a thing of this world: it is produced only by virtue of multiple forms of constraint. And it induces regular effects of power. Each society has its regime of truth, its 'general politics' of truth: that is, types of discourse which it accepts and makes function as true; the mechanisms and instances which enable one to distinguish true and false statements, the means by which each is sanctioned; the techniques and procedures accorded value in the acquisition of truth; the status of those who are charged with saying what counts as true (Foucault 2010b, pp.72–73).

> "Truth" is to be understood as a system of ordered procedures for the production, regulation, distribution, circulation, and operation of statements (Foucault 2010b, p.74).

> "Truth" is linked in a circular relation with systems of power which produce and sustain it, and to effects of power which it induces and which extends it. A "regime" of truth (Foucault 2010b, p.74).

Foucault offers an example that is compelling when considered in light of the current debate over global warming:

> In societies like ours, the "political economy" of truth is characterized by five important traits. "Truth" is centered on the form of scientific discourse and the institutions which produce it; it is subject to constant economic and political incitement (the demand for truth, as much for economic production as for political power); it is the object, under diverse forms, of immense diffusion and consumption (circulating through the apparatuses of education and information whose extent is relatively broad in the social body, notwithstanding certain strict limitations); it is produced and transmitted under the control dominant if not exclusive, of a few great political and economic apparatuses (university, army, writing, media); lastly, it is the issue of a whole political debate and social confrontation ("ideological" struggles) (Foucault 2010b, p.73).

3.5.6 How can power be recognised and studied?

An analyst using Foucault as a guide must be careful when looking for evidence of power. To look for power is not to look for positions of power, nor their institutional rights. It is not sufficient to find bureaucracies, organisational charts, or position descriptions. Instead, power is a circulating force that brings these things into being.

Foucault offered five "methodological precautions" (Foucault 1980b; McHoul and Grace 1993) as a guide for studying power:

- Focus on the local and regional manifestations of power, rather than some central focus. The analyst should be mindful of the following precautions and realise that institutions of power are the results of certain *conditions* of power and are not absolute entities of power.
- Focus on the *effect* of power, rather than the motivations and intentions that might be driving the application of power. In other words, do not try to explain "why" power was exercised or manifested in a certain way, but rather try to identify the effects, or "effective practices" of power.
- Do not assume that power is imposed by the leader on those being lead. Instead, look for how such mechanisms of power have been allowed to function from all levels of society. Power is not a top–down phenomenon.
- While power and knowledge are inextricably linked, the analyst should not be concerned with ideological manifestations of power. Foucault does not dispute that

ideological knowledge and motivations have driven the application of power. More important for the Foucauldian analyst, though, are the historical conditions for that knowledge, and how it came to the point of imposing power in a local situation.

3.5.7 Foucault's discourse studies

Discourse, for Foucault, is inextricably linked with the knowledge, power and structures necessary enable or constrain that discourse (McHoul and Grace 1993). Rather than a study of language, discourses become the study of language-in-action (Danaher et al. 2000). Thus, it is no longer a linguistic exercise, but something that is laden with all of the knowledge, authorities and social conventions necessary to enable action.

Foucault approaches discourse from an entirely different direction, one that offers new insights.

The concept of the discursive formation does not involve any analysis of text, or any other linguistic exercise. Foucault explicitly rejected the search for meaning within textual structures (such as that presented by Fairclough 2003) or the linguistic structures behind constructed social realities (such as that presented in the work of Searle 1979; Searle 1995). Instead, Foucault's unique contribution to discourse studies is described as a *double phenomenological reduction*. He brackets out both the meaning (and associated concepts of "truth") and the medium from the discourse. The former removes a structuralist dependency on linguistic structure as a source of truth and meaning, while the latter removes the document as the basis of the hermeneutic analysis for understanding. This places the Foucauldian analyst completely outside of the normal domain for discourse analysis and instead allows for new insights using interpretive analytics (Dreyfus and Rabinow 1983).

Of course, Foucault's analysis of the discursive formation *is* concerned about concepts of truth and meaning. However, the analyst does not look for these within the message, but for those things that support a constructed truth and give contextual meaning *outside* of the message. This means that Foucault's discourse analysis is a different approach entirely to that of other discourse scholars, such as Fairclough et al. (2011) or Searle (1995).

Instead of analysing talk or text, Foucault looks for those things that allow the discourse to exist, that enables or inhibits it, for the things that distinguish one discourse from another. Rather than analyse what is said, Foucault asks who speaks, and why this person and not some other (Foucault 1971). The analyst now looks for evidence of power and knowledge - how it exists, how it is used, how it is shared - as he or she investigates how a particular discourse comes into being. Rather than seeing discourse as a single message, the analyst looks for collections of discourses, or discursive formations (Foucault 1971).

In *The archaeology of knowledge* (Foucault 1971), Foucault shifted the analysis of discourse away from the preconceptions of *discourse* and instead focused on a new concept of the the *discursive formation.* While his analytical focus was on those rules, concepts and strategies that allowed broad discursive disciplines of knowledge (such as medicine, psychology, or history) to come into existence and develop, there is nothing in his concepts that preclude the application of discursive formations to the discourse of governance and (specifically) IT governance.

This method of enquiry has a unique attraction for the study of governance. By bracketing out meaning from the analysis, Foucault allows the governance analyst to readily identify and isolate management from governance. By equating the meaning of a message with management, governance becomes those things that allow or inhibit management. That is, if the communications that create organisational structures and result in actions represent the domain of management, then Foucault's view represents the domain of governance. This is the decisive break from other discursive and systems-based theories, such as those by Giddens and Luhmann, and it repres-

ents the opportunity for developing an ontological framework for IT governance. Communications represent management intent, and at this point an analysis of communications could gain important insights from Giddens' structuration theory or Luhmann's social systems theory. However, the analyst would be analysing management systems and not governance. Foucault offers the pathway to the analysis of governance, by asking the analyst to consider those things that allow the communication to exist, at that time, in that form, and not some other.

The discursive formation, and Foucault's ideas on power, knowledge and truth will form the basis of the theoretical framework for IT governance proposed in the following chapters. The final section of this chapter will introduce this framework as the response to the social elements present in the case study: power, knowledge, and discourse.

3.6 Discursive formations

The idea of discursive formations comes from *The Archeology of Knowledge* (Foucault 1971), which was widely seen as a clarification of his earlier work *The order of things* (Foucault 1970). As a treatise on the history of ideas, and particularly how knowledge emerges as a discipline and changes (disburses) over periods of history, these works have drawn praise and criticism. One such criticism is Foucault's perceived de-humanising of the subject, to the extent that he examines disciplines of knowledge without the complications of human thought or psychology (Sheridan 1980). This analysis is not an analysis of Foucault's works, and provides neither a defence of, nor an attack on Foucault. His ideas of knowledge, power and discourse are of considerable value in the study of governance—and specifically IT governance—and are used in that context.

The following sections provide both the features and elements of Foucault's discursive formations, as well as a series of analytical questions. These questions were found to be useful when interrogating the archival data for the case study in Chapter 5, and appear again in the construction of the discursive framework for IT governance, as presented in Chapter 7. They are discussed further in each of those chapters, but the reader should be aware of their significance before reading the following overview of discursive formations.

3.6.1 Statements

Statements are the most troublesome aspect of Foucault's analysis of discourse. While statements can equate to utterances, or communications such as emails, memos and such, Foucault is insistent that they are not restricted to linguistic devices. Instead, statements are anything that enable the discourse to constitute the social reality. Statements bring objects into being. Beyond this brief description, Foucault's explanation of statements was vague even by the standards of French philosophy. As some of the foremost commentators on his work lamented, he seemed to spend more effort in explaining what it was not (especially Dreyfus and Rabinow 1983).

Foucault set out the limits of the statement in *The Archaeology of Knowledge* (Foucault 1971). While he utterly rejected the idea of a statement being a linguistic device (an utterance, a sentence, or a speech act, for instance), he did not prohibit the statement from being any of these. He merely rejected these characteristics as defining qualities of statements. What emerges is the idea of a statement being some discrete event that exists at the level of power and knowledge. It may be linguistic, and it may be explicit or implicit.

Statements perform two important roles within the discursive formation. First, statements coalesce around common themes and concepts to form discursive formations. Second, those statements create the objects of that discursive formation, and are in turn generated out of those objects (Foucault 1971).

Statement, therefore, are wrapped up and defined by the elements of the discursive formation (concepts, strategies, objects and the enunciative modalities), and bounded by the rules of the discursive formation's existence. For the purposes of this thesis, therefore, this idea of the statements being simultaneously wrapped in those elements provide a unique perspective on governance.

When analysing governance at the discursive level, statements, can be seen to operate at the management level: they are executive in nature, and are bound together by common themes and knowledge.

It is possible, at this level, to see governance and management to be existing simultaneously, in a symbiotic relationship. Statements get things done, while the elements of the discursive formation, operating at the governance level, enable and inhibit what is possible for those statements to achieve.

The following sections will review the elements of the discursive formation that will, in Chapter 7, be placed into a discursive framework for IT governance. However, Foucault (1971) provides another insight into the nature of governance: just as the discursive formation (governance) enables and limits what statements (management) can achieve, the discursive formation itself is bounded and limited by its own particular rules for formation and disbursement. These are discussed in section 3.6.6 (starting on page 93).

3.6.2 Enunciative modalities

Perhaps the element of discursive formations that is of most interest to the IT governance analyst is the enunciative modality. In fact, the analytical questions provided by Foucault in this element were the guiding questions in the search for data for this thesis. When considering the discursive formation as a collection of related statement, or even a more standard linguistic, discursive exercise (such as an email exchange, or a business meeting), Foucault asks us to consider what links these statements together. What made it necessary? And why did these statements emerge, and not some other (Foucault 1971).

Foucault's guiding questions are, for once, reasonably clear in their intent (as paraphrased here from Foucault 1971, pp.50–52).

1. Who speaks? Why this person or institution: who or what gives them the right to speak at this time, at this place, and not some other person or institution? To this question I would add a supplementary question that would support Foucault's questioning: who is listened to? Clearly Foucault intended the answer to "who speaks" to be a subject who is listened to, yet the case study in this thesis shows that people who are clearly recognised as being able to speak are not always listened to, and those who are not recognised to speak are sometimes listened to.

2. From which institutional sites does the subject speak?

3. How is the speaking subject positioned in relation to various domains and groups of objects? This question invokes concepts of power and knowledge, and in reality answers my supplementary question: a subject is listened to when it is sufficiently positioned and supported within a critical group of objects.

Foucault gives an excellent example in the medical doctor:

> The status of doctor involves criteria of competence and knowledge; institutions, systems, pedagogic norms; legal conditions that give the right—though not without laying down certain limitations—to practice and extend one's knowledge. It also involves a system of differentiation and relations…with other individuals or other groups that also posses their own status (Foucault 1971, p.50).

And what are these groups that the doctor must align with? Foucault suggests the state's legal institutions, the judiciary, religious groups, and so on. It is clear then, that the enunciative modalities extend far beyond a defined discursive formation, and that as a necessary consequence, no discursive formation can exist alone, walled off from the discourse of society. It is not a closed system.

For the analyst of IT governance, Foucault's concept of the enunciative modality offers the key to seeking out instances of governance within governance and management discourse. Who speaks? Why that person or institution? At that time? Why not some other person or institution? By following these key questions, the analyst is able to follow a trail that will reveal the discursive formation that is IT governance. By doing this, the analyst can identify many forms of governance mechanisms and decision-making structures identified in the IT governance literature, and giving them a context within the greater discourse. However, the analyst is not seeking evidence of formally declared mechanisms, but evidence of mechanisms in reality. Whether the mechanisms are formal or informal is less important than identifying them and the power-knowledge relations that allow them a role.

At this point in the analysis, a supplementary question is offered– who is listened to? In doing so, we may understand the power-knowledge role a little better.

3.6.3 Objects

Objects are the "things" that are brought into existence by a discursive formation. An object could be a classification (as used in the sciences), or a conceptual role (such as a manager). Referring to Foucault's previous work on the history of madness, Dreyfus and Rabinow (1983) identify "madness"—or more accurately, our classification and understanding of a human condition—as an object (Foucault 1971).

Foucault (1971) provides the guidance for identifying and analysing objects.:

- Look for the surfaces of their emergence. Within which conceptual code or theory do these objects make sense? Foucault warns that these surfaces of emergence will be different in different societies, of over time.
- What authority delineates these objects? What is it that makes us recognise these objects as part of this discursive formation?
- Determine the *grid of specification*, the system by which the objects are divided and classified.

However, Foucault warns that these guidelines are not of themselves sufficient for developing an understanding of object. The analyst must also be aware of the relationships and differences between the objects of a discursive formation. Objects only exist 'under the positive conditions of a complex group of relations (Foucault 1971, p.45). The object, therefore, cannot exist, and cannot be perceived, in isolation. These relations, called *discursive relations*, are neither within nor without the discourse itself, but are at the outer boundary. It is these relations that form the limit of possibility.

> They are, in a sense, at the limit of discourse: they offer it objects of which it can speak, or rather (for this image of offering presupposes that objects are formed independently of discourse), they determine the group of relations that discourse must establish in order to speak of this or that object, in order to deal with them, name them, analyse them, classify them, explain them, etc. These relations characterise not the language (langue) used by discourse, nor the circumstances in which it is deployed, but discourse itself as a practice (Foucault 1971, p.46).

Therefore, within the field of IT governance, an object might be a steering committee. However, to be recognised as an object within IT governance, it must come with a body of knowledge that recognises this object, and a way of classifying it as different to any other kind of committee. Of course, these conditions exist, but the analyst must now see the steering committee, not in isolation, but as an outcome of the conditions of its existence. Now the analyst must also be aware of the relationships that define and constrain this steering committee. Immediately, there are economic, social and legal constraints upon this object that shape and limit it. The analyst now has the beginnings of a map, with relationships to follow, to chart out the objects.

Using Foucault's discursive formations to analyse IT governance offers another insight for the analyst: whereas scholars within the dominant IT governance paradigm will look to the objects as representing governance (steering committees, decision structures, and so on), the discursive formation forces us to take a further step back. 'Discourse is not about objects: rather, discourse constitutes them' (Sheridan 1980, p.98). It is not the mechanisms or plans that constitute IT governance, it is IT governance that constitutes them! This is an important insight that will be demonstrated within the case study in Chapter 5: the steering committee, project champions or project directors are shown as not being emblematic or representative of IT governance, but are instead brought into existence, enabled and restricted by "something"—a "thing" that Chapter 7 establishes as the discursive formation of IT governance.

Subjects and objects

One area of differentiation between the IT governance literature and social theory research is in the treatment of people's roles. In business and information systems research, people are categorised by roles: manager, director, employee, and so on. Social theorists, however, prefer to de-humanise the role of people. So for Giddens, people become *actors*. For discourse theorists, people are referred to as *subjects*. One of Foucault's controversies was his further de-humanising of the human-as-subject. In *Where is 'the subject'?* Hall explained Foucault's method and reason (the emphases are the original's):

> It is discourse, not the subjects who speak…which produces knowledge. Subjects may produce particular texts, but they are operating within the limits of the…*discursive formation*, the *regime of truth*, of a particular period and culture. Indeed, this is one of Foucault's most radical propositions: the 'subject' is *produced* within *discourse*. This subject <u>of</u> discourse cannot be outside discourse, because it must be **subjected to discourse** It must subject to its rules and conventions, to its dispositions of power/knowledge. The subject can become the bearer of the kind of knowledge which produces discourse. It can become an object through which power is relayed. But it cannot stand outside power/knowledge as its source and author (Hall 2001, pp.79-80).

In reality, Foucault's approach is in line with the treatment of people within the IT governance literature. While familiar roles are used instead of the bland title of 'subject', there is no further sense given of the person within that role, or their individual psychology or ethics. Just as the role of Chair of Steering Committee is the creation of a decision and proclamation, in Foucault's explanation, that role represents a subject that was created by the governing discourse, able to act only within the boundaries set by that discourse. Foucault's language may be unfamiliar to readers of IT governance, but his observations and analyses are consistent with—and applicable to—that literature.

3.6.4 Concepts

Concepts emerge out of knowledge disciplines. They are the ideas and concepts that the disciplines organise into a coherent set or system. Foucault's interest in concepts as they exist within a discursive formation is not to classify them, but to discover how they emerge, how they are organised by discursive statements, and where they appear and circulate. His first task, when introducing concepts in AK, is to remind the reader that although concepts may be classified according to some logical system (which he refers to as a "virtual deductive edifice"), they emerge and disperse in apparent disorder. His interest is in how they emerge and disperse.

> …if one takes a broader scale, and chooses as guide-lines such disciplines as grammar, or economics…the set of concepts that emerges does not obey such rigorous conditions; their history is not the stone-by-stone construction of an edifice. Should this dispersion be left in apparent disorder? Or should it be seen as a succession of conceptual systems, each possessing its own organization, and being articulated only against the permanence of problems, the continuity of tradition, or the mechanism of influence?…Rather than wishing to replace concepts in a virtual deductive edifice, one would have to describe the organization of the field of statements where they appeared and circulated (Foucault 1971, p.56).

Foucault's challenge to the analyst, therefore, is to not "import" preconceptions about the concepts under review, to not take notice of their "tradition". Concepts are to be explored and evaluated within the field of discursive statements under review (and by "statements", Foucault is referring to statements within the discursive formation). And the field of statements <u>is</u> the discursive formation.

Although Foucault's description of concepts within the discursive formation is vague, he does offer guidance in how to evaluate them.

1. Look for *forms of succession*. This involves how the enunciative series is progressed. Is there an order of inferences, implications, or reasonings? Is the concept portrayed as a descriptive series? As a linear succession of statements?
2. Where is the inter-dependence between the concepts? Are concepts put forwards as hypothesis/verification, or is there some other kind of link?

3. How are concepts combined into greater concepts?
4. What is the *field of presence* and *field of concomitance* for the statements that comprise these concepts? What is the context within which these statements are judged to be truthful and reasonable? What is the field that gives them legitimacy? Conversely, a *field of concomitance* recognises that statements that constitute quite different objects, and comprise alternative concepts, can still exist within the same *field of presence*.
5. What are the *procedures of intervention* that can be applied to these statements? These procedures make it possible to translate concepts, re-write them, change them, apply them in different situations. These are the processes by which the constituting statements change, and make the concepts change also.

Foucault has recognised the vital role of ideas and unifying concepts within discursive formations. He also recognises that they are diverse and dynamic, and are wholly dependent upon the underlying statements, as are objects within the discourse. However, he does provide a warning to the analyst: do not ascribe ideals to them. Concepts exist only as far as the local discursive formation allows them to exist.

3.6.5 Strategies

The strategies of a discursive formation are the themes and theories that make the formation a linked, unified whole, that give it meaning (Foucault 1971). These themes and theories can, of course, be quite different for each discursive formation. This means that the analyst has a difficult task to identify them. Nevertheless, Foucault Foucault (1971)has provided some clues.

A common theme in Foucault's methods is to look, not only for similarities, but for differences. In this way, Foucault urges the analyst to look for the possible *points of diffraction* of discourse. In science, diffraction occurs when a force strikes an object and is then split and spread out, such as when a light is passed through a prism. In a

discursive formation, this occurs when two objects, enunciative modalities, or concepts appear similar, but cannot logically appear in the same series of statements. To achieve this, Foucault urges the analyst to look for points of equivalence and systemisation.

- Determine whether these elements have *points of equivalence*, which occur when the different yet similar elements exist on the same level, to the point where they become *alternatives*.
- Look for *points of systemisation*, which occurs when these similar-yet-different elements form into coherent discursive sub-groups.

> Why are some alternatives brought into reality, and not others? To understand this, Foucault says that the analyst must study contemporary, or related discourses. The authorities that guided the choice must be found. 'The discourse under study may also be in a relation of analogy, opposition, or complementarity with certain other discourses…'(Foucault 1971, p.66).

The theoretical choices that can be made are also determined by the function that the discursive formation is expected to perform outside of discourse.

The importance of strategies within the discursive formation is that the choice of strategies *individualise* the discursive formation: 'A discursive formation will be individualized if one can define the system of formation of the different strategies that are deployed in it…'(Foucault 1971, p.68).

3.6.6 The rules of formation

In a discursive formation, the conditions to which the elements are subjected are called the *rules of formation*, or the *conditions of existence*. Foucault also recognises that they are the conditions of coexistence, maintenance, modification, and disappearance (Foucault 1971). As such, discursive formations are dynamic constructs (as Foucault recognised when he specified his rules), and not static representation of a "snapshot in time".

In the study of IT governance, it is these "rules" that hold the key. As valuable as the elements of a discursive formation are for coming to an understanding of IT governance, it is the rules themselves that best represent the ontology of governance. The rules set out the conditions of existence, and also the conditions of possibility. It is the rules that not only allow the elements of the discursive formation to co-exist and take shape, but they also limit those elements.

The case study that is presented in Chapter 5 demonstrates that none of the management communications, and none of the institutional entities mentioned (project directors, University Council, etc) existed without being established by some rule or authority. Further, their effectiveness was limited by certain conditions of their existence. As this section further explains below, these rules are more than institutionalised rules or laws. There are a range of economic contingencies, limitations in capabilities etc that both enable and limit what can be done.

Dreyfus and Rabinow (1983) explained Foucault's rules by acknowledging that Foucault believed in the domain of discourse as a 'rule-governed system' (Dreyfus and Rabinow 1983, p.53). It is likely that he saw these rules as firming the discourse from the conditions of possibility to the conditions of existence.

The archaeological analyst identifies and defines the rules of a discursive formation. This is not a straight-forward process.

> Archaeology defines the rules of formation of a group of statements. In this way it shows how a succession of events may, in the same order in which it is presented, become an object of discourse, be recorded, described, explained, elaborated into concepts, and provide the opportunity for a theoretical choice (Foucault 1971, p.167).

So rules can form statements into elements of the discourse, but ultimately, it is the rules that give form to the discursive formation. Foucault warns of the dangers inherent in analysing rules:

- It is no use trying to find the rules in every statement. They may only become apparent at intermittent periods.

- There is no generality to the rules. Some may be more specific than others, and can emerge at different historical times.
- There is no linearity to the emergence of rules, and the subsequent change and transformation of the discursive formation (Foucault 1971).

So this exercise in examining the ontology may—or rather, should—uncover rules that are entirely unique to the case study under review. Instead of guarding against this, it is to be welcomed and examined. The discursive formation that is IT governance will change over historical periods, across industries, jurisdictions, and cultures. This thesis becomes, not a quest to find universal rules and principles, but an investigation of IT governance in its "being", its reality.

3.7 Criticisms of Foucault

Having been such a prominent scholar and intellectual in the late 20th Century, it is not surprising that Foucault also attracted an extensive body of criticism, covering all aspects of his work. While it is not in the scope of this thesis to defend Foucault, or even to respond to his critics, there is an obligation to inform the reader of the general criticisms pointed at Foucault's work on power, knowledge and discourse.

3.7.1 Compliance with methodology

Given the range of Foucault's enquiries—history, medicine, sociology and linguistics to name a few—and Foucault's disdain for following accepted methodologies, or even any clearly articulated approach, it is not surprising that he has succeeded in drawing criticism. Burrell (1988) stated that Foucault followed a northern European tradition in using opaque language. Much of the criticism can be described as people wanting to put Foucault into categories where he did not belong. If Foucault was criticised for not following accepted techniques of analysing history or medicine, it was because he did not claim to be a scholar of either (Farrar 2011; Venn 2011).

More relevant to this thesis are the charges made from various scholars of Foucault's breaking with the conventions of various philosophical paradigms, especially post-structuralism, critical theory and postmodernism. Of the latter points, Foucault steadfastly refused to enter into any comparison of his approach to power with those of the critical theorists who insisted on seeing power through the lens of colonialism, race, gender, or other forms of subjugation (Burrell 1988; Dreyfus and Rabinow 1983). As discussed earlier, Foucault refused to introduce ideology into his view of power, although he did not deny its role in subjugation. Rather, he saw it as a thing of the world and not something to be hostage to any one view. Interestingly, Foucault regularly corresponded with prominent critics, especially Habermas (Burrell 1988; Dreyfus and Rabinow 1983).

While this section barely touches on the depth of criticisms of Foucault, it is important to acknowledge criticisms that are directly pertinent to this thesis. These are identified in the following section, and include the inconsistencies in his approach to post-structuralism, discourse theory, and power.

3.7.2 Validity in application

Foucault's work contains many dangers for the unwary analyst. He offers analytical method, but no theory. His work has been labelled 'ad hoc, fragmentary, and incomplete' (Gutting 2003, p.2). Gutting sums up the value, and the danger, of Foucault's work:

> Foucault's writings tempt us to general interpretation along two primary axes. In the first dimension he appears as a philosophical historian, progressively developing a series of complementary historical methods: an archaeology of discourse in The History of Madness, The Birth of the Clinic, The Order of Things, and The Archaeology of Knowledge; a genealogy of power relations in Discipline and Punish and The History of Sexuality I; and a problematization [sic] of ethics in The Use of Pleasure and The Care of the Self. In the second dimension he appears as a historicist philosopher, offering, parallel to his methodological innovations, successively deeper and mutually supporting theories of knowledge, power, and the self. It is natural to combine these two dimensions in an overall interpretation of Foucault's work as a new comprehensive understanding of human reality supported by new methods of historical analysis (Gutting 2003, p.2).

Gutting explains his unease with using Foucault for generalising:

> I am uneasy with this and other general interpretations of Foucault because they deny the two things that, to my mind, are most distinctive and most valuable in his voice: its specificity and its marginality. It is striking that Foucault's books hardly ever refer back to his previous works…This lack of self-citation is not mere coyness…his analyses are effective precisely because they are specific to the particular terrain of the discipline he is challenging, not determined by some general theory or methodology. As we shall see, Foucault does not hesitate to construct theories and methods, but the constructions are always subordinated to the tactical needs of the particular analysis at hand. They are not general engines of war that can be deployed against any target (Gutting 2003, pp.3–4).

As Gutting also pointed out, it is not valid to criticise Foucault for not following the norms and traditions of disciplines, as this is what Foucault specifically set out to dismantle. On the other hand, it is Foucault's focus on specific knowledge disciplines that makes the porting of his work to other disciplines (as thesis attempts to do) so dangerous.

> General interpretations of Foucault suppress his marginality by presenting his work as the solution to the problems of an established discipline or as the initiation of some new discipline. This ignores the crucial fact that disciplines are precisely the dangers from which Foucault is trying to help us save ourselves. His attacks are on the apparently necessary presuppositions…that define disciplines. Therefore, they can be launched only from the peripheral areas where the defining assumptions begin to lose hold. To present Foucault as working within an established discipline…is to contradict the basic thrust of his efforts (Gutting 2003, p.4).

Burrell (1988) found similar problems with his inconsistencies (as he lamented that Foucault's philosophical position only lasted until the publication of his next book) and use of vague language.

Gutting's review of Foucault's value to the analyst appears to be as contradictory and problematic as Foucault's own work (no doubt this is itself testimony to the dangers of interpreting Foucault). Gutting's criticism seems to be that while Foucault offers deep and effective insights into the ontology and epistemology of knowledge disciplines, his work is so specific to the domains they were written about as to be non-transferrable to other uses or domains. Given Gutting's contribution to the study of

Foucault (at the time he wrote this commentary, he held the Chair in Philosophy at the University of Notre Dame, and had published two books on Foucault), his concerns are not to be dismissed lightly, even if they are contrary to a solid body of commentary on Foucault.

Foucault's work on archaeology is a study of knowledge disciplines, and their emergence and conditions for existence. This use of his methods applies to the study of governance. Governance itself is a branch of organisational and political knowledge, and even though Foucault himself did not cast his analysis in that direction, neither did he preclude it. And it is precisely at the margins of this discipline that this thesis is applied, seeking the point of difference between governance and management.

3.7.3 Circular logic

The most serious criticisms of Foucault's work, particularly on discursive formations, come from Dreyfus and Rabinow (1983). Their criticisms come down to issues of logic and method. First, if by Foucault's double reduction a discursive formation brackets out all truth and meaning, is it not a logical conclusion that there is no meaning or truth to a discursive formation? This thesis will demonstrate in section 3.7.4 on page 265 that the discursive formation cannot be viewed in isolation from the discourse. This thesis overlays this relationship as a parallel with governance and management. The truth and meaning belong in the message, leaving the discursive formation free to govern these messages. Far from being a meaningless construct, the discursive formation is the governing overlay of discourse.

Dreyfus and Rabinow's next telling criticism is of the circular "chicken or the egg" logic that seems to occur in Foucault's description of discursive formations. Discursive formations generate statements that create objects. Yet the statements come from the objects of discourse. This is known as self-referencing, and it is a feature of prominent theories in social theory (see for example Luhmann's social systems (Luhmann 1995) and Giddens' theory of structuration (Giddens 1979, 1984)). Nevertheless, on considering the application of Foucault's discursive formation to IT gov-

ernance in Chapter 7, this study concludes that a discursive formation cannot in fact *create* objects as claimed by Foucault in The archaeology of knowledge (Foucault 1971), but that it creates the conditions for such objects to exist. Again, the discursive formation cannot be considered unless it in the company of discourse. There will be a fuller discussion within Chapter 7.

Finally, Foucault himself provided the last word on the use of his work:

> When I was teaching philosophy I often used to lecture on Nietzsche, but I wouldn't do that any more today. … Nietzsche's contemporary presence is increasingly important. But I am tired of people studying him only to produce the same kind of commentaries that are written on Hegel or Mallarmé. For myself, I prefer to utilise the writers I like. The only valid tribute to thought such as Nietzsche's is precisely to use it, to deform it, to make it groan and protest. And if commentators then say that I am being faithful or unfaithful to Nietzsche, that is of absolutely no interest (Foucault 1977, pp.53-54).

As Burrell (1988) suggests, we may take Foucault at his word. No doubt Foucault would find fault with this thesis' interpretation of his own work, but not its attempt at exploring new perspectives.

3.8 Applying Foucault in organisation and technology studies

Foucault has been used extensively in organisation theory, where his distinct observations on the use and nature of power have found a wide audience. Within organisation theory, Foucault has been extensively championed by leading scholars Stewart R. Clegg and Cynthia Hardy (for example, Clegg 1989; Clegg and Palmer 1996; Clegg 2007; Clegg and Haugaard 2009a; Clegg 2009; Hardy and Phillips 2004; Hardy and Clegg 2006; Hardy 2011).

Foucault's technologies (a better translation from French would be "techniques") of power, domination and production, together with the related concept of "governmentality[9]", have been extensively applied in human resource management research (for example, McKinlay and Starkey 1998a; Deetz 1998; Findlay and Newton 1998; Townley 1993) and accounting (for example, Stewart 1992).

It is surprising that given Foucault's popularity in social and organisation theory, his ideas have not been taken up in the study of information systems to a similar extent. A significant exception has been Hassan and Will (2006), who have recognised that the knowledge discipline of information systems is somewhat fragmented and in need of unifying theory (an interpretation of the problems explained in this thesis for IT governance). They proposed Foucault's work on knowledge disciplines[10] as a useful lens for further theorising (Hassan and Will 2006).

9. Governmentality is Foucault's exploration of the relationships of power and knowledge, discipline and sovereign power. In this view of governance and governing, governmentality is as much about proper training in order to perpetuate socially appropriate manners, habits and knowledge. The means of disciplining individuals is of particular interest ("governmentality" 2009). Although clearly related to the goals of this thesis, governmentality is not specifically explored here due to time and space constraints. However, most of its significant elements and ideas are contained in the coming chapters on discursive formations and the regime of truth.

10. The study of knowledge disciplines in Foucault (1970) led directly to Foucault's work on discursive formations.

3.9 Conclusion

Given the diversity and depth of contemporary social and organisation theory, this chapter has focused on three inter-related topics that are gaining wide coverage in those literatures, and which are highly relevant to this thesis' analysis of the case study that follows. These topics—power, knowledge and discourse—have attracted a range of approaches from various scholars, but one in particular offers the possibility of a coherent framework build around all three topics. Michel Foucault's work in these areas was reviewed, as were the pertinent criticisms of his work. His work on discursive formations has to potential to be the basis for a theoretical framework for IT governance.

This concludes two chapters of literature reviews, which covered the relevant aspects of the IT governance, information systems, and management literatures, plus relevant topics within social and organisation theory. The thesis now progresses to the discussion of methodology, then to a large historical case study covering an ERP project (Project Renaissance) at an Australian university. These chapters form the basis for the analyses that follow.

Chapter 4: Methodology

The literature review of the previous chapter showed the IT governance literature to be dominated by a normative and functional approach to the concept. A lack of theorising and ontology has meant that the form and nature of IT governance remains unclear, and academics and practitioners alike would benefit from the development of an ontological theory or theoretical framework.

This thesis attempts to address this need by undertaking an ontological review of IT governance as it occurred in a single case study. In order to provide a contrasting view of the concept, key issues in social and organisational theory—discourse, power and knowledge—are used to focus this investigation. A major case study is presented in Chapter 5, in the format of an historical review and with no analysis. The two chapters that follow then provide alternative views of the case study: the first using the extant IT governance literature, and the second is an interpretivist perspective, using the work of Michel Foucault. This approach is used to allow a reader to separate the facts of the case from the subsequent analysis, and consequently to be able to judge the validity of the arguments presented.

4.1 Interpretive research

Interpretive research, its scope, application and location within the pantheon of research methods, is—like the subject of this thesis and as its name suggests—subject to interpretation. There are certainly differing views within organisational research. Two seminal publications, Burrell and Morgan (1979) and Guba and Lincoln (2005) offer differing viewpoints, yet both are valuable in framing an interpretive approach.

Burrell and Morgan (1979) set the interpretive paradigm in opposition to the functionalist paradigm (which this writer believes represents the fundamentally normative approach of the IT governance literature).

> The underlying assumptions of the interpretive paradigm with regard to the ontological status of the social world reject the utility of constructing a social science which focuses upon the analysis of 'structures'. It rejects any view which attributes to the social world a reality which is independent of the minds of men. It emphasises that the social world is no more than the subjective construction of individual human beings who, through the development and use of common language and the interactions of everyday life, may create and sustain a social world of intersubjectively shared meaning. The social world is thus of an essentially intangible nature and is in a continuous process of reaffirmation or change (Burrell and Morgan 1979, p.260).

This differentiation is particularly important in terms of this thesis. Having drawn attention to the fundamentally normative approach of the IT governance literature in the previous chapter, it is important that the methodology applied here offers a suitable contrast to a body of knowledge where IT governance is considered functional, formal and structural. To offer yet another functional and normative study would be to commit the very mistakes the literature is already criticised for. To use the interpretive paradigm is to offer a contrast to a body of knowledge where '…most organization theorists tend to treat their subject of study as a hard, concrete and tangible empirical phenomenon which exists 'out there' in the 'real world'' (Burrell and Morgan 1979, p.260).

Guba and Lincoln (2005) locate constructivism as one aspect of the broader interpretivist paradigm. As a product of sociological thought, at the heart of constructivism is the belief that knowledge is constructed by people, and is not something that is exterior, or "out there" in the world. Knowledge is not external to the human experience (Downes 2005). The concepts of socially constructed knowledge and power that only exists between individuals or institutions are recurring themes in the analyses that follow the case study.

4.1.1 Relevant principles for conducting interpretive research

Allowing theory to emerge

In section 4.1.2 (starting on page 111), the difficulties in using Foucault as a basis for interpreting data are recognised. Foucault eschewed declaring formal theories or methods in his work. In this way, Foucault was grounded in the European philosophical tradition of not constraining ideas with method (Gutting 2003). Within the social theory movement, Foucault's approach has much in common with the grounded theory approach of Glaser and Strauss (1967), which also rejected formally declared methods in favour of allowing theory to emerge, rather than "forcing" data to fit a preconceived method or outcome. Yet it should be recognised that this is a conflict that has split the grounded theory community (Kelle 2007). As a result, grounded theorists may choose to follow more rigorous methods and coding strictures as set out by Strauss and Corbin (1998).

This research project followed Foucault's path rather than grounded theory. No formal coding method was used, and none have been endorsed by Foucault or his critics and commentators. However, there are principles to follow in the conduct of interpretive research, and the following section outlines the approach used.

Following Klein and Myers (1999)

Recognising the contribution that interpretive methods can make to information systems research, Klein and Myers (1999) provided a set of principles for the conduct of empirical, interpretive research. The authors recognised that interpretive philosophies are weak in formal methods, yet they demonstrated, using examples from the IS literature, that generalisations and external validity can be achieved by following a set of seven principles. It should be noted that the principles are strongly influenced by the philosophies of hermeneutics, and especially the works of Gadamer and Ricoeur (especially Gadamer 1976; Ricoeur 1981).

Klein and Myers' (1999) principles are summarised in the following sections, with examples of how they apply to this thesis. While they were not followed directly, as in a linear process, these sections will show how they have combined to improve the validity of the thesis' outcomes.

The fundamental principle of the hermeneutic circle

The principles proposed by Klein and Myers (1999) are heavily influenced by the hermeneutic tradition, and especially by the works of Gadamer (Gadamer 1976, 1989) and Ricoeur (1981). Fundamental to that tradition is the concept of the hermeneutic circle: that understanding develops by alternatively considering the concept as a whole, and its elemental parts (Klein and Myers 1999). The movement always begins with the consideration of the whole, then of the parts, and a return to the whole (Butler 1998; Cole and Avison 2007).

The process of the hermeneutic circle was employed in two distinct phases within this project. It was first used in the critical review of the IT governance literature; the second use was in the selection and application of theory to the case study data, as described in the following sections.

The circle and the IT governance literature

Analysing the literature for the literature review in Chapter 2 involved a process of considering individual publications against a perceived idea of what IT governance was. During this process, a number of insights emerged. First, when the context of the individual studies and the academic profiles of the key authors was considered, it became clear that the antecedent literature and the early publications on IT governance had no connection at all to corporate governance or any other system of enterprise governance. The concept of IT governance had emerged out of attempts to make sense of a rapidly expanding set of complexities in the information systems management domain.

Yet the themes of corporate governance and enterprise systems had become quite strong after 2004. By using the hermeneutic circle, it became clearer that another dynamic had emerged in the IT governance literature: the demand for information assurance and control that had resulted from the Sarbanes-Oxley Act of 2002 in the United States. This insight reinforced this researcher's belief that the literature needed a theory and ontology for future studies of IT governance.

The circle and social theory

The second stage of this thesis that benefited from the hermeneutic circle was in the selection, application and use of theory. The following paragraphs summarise the use of the circle.

During the review of the literature, the circle concept was used to reflect on the form and nature of IT governance. By reviewing the individual publications, and reflecting on the dominant views of IT governance (which changed over time), it became clear that the form and nature of IT governance suggested that IT governance was a social construct, rather than a structural, procedural, or managerial construct. The IT governance literature also revealed a systemic nature where communications (discourse) were a critical aspect.

The choices of social theories has been described in the previous chapter. Ultimately, Foucault's work on discursive formations was selected by its application and fit to the case study data. However, this in itself was the result of a long process of reflection between what was revealed in the data, and how that applied to Foucault's intended application of the discursive formation. There is no doubt that Foucault did not envisage his work on discursive formation being applied to this context (IT governance), but neither was there anything in its application to this thesis that precluded it.

Of course there were logical inconsistencies arising from the application of Foucault's ideas to the study of IT governance, and hence section 4.1.2 details extensions to Foucault's ideas that emerged from the data. These extensions were a result of the application of the hermeneutic circle.

The principle of contextualisation

Contextualisation, or the conscious recognition and identification of a subject's historical context by the researcher is an essential part of interpretive research (Klein and Myers 1999). Identifying the historical contexts within which the IT governance literature had developed (as described in the previous section) was an important part of understanding how the conceptual understanding of IT governance had become fragmented.

The interaction between the researcher and the subject

The central issue in recognising the interaction between researcher and subject is the declaration of the researcher's biases and prejudices. Cole and Avison (2007), considered this to be the first step on the hermeneutic cycle. With regards to this thesis, there are two important declarations of bias that should be made here.

The first bias to declare is the motivation for the study. This research project was originally to be quantitative and positivist examination of factors relating to "effective" IT governance. However, the initial literature review, conducted in 2005, soon found that there was no accepted definition of IT governance, let alone "effective IT governance". This researcher concluded that a better understanding and ontology of IT governance was needed before any such research could be successfully concluded. Therefore, this research project was based on the view that (at least) the academic concept of IT governance required theoretical guidance.

The second bias to declare is this researcher's involvement in the events recounted in the case study. This researcher was actively involved in the university's middle management at the time, and was constantly interacting with people serving on Project Renaissance, and with the key decision makers described in Chapter 5. However, when collecting the data on Project Renaissance it was not necessary to include personal accounts or recollections of events, due to the availability of a large collection of archival data. Nevertheless, although the data has been allowed to speak for itself wherever possible, in the form of direct quotations, it cannot be ruled out that some form of bias has shaped the presentation of the case study.

Abstraction and generalisation

In line with the recommendations of Klein and Myers (1999) and Walsham (1995), this thesis uses theory to guide its conclusions. Abstraction and generalisation, as it applies to the context of this study, is made possible by the application of theory (specifically, Foucault's discursive formation).

The use of theory is particularly important in deriving generalisations and insights from interpretive studies. It is the use of theory, either constructed from the study or used in its analysis of data, that distinguishes empirical interpretive research (particularly interpretive case study research) from anecdotal observations (Klein and Myers 1999). Theory can be used in the development of concepts, for supporting generalisations, for drawing specific implications from the data, or for contributing and supporting rich insights (Klein and Myers 1999; Walsham 1995). Theory has been used within this research project to gain rich insights into IT governance.

Dialogical reasoning

The principle of dialogical reasoning involves the researcher being transparent about perceived prejudices and confronting them during the research process (Klein and Myers 1999). This principle was followed when the case study was constructed using archival data, supported by extensive quotations for a reader to follow and analyse. Although this does not eliminate bias or prejudice (which should not occur in an interpretive study), this does allow the reader to evaluate the claims and interpretation against the presented data. Transparency in heightened through this approach.

Multiple interpretations

The case study is not presented to demonstrate theory or to reinforce an accepted fact. That is, unlike a teaching case study, it is not presented in a manner as to demonstrate a point of learning. Instead, it is constructed from data for the purpose of constructing theory, and it leaves itself open to the reader's interpretation. It supports this thesis' conclusions only to the extent that the support is logically argued.

Suspicion

The principle of suspicion requires researchers to look further than the understanding of meaning, and to consider the social and contextual issues behind the data. This approach is inherently critical in nature Klein and Myers (1999).

There is a danger in following this principle for this thesis. The Foucauldian approach to power—at least at this stage of Foucault's work—is strongly non-ideological and consequently this thesis should not be considered "critical" in any way. Instead, the following advice is appropriate:

> However, since there is considerable disagreement among interpretive researchers concerning the extent to which social research can (or should be) critical...some interpretive researchers may choose not to follow this principle in their work Klein and Myers (1999, p.78).

The key outcome of this principle is that a conscious decision was taken in the design of this project that it should **not** be critical in nature.

4.1.2 Using and interpreting Foucault

Chapter 3 explored various aspects and theories within contemporary social theory that could potentially form the basis of a theoretical framework for IT governance. Issues of power, knowledge and discourse were found to be common threads within the IT governance literature, and one theorist offered a view that could unite these issues into a cohesive and cogent framework. Foucault's work on discursive formations (Foucault 1971) will form the basis for the remainder of this thesis: the construction of the case study, and constructing the theoretical framework for IT governance[11].

Foucault's combination of *archaeology* and *genealogy* have resulted in a useful approach to understanding a current situation. Dreyfus and Rabinow (1983) referred to this combination as the establishment of a series of interpretive analytics.

> Foucault is not trying to construct a general theory of production…Rather, he is offering us an interpretive analytic of our current situation. It is Foucault's unique combination of genealogy and archaeology that enables him to go beyond theory and hermeneutics and yet take problems seriously. The practitioner of interpretive analytics realizes that he himself is produced by what he is studying; consequently he can never stand outside it (Dreyfus and Rabinow 1983, pp.124–125).

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11. A substantial review of the relevant works of Foucault has been provided in the previous chapter. The reader of this thesis should be aware that it relies entirely upon translated English publications of Foucault's work. Foucault wrote entirely in French, and this author has not attempted to work with, or translate the original works.

The analytical questions and guidance used to reflect on this case study are presented in section 3.5.6 on page 80. Foucault's analytics strip the IT governance phenomenon bare, exposing it to scrutiny. Its effects are seen in the formation and use of objects within the discourse and their relationships.

Beyond Foucault's analytics, this author found that a set of analytical questions based on Foucault's archaeology method were central to the exploration of the key aspects of governance:

- Who speaks, and who is listened to?
- Why this person/institution, at this time, and not some other?
- By what rules could this person/institution do this?

These simple questions contained the essence of Foucault's interpretive analytics, and the exploration for answers led this questioner to make fundamental discoveries about the form and nature of IT governance.

A major difficulty with using Foucault's work is that Foucault never claimed his work as theories, at least in the understanding of theory as a universal law (Dreyfus and Rabinow 1983; Foucault 1971). Yet in the *Archaeology of Knowledge* (Foucault 1971), Foucault had at least set out the beginnings of methods for the analysis of discursive practices. However, in the absence of clear theoretical guidance (and noting the criticisms of Foucault's vagueness reported in Chapter 3), some "liberties" with Foucault's work are necessary for this thesis. It is hoped that these liberties extend Foucault's work in a constructive and positive way, and are seen as compatible with Foucault's ideas.

The first extension is to recognise that some of the elements of the discursive formation are defined by power relations (objects and enunciative modalities), while others are primarily knowledge-based (concepts and strategies). These are minor labels, as Foucault considered power and knowledge to be inseparable, and the four elements of the discursive formation are essentially inter-dependent.

The second extension is to construct the discursive framework for IT governance using an amalgam of Foucault's archaeological and genealogical periods. Although scholars have viewed these to be different periods of Foucault's work (see, for example, Danaher et al. 2000; McHoul and Grace 1993), Dreyfus and Rabinow (1983) saw the two periods as a joint project in the construction of Foucault's interpretive analytics. Where archaeology was concerned with the exploration of knowledge disciplines, genealogy was concerned with the discovery of localised instances and effects of power (Dreyfus and Rabinow 1983).

The third extension involved the conception of the statement being "surrounded" by the elements of the discursive formation. This is how a discursive formation is conceived in the construction of the discursive framework for IT governance in Chapter 7. This concept does not contradict Foucault's work, but it must be recognised that Foucault made no such explicit claim. A reader of Foucault must be content with the vague notion of a discursive formation existing whenever there are regularities between the elements and *types* of statements (Foucault 1971).

Finally, the central extension of Foucault's work is the equating of the discursive formation with governance, and the statements with managerial action. Foucault implies that statements within the discursive formation are more than casual conversations: they are capable of creating and modifying objects within the discourse, and of other "serious" acts (Dreyfus and Rabinow 1983). Through his "double reduction", Foucault removes the search for truth and meaning from within the message and instead searches for what allowed that particular message or statement to exist, in that form, at that time, and not some other. What he is describing, in effect, is the governance of that discourse. Table 4.1 provides a summary of the analytical questions that can be used to guide the collection and analysis of data. These analytics reflect all of the extensions discussed in this section. They were used to evaluate the archival data for the case study in this project, and are also useful for analysts wishing to use this method in other research projects.

Table 4.1: Analytics for the analysis of data

Analytics	Application to this research
The analytics of power (from Section 3.5.6)	
What are the local manifestations and conditions of power?	The focus is very much on the local impacts of decisions around the project. However, these can also be traced to broader impacts, such as the impact of the project on the University's financial reporting.
What is the effect of power (rather than the motivation)?	The analyst must look for effects and outcomes of particular communications (or statements, as Foucault would refer to them). This is not a study into the mind or motivations of the decision-makers.
How have the mechanisms of power functioned?	The review of power mechanisms showed that committees were the dominant mechanism, but in fact power tended to concentrate around key individuals.
What are the historical conditions of power and knowledge in this study?	The analyst must be aware of the culture and history of the organisation being studied. For the case study, a review of the University showed its traditional reliance on committees and strong, perhaps autocratic leadership from its VC.
The analytics of the discursive formation (summarised from Section 3.6).	
Which communications are capable of enacting or influencing action and change?	This analytic helped to reduce the number of communications to be analysed. Only "serious" communications were considered.
Who speaks, who is listened to?	The analyst should ignore concepts of formal authority and structures. The focus is on whose voice is heard in management communications. Who speaks, who is listened to, and—where it can be determined—who is not.
Why this communication/object, at this time, and not some other?	The analyst must consider why the focus of a particular message is being discussed, and not some other. What has led to this situation?
By what rules could this happen?	This analytic guided the investigation to broad rules, such as the University's enabling Act of Parliament, and also to consider the economics and feasibilities that limited the possibilities of this ERP project.

Taking heed of these questions led to a critical appraisal being made of each document being considered for the case study. The message contained in the documents became secondary to the discovery of rules and conditions for its very existence. What was being communicated within an ERP project became less important than why an ERP project was being discussed at all, or why it was being discussed by these particular people. This helped to bring order to the evaluation of documents.

4.2 Case study research

The data collection upon which this thesis is based is presented as a single case study, in the form of a historical narrative. The case is constructed entirely from archival data, including memos, emails and various meeting records (such as formal minutes). The case is presented in Chapter 5, with the following chapters containing the subsequent analyses. However, before this chapter presents a case for using a single case study, it should first be declared that this was to be a multi-case study. The reasons for changing to a single case design are detailed in the following section.

4.2.1 Reasons for not adopting a two-case design

Approval had been given by Central Queensland University (the organisation involved in the ERP project in the following chapter) to conduct interviews with past and present staff to gather data not only for the period of Project Renaissance, but for the state of IT governance at CQU in 2011. Consequent to this approval, nine interviews were conducted and analysed. The intent was to provide a comparison of IT governance at the same organisation at two different times, and to describe the governance at these times using the theoretical framework being developed in this thesis.

Several factors contributed to the decision to base this thesis on a single case study. First, CQU provided unprecedented access to all archived communications for the period of Project Renaissance (the ERP project reviewed in Chapter 5). This made it possible to construct an in-depth analysis of the discourse concerning the project between all of the key decision-makers. This level of primary data was not available for researching IT governance in 2011.

Second, the two cases offered no direct comparison. The first case was of a major ERP project, but no comparable project existed at the University in 2011. Therefore, while the two cases would have been interesting to read and useful for further research, they offered no valid comparison. This would have lessened the validity in the research design.

Third, the objective of this thesis it to build a theoretical framework that offers deep insights into the ontology of IT governance. This process should be completed before the resulting framework can be used as a basis for comparing one instance of IT governance with another. By considering a second case, this thesis risked repeating the errors of the extant IT governance literature, where assumptions about the form and nature of IT governance are perpetuated in the absence of a firm ontology. Therefore, it was decided to examine a single case constructed from a rich source of data, and to report on the insights gained. A framework emerging from this process can then be used for future research into other instances of IT governance.

4.2.2 Single case study research

Yin (2003) found that single case study designs are common and appropriate for "revelatory" or longitudinal purposes. This case study fulfils both purposes. However, Yin also warned that single case studies are more open to criticism and scepticism about the conclusions drawn. Since this thesis is built upon a single case, Yin's subsequent advice should be heeded: '…be prepared to make an extremely strong argument in justifying your choice for the case' (Yin 2003, p.54).

While there is no doubt that multiple cases have greater potential for maximising explanatory power in a study, this study has only one case for one primary reason: the exceptional depth of data access that was provided by the organisation under study. While other researchers lamented at the unwillingness of companies and other organisations to open up their corporate governance records for independent scrutiny (see, for example, Jordan and Musson 2004), this researcher was granted access to all available archival material. No doubt this was because the period in question occurred a decade ago. Nevertheless, the lessons learned and the issues faced remain relevant.

Mounting a second case of comparable depth to this case would not only be difficult to achieve in terms of data availability, it would most likely be beyond the time limitations for this study. Perhaps more importantly, a further case study would not strengthen the external validity of this thesis. As mentioned earlier in this chapter, this is an interpretive study, which therefore '…challenges the validity of the ontological assumptions which underwrite functionalist approaches…' (Burrell and Morgan 1979, p.32). As an interpretive study (and unlike the functionalist and normative studies to which this thesis seeks to respond),this thesis does not seek generalisability ,or testable hypotheses. As this study is not looking for generalizable conclusions, such an expansion of the study may not offer a comparable increase in explanatory power. However, the context and scenarios described within the single case study would be recognisable by scholars and practitioners of information systems projects, allowing insights and lessons to be drawn.

4.2.3 Historical case study design

The case study follows Eisenhardt's important principle for constructing case studies:

> Finally and most importantly, theory-building research is begun as close as possible to the ideal of no theory under consideration and no hypothesis to test. Admittedly, it is impossible to achieve this ideal of a clean theoretical slate. Nonetheless, attempting to approach this ideal is important because preordained theoretical perspectives or propositions may bias and limit the findings. Thus, investigators should formulate a research problem and possibly specify some potentially important variables, with some reference to the extant literature. However, they should avoid thinking about specific relationships between variables and theories as much as possible, especially at the outset of the process (Eisenhardt 1989, p.536).

This case study has been constructed in a very particular manner. Case studies have been a useful method for research in information systems management; Markus' case of political motivations influencing the success (or lack of success) in an accounting system implementation (Markus 1983) has been held up as an exemplar (in particular by Lee 1989). However, Markus' approach was to specifically identify candidate theories for testing, and intertwined her analysis with the case facts. Lee praised this case study as an exemplar of how to achieve scientific rigour and a positivist world view within a single case study. This writer finds no fault with either Markus' approach, or the views of Lee, except for the point that the purpose of this study is to offer an alternative to the positivist and normative world view of IT governance. Consequently, the methodology must reflect that, and for this reason the case study design is more attuned to Eisenhardt than to Markus.

A historical case study involves a deep engagement with archival data, rather than a reliance on secondary sources. It is important to 'ward off misunderstandings and reveal how key actors thought about what they were doing (Amenta 2009, p.352). This approach is beneficial in that the reader is able to read the narrative free of theoretical or ideological bias.

The case study is then followed by two analyses: one using the extant IT governance literature, and the other using elements of social and organisation theory.

4.3 Data collection and analysis

This research was conducted with the approval of the CQUniversity Human Research Ethics Committee (CQUHREC), project number H07/03–026. Under the direction of that committee's ethics approval, the Secretary to Council for CQUniversity was written to in November 2010, seeking permission to conduct interviews with past and present office holders of the University, and to search archival data pertaining to Project Renaissance and the University's Council. A signed approval was received on 8 December 2010, granting permission to:

- Approach current and past officers of the University to request interviews,
- Search University documents (contingent on specific requests being made),
- Use the University's name within publications.

A copy of the signed permission form is provided in Appendix A.

Further requests were made (and approved) for access to archives and specific staff members for interviews. Copies of these are provided in Appendix B. As noted earlier in this chapter, although interviews were conducted as part of this research, for reasons already stated they did not inform the case study and therefore no further record of them is provided here. Similarly, the second case study was not presented for reasons already provided.

Access was granted to the University's archive, which included:

- All Council meeting minutes and correspondence,
- Minutes of meetings and correspondence for various committees that had supported Council and the VC over several decades,
- A "float file" of correspondence and diary notes belonging to the VP (A) during the time of Project Renaissance,

- All stored electronic records pertaining to Project Renaissance kept within the University's new electronic archive system, TRIM. These included email communications, memos, written notes, minutes of meetings and various reports.

This last item provided several boxes of documents, printed from TRIM and stamped "COPY". They were accompanied by a printed report of the documents printed from TRIM, with a TRIM record number. However, the printed documents themselves were not coded with the TRIM number, and little was provided on the report to assist in matching documents with the TRIM number. Nevertheless, any document used from any of the above sources was referenced into this thesis' reference management database system (the Bookends system was used in preference to Endnote) and the documents were cross-referenced with that database of references.

Every source document used to construct the case study in Chapter 5 has been provided with a reference, and that reference includes the source container of the original document.

The primary data collection was too large for a single case study, given the time and word count constraints for submitting a PhD thesis. Communications within Project Renaissance were rejected, as this was not to be a case study on the conduct of an ERP project. Communications within the senior management levels and Council concerning the Project or its antecedents were included, as were communications that crossed the boundary between University and Project.

The data collection that satisfied these criteria was still too large, forcing a critical review of what purpose the case study was to serve. It was not to serve as a historical record of the Project, even though it was constructed as a historical case study. Rather, its primary purpose was to provide rich context with which the ontology of IT governance could be discerned. To that end, enough data was included in the case study to provide such a case study, with the remaining data kept for later research.

Foucault's concepts of the discursive formation (Foucault 1971) proved to be especially useful in the analysis of data. The discursive framework, developed later and presented in Chapter 7, could not be used as it had not been developed. The case study was not a test of the framework but the foundation for its creation. Yet Foucault's analytical question provided valuable guidance.

When the narrative for the case study was being constructed from the source data, an immediate problem had to be addressed. The trap of focussing on the content of the archived communications was ever-present. Of course the content drives the narrative, but only to a point. A focus on the communications themselves would have revealed a very effective case study about project management and about an ERP project. Yet this was to be a case study about IT governance, and this project was in response to the apparent "messy" nature of its ontology. How can a case study be constructed that allowed full analysis and opportunity for discovery, without also importing preconceptions of what IT governance is? Foucault's analytics showed the way.

4.3.1 Reflexivity and analytics

The case study was constructed from data collected from a large university archive, covering not only the period of the ERP project, but also a decade before and after. From such an archive, decisions had to be made concerning what data was to be collected and what was not to be. This required a reflexive exercise, based on the literature reviewed in the previous chapters, on the nature of IT governance.

The construction of this case study held substantial traps for the unwary researcher. Principally, this was not to be a case study about an ERP project; this is to be a case study about the governance of the project, and its relationships and interactions with the broader IT and corporate governance environments within the organisation (a university). With no strong ontology of IT governance available, decisions had to be made regarding where and what to look for as evidence of governance, versus evidence of management.

Care was needed in establishing what was to be analysed from this case study. The period being analysed occurred at a time when the term IT governance was only beginning to be used in the academic literature. Consequently, there was no clearly identified structure or process within the organisation that said "this is IT governance, or at least how it is understood at this place and at this time". Instead, the case study had to be constructed from data that allowed the analyst to find IT governance, by distilling its form, scope and nature from the data.

To give a cohesion to the data collection and the subsequent narrative contained within the case study, the focus was on a major ERP project. This approach risked being caught in another trap: would this be a case study of project governance or of organisation-wide IT governance? The decision was taken to use the project as the unifying concept of the case study, but to also collect data concerning its communications and interactions with other sections of the university. The reason for this was that because the project was so significant for the university, it must therefore interact with the true form of IT governance at that university.

With the scope of the data collection settled in regards to where to focus the search for data, a decision had to be made on how to discern data of governance versus data on management. As this is the focus of one of the research questions for this thesis, it was important not to rush to an assumption of where the point of demarcation between governance and management might lie.

The decision was made that as Foucault had been selected as the "lens" through which to view IT governance, his work needed to be consulted for guidance in the data collection. If Foucault's work is to be useful in analysing and conceiving IT governance, then it also needs to be able to guide a data collection. And in fact, it was.

Foucault's double reduction of discourse, described on page 81, offered important guidance for the evaluation of archival data. On reflecting on that reduction, where concepts of truth and medium are bracketed out, it can be perceived that each communication has two aspects: the message itself , and the discursive formation that wraps around it: the power, knowledge and concepts that made the communication possible. Although he never discussed discursive formations in this context, it is this researcher's view that Foucault's reduction allows the analyst to discern the *governance* of discourse. At this discursive level and with this model of discursive formations, the distractions of roles and structures fall away and the distinction between management and governance becomes clearer. Management can be equated with the content of a message ("do X with Y to achieve Z), while governance is at the level of the discursive formation. Therefore, as an example, when evaluating emails for inclusion, the focus should not be on the content of the message, but on what made that email possible, and whose voice was being heard. By following this guidance and reflecting on how Foucault's discursive formation (see the discussion starting on page 81 for an overview of this) might apply to archival data, an effective case study of the governance of the ERP project could be constructed.

4.3.2 Validity

The validity within interpretivist and constructivist research remains controversial. Guba and Lincoln (2005) examined the issues surrounding validity in interpretivist research. At the heart of the problem is the conflict between method and rigor on one hand, and interpretation on the other. However, the goal of validity remains relevant:

> Validity cannot be dismissed simply because it points to a question that has to be answered in one way or another: Are these findings sufficiently authentic…that I may trust myself in acting on their implications? More to the point, would I feel sufficiently secure about these findings to construct social policy or legislation based on them (Guba and Lincoln 2005, p.205)?

This thesis employs several devices to improve the validity of the outcomes, but ultimately validity lies in the judgment of the reader. The devices used in this thesis to improve validity are:

- The case in Chapter 5 is written as an historical narrative—although as stated earlier, not a complete history—instead of the more usual approach of analysis and case facts being interwoven. This allows the reader to evaluate the entire case study first, before making judgements about the following analyses and conclusions.
- The case is deliberately written to include numerous and extensive quotations of source documents, to allow the reader to read the words of the historical participants wherever possible.
- All source documents, whether they be emails, minutes, or memos are referenced. All are available for review and are contained within the participating organisation's archives, as well as the archived data collections for this thesis.
- The thesis was read and criticised by a retired associate professor (Associate Professor Jessica Kennedy) who had not had prior involvement with this research (although she had previously worked in the same school as this researcher).
- The data collection, methodology and conclusions were regularly discussed with this project's principal and associate supervisors.

4.4 Constructing and applying the discursive framework

The theoretical framework—to be presented in Chapter 7—is constructed using Foucault's discursive formation (as presented in Foucault 1971) and the extensions identified earlier in section 4.1.2. Further methodological guidance on how this framework is constructed in included within that chapter, in order to be more immediate to the construction and presentation.

4.5 Conclusion

This chapter has provided an overview of the methodology and methods used to construct a large historical case study and analyse the result. A justification has been provided for using a single case study approach, and for using Foucault's interpretive analytics as the basis of the interrogation. The following chapters provide the resulting case study and analyses.

Chapter 5: Case Study: Project Renaissance

5.1 Introduction

This chapter presents an historical review of Central Queensland University's major enterprise resourse planning (ERP) project, Project Renaissance. The project ran from 1999 to 2001, and resulted in the implementation of a PeopleSoft ERP system. A major project such as this is an excellent opportunity for constructing a case study on IT governance. Although the events took place over a decade ago, and none of the key decision-makers remain at the University, an enormous amount of documentary evidence was made available for analysis, which most likely would not have been available if the project had been of recent history. The documents included Council minutes and reports, correspondence between decision-makers, Steering Committee minutes, and personal emails.

A trap for constructing a large case study like this is to lose focus of what is being reviewed. The key question for this thesis is 'what is IT governance?'. Consequently, the case study is constructed in a way that assumes that this question remains open, and that clues must be found within it. The case study is really about identifying what, and who, shaped the project, what and who brought it into existence, limited it, and gave it the opportunity to achieve outcomes. The case study is largely silent on the happenings within the implementation project itself: the focus is on the interactions between the project and the University. It is around the fringes of the project that evidence of governance is looked for.

Following this introduction, the chapter proceeds by way of several major parts, covering the background to the project, the antecedent issues that led to the project's initiation, the establishment of the project, the governance issues surrounding the project itself, and the conclusion of the project and its consequences. These parts are broken up by summaries of each year of the project: 1999, 2000 and 2001. This is done to give the reader a sense of the flow of time. While the case study is mostly constructed around issues, these sometimes overlap in time (to do the opposite might give a better sense of the historical flow of time, but little sense of continuity in issues). By establishing "stop points" at the start of each year, the reader can gain a sense of how the issues related to each other over time.

5.2 Background

This section introduces the major decision-makers and institutions involved in this case study. Of major importance are the decision-makers for Central Queensland University (CQU) and its implementation partner, Andersen Consulting (AC). PeopleSoft is also introduced, as it is the vendor for the system being implemented. Beyond that, however, the PeopleSoft system plays only a minor part in this case study.

5.2.1 About Central Queensland University

Central Queensland University (CQU) began as an Institute of Technology in 1967 in the Queensland city of Rockhampton. By 1989, it had established itself as a multi-campus institute of advanced education, with campuses in the neighbouring cities of Mackay, Emerald, Gladstone and Bundaberg (Moodie 2007). Following the passing of the University of Central Queensland Act in 1989, it became a university in 1992—the University of Central Queensland (Cryle 1992). With university status came the necessity for revised and updated governance structures, and executive appointments appropriate for a university. Consequently, appointments were made for Vice Chancellor, Chancellor, and Pro Vice-Chancellor (Academic and Research) (Cryle 1992). The peak governance body of the University is its Council (its terms of reference and membership is provided in Table 5.1 on page 133). The equivalent of a Chairperson of a board is its Chancellor, and the Vice Chancellor (VC) equates to a Chief Executive Officer (CEO).

CQU provides undergraduate and postgraduate education to Australian students in a mixture of on-campus and distance modes, as well as to a large cohort of international students within Australia.The official enrolment figures for 1999–2001, provided in Figure 5.1, show the dramatic increase in student numbers from international enrolments over this period[12].

12. EFTSU = equivalent fulltime student units

Figure 5.1: Student enrolments 1999–2001 (Source: Central Queensland University 2001, p.37)

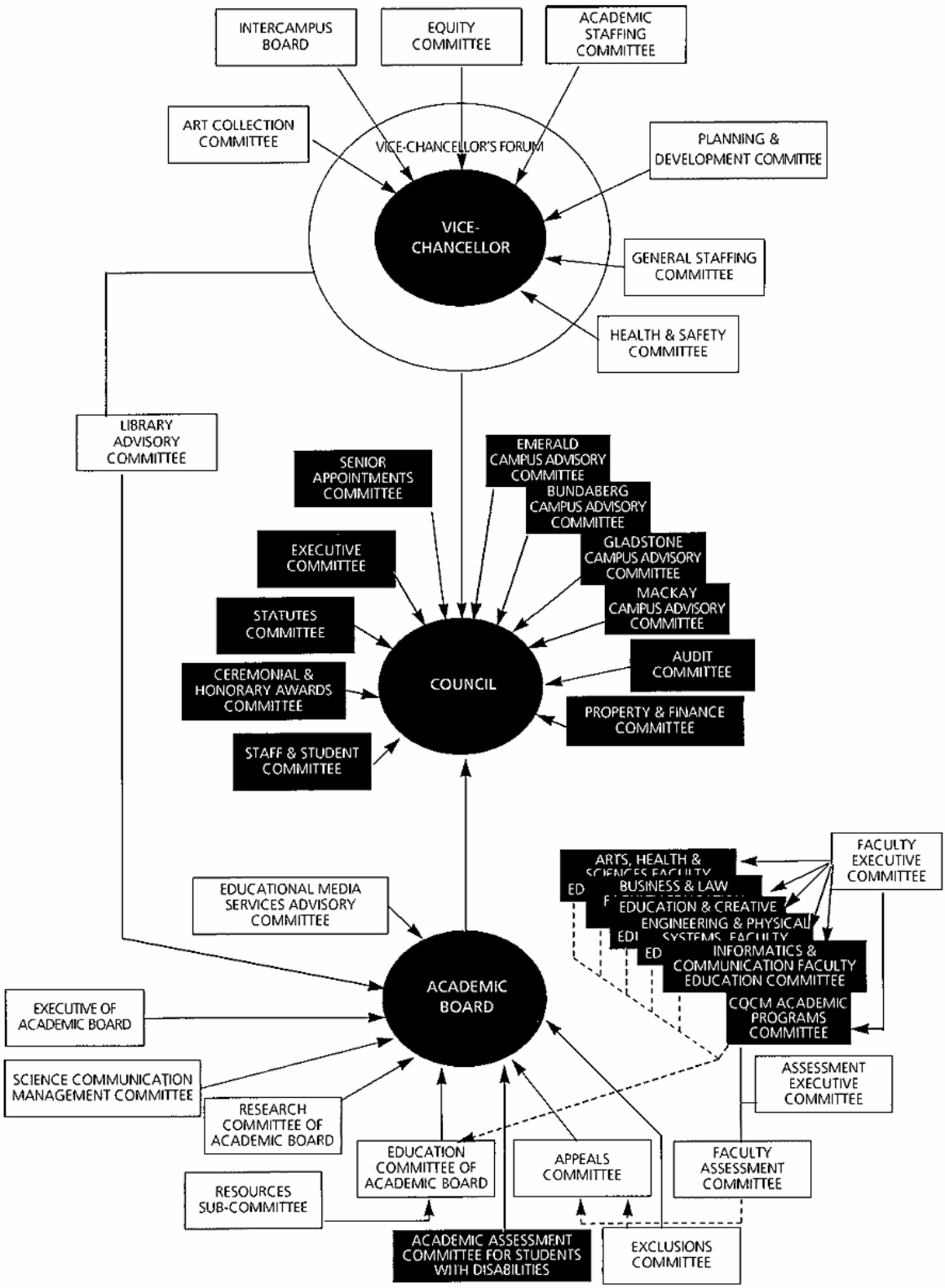
Student Numbers and Load by Attendance Mode, 1999-2001

	1999		2000		2001	
Mode of Attendance	**EFTSU**	**Students**	**EFTSU**	**Students**	**EFTSU**	**Students**
Internal & Multi Modal						
Full-Time	4553.0	4712	4516.5	4583	7460.9	7423
Part-Time	1220.6	2829	1915.0	4335	1758.7	3997
Total Internal/Multi Modal	**5773.6**	**7541**	**6431.4**	**8918**	**9219.6**	**11420**
External	2602.3	5736	2736.2	5855	2823.8	6119
Total	**8375.9**	**13277**	**9167.6**	**14773**	**12043.4**	**17539**

5.2.2 CQU's governance structures

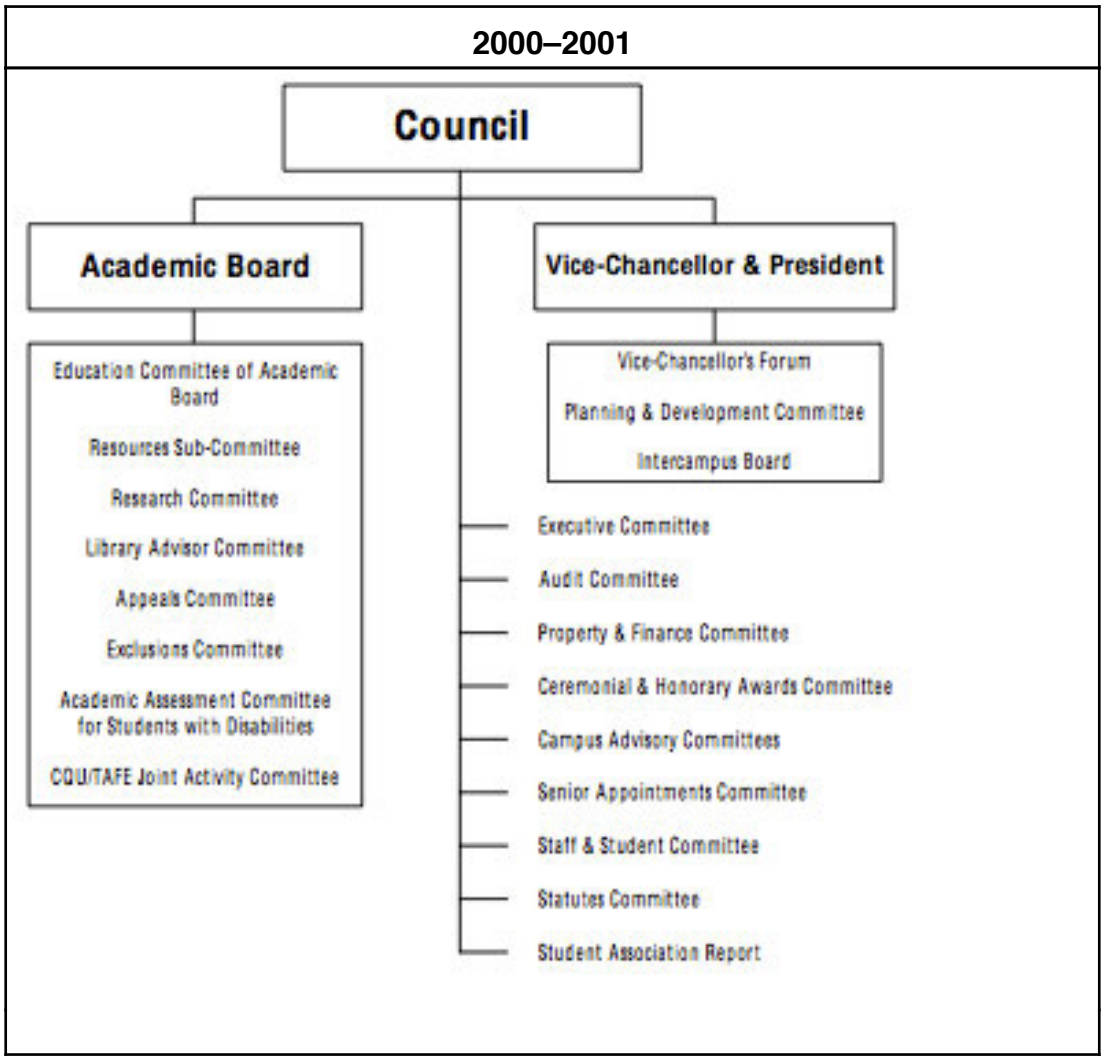
CQU has relied heavily on committees for its internal governance. Figures 5.2 and 5.3, taken from the University's annual reports of 1999 and 2001 respectively, illustrate the committees in existence before and during Project Renaissance. The University changed the committees reporting to the VC in 1998, but the committees of Council remained relatively constant. The Property and Finance Committee was constituted prior to the presentation of the 1999 budget, and was a critical committee during the life of Project Renaissance. Table 5.1 on page 133 shows the terms of reference for the critical governance committees in 2000, the middle year of the project.

Figure 5.2: Chart 1: CQU's internal committees 1998/1999 (Central Queensland University 1999, p.10)



By 2000, the number of internal committees had consolidated, especially those around the Vice Chancellor, as shown in Figure 5.3.

Figure 5.3: Chart 1: CQU internal committees 2000–2001 (Central Queensland University 2001, p.11)



Not all of these committees were directly relevant to the conduct and governance of Project Renaissance. Those that were prominent in the case study are included in Table 5.1.

Table 5.1: Critical governance committees for Project Renaissance reports in 2000 **(Council 2000a, pp.7–14)**

	Terms of reference	Membership
Council	The Council is responsible for the management and control of the total operation of the University which includes its day-to-day affairs, property holdings and financial management. The Council has the full power and authority to appoint and dismiss officers and employees of the University. It acts in all matters to advance the interests and aspirations of the University. The current Council was constituted in June 1998, which term concludes in June 2001. Council meetings are held on a bi-monthly basis, normally on the third Monday of each alternate month.	• Chancellor (Chair) • Vice Chancellor and President • Director General of Education (or nominee) • President of Academic Board • Three elected members from the academic staff • One elected member of the general staff • Those members appointed by the Governor-in-Council • Two members elected by convocation • Two members co-opted by Council • Vice-President (Administration)—Secretary to Council.
Executive Committee of Council	1. There shall be an Executive Committee of Council with such membership of Council members as Council may from time to time determine. 2. The Executive Committee may, between ordinary meetings of Council, exercise any of the powers of the Council in respect of all matters which require determination before the next such meeting. 3. Any action taken by Executive Committee of Council shall be reported to Council at its next ordinary meeting.	• Chancellor • Deputy Chancellor • Vice Chancellor • 3 other Members of Council
Property & Finance Committee	The Property and Finance Committee shall advise the Council on all matters relating to the financial policy of the University and on policy for the development, maintenance, and environmental management of University sites.	• Those appointed by Council • Those co-opted by the Committee. • Chair: appointed by Council from Committee members.

Audit Committee	The.Audit Committee is responsible for determining the University's policy and practice with respect to the internal and external audit functions.	• Chair of Property & Finance committee (Chair) • Vice Chancellor • Vice-President (Administration) • Two member of Council (not being University staff) • Such other persons appointed by the Council.

5.2.3 Key decision-makers 1997–2001

A list of the abbreviations used in this case study are provided in Table 5.2. The University's core group of decision-makers were the Senior Executive group (which is not the Executive Committee of Council—ECC). Within this thesis, these individuals will be referred to by title, or by title abbreviation. The key decision-makers included the VC, the DVC, the VP (A) and the PVC (R&AD). Within the project, the key decision-makers were the two Project Directors: one provided by Andersen Consulting, and one experienced project manager recruited by the University to represent their interests in the project.

Table 5.2: Key decision-makers before and during the Project

Abbrev.	Title	Formal role
VC	Vice Chancellor and President	The Vice Chancellor represents both the University's senior executive officer, and its senior academic. As such, the position dominates both the business, administrative, and scholarly aspects of decision-making. The VC at CQU during Project Renaissance was a willing and constant advocate of the project's benefits, and reserved ultimate decision-making responsibility for it.
DVC	Deputy Vice-Chancellor	The DVC is the standing deputy to the VC, and assists him in University planning and development (VP(A) 1999j).
PVC (R&AD)	Pro Vice-Chancellor (Research & Academic Development)	The PVC (R&AD) is responsible for research and academic development within the University, and also has direct responsibility for some academic support units, such as the library (VC 2000c, p.9) .
VP (A)	Vice-President (Administration)	The VP (A) is the chief administrative officer of the University, and is responsible for the major administrative functions, including Finance, Human Resources, and Information Technology (VP(A) 1999j).
VP (CD)	Vice-President (Corporate Development)	The VP (CD)'s roles include responsibility for the monitoring, strengthening and furthering of non-government funded activities of the University (VP(A) 1999j).
ACPD	Andersen Consulting Project Director	Andersen Consulting appointed a project manager to oversee their own effort. The ACPD was a senior Andersen manager and was skilled in setting up the project infrastructure, mechanisms, and protocols within a short period.
PD	Project Director	Appointed on contract in September 1999, the PD was a senior accountant and experienced project manager. He represented CQU's interests and provided an independent review of the project. The PD managed the project in tandem with the ACPD.

5.2.4 About Andersen Consulting

Andersen Consulting began when a group of partners from the consulting division of Arthur Andersen formed a new consulting company in 1989. Andersen Consulting became a global management and technology consulting company in its own right, and built its business model around business integration methodologies (Accenture 2012b).

In 2000, Andersen Consulting was forced by a United States court, as a result of its final separation from its parent firm Andersen Worldwide, to cease using the Andersen name. As a result, its name changed to Accenture in 2001 (Greenemeier 2000).[13] Accenture remains a global management consulting company, with strong ties to large Australian businesses (Accenture 2012a).

5.2.5 About PeopleSoft

PeopleSoft is a major supplier of ERP software worldwide. It was founded in 1987 in Pleasanton, California. In 1992, it became a publicly listed company (Nnigma Inc. 2008). In 1999, it began to offer an enterprise suite of systems, including a student administration system, to the Australian and New Zealand higher education markets. A large number of universities purchased some, or all elements of these systems. This resulted in a significant number of universities in both countries running large implementation projects simultaneously. Table 5.3 shows the Australian and New Zealand universities who were committed to implementing some or all of the PeopleSoft Higher Education ERP system in 2001 (source: Customer Services Director —PeopleSoft 2001).

Table 5.3: Universities adopting PeopleSoft

Adelaide University	University of New South Wales
Central Queensland University	University of Newcastle
Griffith University	University of Queensland
RMIT	University of South Australia
University of Auckland (New Zealand)	University of Southern Queensland
University of Canterbury (New Zealand)	University of Western Australia

PeopleSoft was wholly acquired by Oracle (now the World's largest vendor of database and application systems) in 2005, but the PeopleSoft brand and products were retained. The PeopleSoft ERP software is still used at CQU, since renamed CQUniversity Australia.

13. Although the change of name to Accenture occurred late in the period covered in this chapter, it was not mentioned as it had no bearing on the conduct of the Project.

5.3 Antecedents (1997-1998)

Sambamurthy and Zmud (1999) used contingency theory to demonstrate that there is no single optimum arrangement for IT governance. They found that factors such as the local corporate governance structures, culture, and the IT capabilities of senior executives influenced the shape of IT governance at any particular organisation. Therefore, a case study that lays the foundations for establishing an ontology and a theoretical framework for IT governance must first seek out the local antecedents for the project. This search extended back to 1997, when the University Council examined the University's threats and opportunities, both internal and external.

In 1997, the Information Technology Division (ITD) had no specific or formal framework of IT governance, and nor did the Council. IT governance was a largely unknown term at this time and the academic work by Brown (1997) that brought it to international attention would not be published until later in 1997. While there was no formal IT governance plan or framework in place, this did not mean that IT governance did not exist. To establish how information technology was governed, this case study starts by examining the workings of the University Council and its sub-committees.

Then, as now, Council was the apex corporate governance body in the University and was served by a number of sub-committees. Council ultimately set the agenda for the direction of the University, approved total budgets, and directly considered and approved projects and expenditure of strategic importance. From 1997 to 1999, Council was increasingly concerned about their strategic response to the proposed deregulation of student fees, and the ability of key systems—notably finance and student records—to support their strategy.

5.3.1 Deficiencies of financial systems (Jan – Aug 1997)

At the start of 1997, Council was aware of the impending West Review of higher education, with its proposed changes to the Federal Government's funding arrangements for higher education in Australia (see, for example, VC 1997). This review, commissioned by the recently elected Federal Government, had the potential to fully deregulate the university sector, making universities compete with one another for students. Council had another reason to be interested in the West review—its Vice Chancellor was on the West review committee (West 1997). In light of this, Council spent much of 1997 considering avenues for recruiting international students, including off-shore ventures and partnerships, and also firming up its relationship with the private education provider Campus Management Services (CMS). Another possible strategic initiative considered by Council was the four-term academic year. When other universities (potential rivals) were still using a two-semester model, a four-term model was thought to be attractive for students seeking to fast-track their study and for international students with time-limited visas.

Although the CQU Council was moving proactively to strategically respond to the changing higher education environment, its members were concerned about their own decision-making processes. The February 1997 meeting of Council aired grievances from Councillors about the timing and quality of financial information for decision-making: the reports were considered to be inadequate:

> While there is a belief that there has been an improvement in the presentation of such information to Council, many members still feel unable to fully discharge their fiduciary duties because they have not been able to receive, on a regular basis, the information on the University's financial performance which they required…It was noted that information is being sought on major accounting firms which could assist the Council by providing an expert review (Council 1997a, p.9).

The VC presented a report on this matter, supporting the councillors and expanding the context.

> There will be changing and growing demands on the Bursar's Division over the next few months as a consequence of the Federal Government's implementation of the principles of "competitive neutrality" within the university sector. There are also likely to be changing demands as a result of the current Review of Higher Education Financing and Policy ("The West Review").
>
> In order to ensure that the University is well-placed to adjust to these changing demands, and to ensure that the Bursar is provided with all necessary assistance to improve the presentation of financial information to Council, the Vice-President (Administration) is currently seeking information relating to the costs of a major review of all of our accounting practices and procedures including the ways in which financial information is presented to Council and to all senior officers of the University. A number of the major accounting firms now have considerable experience in providing such assistance by way of review and recommendation to universities.
>
> I wish to advise Council that, on receipt of the relevant information…it is my intention to commission such a review (VC 1997, p.1).

The Council again raised concerns at the April 1997 meeting, stating:

> The view was suggested that the University does not have systems which would allow it to provide timely and accurate reports in the timeframe suggested (Council 1997c, p.9).

The Executive Committee of Council (ECC) also considered the proposed review from four major accounting firms. Its Chair sought to mollify frustrated committee members, urging them to consider further opportunities for the Financial Services Division (FSD) to demonstrate their capabilities and those of the existing system. However:

> Other members felt that the issue was wider than reporting and included such things as key performance indicators, benchmarking, and duplication of systems (ECC 1997a, p.2).

The VC's report was subsequently presented to Council at the June 1997 meeting (Council 1997d).

At the August meeting of ECC, it was agreed to seek tenders, appoint an accounting firm and undertake the review (ECC 1997b). This was reported to the Council meeting of August 1997 and was then largely removed from Council's attention until later in the following year. In the meantime, Council's attention shifted to another vital in-

formation system, the student records system (SRS), which is discussed in the following section. During this time, the global accounting and consulting firm Arthur Andersen was appointed to review the University's financial systems, and this was conducted in early 1998.

5.3.2 The Student Records System (SRS) (Jan 1997 – Apr 1998)

At the beginning of 1997, CQU—like many other universities—belonged to the UniPower consortium, a body charged with developing a standard specification for an integrated information system for those Australian universities. UniPower would not be developing this integrated system itself; instead it was negotiating a contract with a third party supplier. Early in 1997, these negotiations collapsed and in time this would see the end of UniPower with no substantial deliverables (IT Director 1997).

Unipower's prime deliverable for CQU was a new student records system. The existing legacy system was not capable of meeting future requirements, such as the four-term year (or any number of terms greater than two). In addition, due to project slippages from UniPower, the University had already purchased applications for finance and HR/payroll. The Director mentioned that the University had the option of purchasing commercial software from suppliers such as PeopleSoft, but that this would be costly (IT Director 1997).

The Information Technology Division (ITD) supported and developed the Student Record System (SRS). In doing so, they had developed a degree of project management expertise. In a memo of 11 April 1997 to Chancellery executives (Associate Director IT 1997)—and at the Vice Chancellor's Committee (VCC) meeting of 16 April 1997 (VCC 1997)—the Associate Director of ITD advised of a project underway within ITD. This project was to convert the existing legacy SRS to an Oracle database for the purpose of reducing data redundancy; to become more integrated with other administrative systems that are currently using Oracle; and to cater for the four-term year to commence in 1998. The reports also stated that purchasing an SRS from commercial providers remained an option.

Frustrations with the shortcomings of the SRS continued, particularly its unreliable reporting. In April 1998, on the same day that the VCC met to discuss the review of financial systems at the University, the meeting of the Intercampus Board considered a detailed report of a recent issue with faulty and unreliable reporting of student enrolments from the SRS. Discussions centred on problems with the system and with centrally controlled inefficient processes. The Vice-President (Administration) responded that there was already a review of financial systems under way because of similar concerns with financial reporting. In addition, he stated that 'there existed a need to review information technology across the University' (VCC-ICB 1998, p.3).

The issue of the SRS then disappeared from Council's deliberations for the remainder of the year. However, as will be shown later, it had not lapsed as a management issue and certain endeavours were undertaken and completed before Council was apparently made aware of them. Unknown to Council, the VP (A)'s expressed need to review information technology across the University had crystallised. Senior managers and divisional directors had undertaken a review of all administrative systems during late 1998 with an intention of replacing them with a more integrated system. This was taking place concurrent with Council's review of financial systems and processes.

5.3.3 The Arthur Andersen review into financial systems and processes (Aug – Dec 1998)

At the August 1998 meeting of Council, the Vice Chancellor reported that the Arthur Andersen report into the review of financial systems and operations would soon be made available to members (Council 1998, p.4). There was a mood within Council to implement this report. An undated job ad for the position of Chief Financial Officer (CFO) was attached to the minutes of this meeting. The position of CFO would replace the existing position of Bursar, but no decision had yet been made at Council to follow this course. The final decision to advertise for a CFO was made at a subsequent meeting of Executive Committee of Council[14].

The 17 September 1998 meeting of Executive Committee of Council (ECC) considered an extensive discussion paper from the Bursar (Bursar 1998) and discussed its merits. They also considered advice provided by Arthur Andersen and concluded that the Bursar's proposal was not strong in aligning the finance function with University strategy. Consequently, the ECC decided to immediately advertise for the position of Chief Financial Officer. This occurred and the appointment was made around December 1998.

At a 19 September 1998 meeting of Executive of Council, the VP (A) reported that the Arthur Andersen report should be implemented faster than recommended (VP(A) 1998a). Drivers for this change were:

- A new Director of Finance would have private sector financial management experience;
- The University had to make better use of existing financial information systems and staff resources;
- The University needed a consistent, single view of financial management, including a commonly accepted chart of accounts.

14. Although the position was advertised as a Chief Financial Officer, the successful applicant was appointed as Director of Finance. The reasons for this change are not recorded in the Council minutes.

The Bursar was replaced in December 1998.

Council then prepared for 1999 knowing that a strategic restructure of the University's financial functions and systems was about to occur, and that the SRS—which still had significant problems and had undergone significant upgrades in 1998—was now capable of supporting the University's strategies. Council were therefore entitled to focus on the University's strategic response to the West Report. However, two issues served to disrupt Council's plans. The first was the delayed and opaque processes for producing the University's 1999 budget which—unknown to Council—contained funding for the acquisition of a new administrative system. The second issue was the review of administrative systems that had been occurring at the University since the second half of 1998, which would be put to Council simply as a request for approval to expend funds.

5.3.4 The 1999 budget process (Oct – Dec 1998)

The 1999 preliminary budget was presented to Council at the last Council meeting for 1998. Although it was late, the Deputy Vice-Chancellor (DVC) explained that this is not yet a complete budget, containing only allocations to operational cost centres, and only at a summarised level. The Council was advised that further detail would be provided in the February 1999 meeting of Council (DVC 1998). There had been some difficulties in constructing the 1999 budget. First, the intended budget appears to have undergone a major revision late in the process, as evidenced by the Bursar's report to the 9 October meeting of the Property & Finance committee:

> The bursar has prepared a revised budget that is closer to actual reality, however it has not been presented to Council as yet. The Bursar indicated that the revised budget was prepared in a very short period of time and with undue pressure being brought to bear (P&FC 1998b, pp.1-2).

Second, the committee structures changed in 1998. The Vice Chancellor's Committee and its sub-committees were discontinued (VP(A) 1998c) and some existing committees were amalgamated. Two of these committees were the Finance Committee and the Buildings & Grounds Committee, which were amalgamated into the Property and Finance Committee. The terms of reference for the new committees were passed by Council at their June meeting (VP(A) 1998b). For the Property and Finance Committee, the terms of reference included:

> …the Committee shall make recommendations to and advise Council on:
>
> …
>
> 1.2 matters relating to operating income and expenditure, and more particularly on an annual operating budget for the University for the ensuing calendar year and on changes to the budget following reviews (VP(A) 1998b, p.4).

The Property and Finance Committee considered its new terms of reference at its October meeting.

> 5.2 The Committee discussed the relationship between this committee and the Budget Working Party. There is no direct link between the two committees except that the final budget as developed will be presented to this Committee (P&FC 1998b, p.4).
>
> …
>
> 5.4 The committee considered its role under the new Terms of Reference to be one of review. In light of this the Committee will be working towards ensuring that appropriate analysis of the financial position of the University is undertaken and then conveyed to Council (P&FC 1998b, p.4)

At that point, the Property and Finance Committee may have ceded its responsibility to review the budget process and advise council on the workings of the Budget Working Party, which was a senior management group and not a committee of Council. The Committee saw its sole involvement as being one of reviewing a completed and final budget document.

At its 27 November 1998 meeting, the Property and Finance Committee reviewed the draft 1999 Budget. the committee noted that the budget contained strategic reserves that were to be taken 'from the top' (i.e. before operational expenditures). This was not challenged or discussed (P&FC 1998a). Those reserves included a $2m item for 'IT strategic initiative'.

5.4 1999

1999 would prove to be an eventful year for CQU. The budget was finally approved in February, but Council immediately found itself being asked to approve the purchase of a large enterprise system to replace the existing student records and financial systems. What followed was a rush to lock in purchases and contracts in a way that would later draw a rebuke from the Queensland government and led to a level of resistance—most markedly from the University's Financial Services Division—that would eventually diminish the outcomes delivered by the project.

1999 itself would be dominated by several events: the establishment of the project and its governance mechanisms; the problems within the finance function of the University (including the resignation of the Finance Director in less than a year since his appointment and problems in delivering the 1999 annual report) and the unpreparedness of the purchased software to comply with the imminent Goods and Services Tax (GST).

Nevertheless, by the end of 1999, a large ERP project was in operation, guided by a highly experienced implementation partner, with only a minor slip in the schedule to allow for the GST issues. CQU was also still looking for a new Finance Director.

5.4.1 The budget process is finalised

Executive Committee of Council saw the revised draft 1999 budget prior to their January 1999 meeting. The Vice Chancellor 'indicated that this draft of the budget had been considered by Planning and Development Committee and Executive Committee's interim approval was sought' (ECC 1999a, p.3).

The timing and process of the 1999 budget was significant for the later establishment of Project Renaissance. At the same Council meeting that the 1999 budget is approved, the VP (A) advised Council of a pending information technology purchase. The VP (A) … 'tabled this item as a matter to be considered by the Executive Committee of Council' (Council 1999a, p.13). The $2M 'IT strategic initiative', rather than being a strategic reserve, was in fact an expenditure item already tagged for spending.

The 1999 budget process was also impacted on by other complications, not all of which were controllable by the University. The Federal Government's funding model for universities was shifting and creating uncertainties (VC 1999a). CQU's Council was also responding strategically by adopting the 'Smart City' initiative, which focused a lot of Council's attention at this time. Added to this was the restructuring of the committee structures (VP(A) 1998b) and a process of drafting a budget beyond the scrutiny of Council's committees.

Council approved the 1999 budget at the 19 February 1999 meeting, but not before Council noted a significant reduction in the projected operating surplus in 1999 and the fact that the format of the budget made it difficult, if not impossible to compare to the previous year:

> Concern was expressed by members regarding the difficulty in comparing the 1999 budget to the 1998 budget. The Chancellor confirmed that this difficulty would not occur next year, as the budget process was altered substantially this year and was therefore not feasible to compare 1999 figures to those of 1998. The 1998 budget had been DETYA[15] grant only. The 1999 budget covers all funds (Council 1999a, p.9).

A quick comparison of the 1999 budget with that approved by Council for 1998 (Council 1997b) also shows that while the 1998 budget was presented to the level of expenditure item, the 1999 budget only goes to the operational unit level (see budget documents contained in DVC 1999a).

As soon as the budget was passed, Council was asked to approve the purchase of a large enterprise system, with a significant project to ensue. This appears to have caught Council by surprise, and the 1999 budget was constructed in a manner that did not assist Council's strategic decision-making. If Council had been aware of the possibility of a major systems implementation project in 1999, decisions involving the acquisition of the software and the establishment of the project may have been different, as too the decisions regarding the finance function of the University. Different decisions may not have been better decisions, but different none the less.

15. This is the Federal department responsible for providing operating grants to universities: Department of Education, Training, and Youth Affairs.

5.4.2 The request to purchase (Mar 1999)

The issues concerning the information systems and business processes of Financial Services and Student Administration now converged in 1999. Despite making significant upgrades to the SRS, and the Financial Services Division facing a year of upheaval with a new Director and restructures in the wake of the Arthur Andersen report, senior University management had been exploring options for purchasing an integrated information system. On 18 February 1999, the VP (A) sent a memo to members of Council on 18 February (VP(A) 1999a), disclosing that:

1. Before Christmas, three suppliers of administrative systems had been invited to tender for the supply of an integrated administrative system, in response to a Request for Proposal sent by the University earlier in the year.
2. Demonstrations had already been performed for University staff on campus during January.
3. There had been $2m allocated in the 1999 budget for this initiative, and Council would soon be asked to approve a purchase.

This disclosure foreshadowed a major implementation project at CQU, which had not been contemplated by Council when the Bursar was removed in favour of a new Director. It became clear, however, that the most senior administrators of the University had some knowledge of this possibility, either by being involved in the review of vendors, or through involvement in the budget process.

On 1 March 1999 a flying minute was put to members of the Executive Committee of Council (ECC) from the Secretary to Council and Vice-President (Administration), seeking approval to expend $1.4m on the acquisition of PeopleSoft software (Secretary to Council and VP(A) 1999). It was only one of four items on this minute. The response from members of the ECC is not recorded, but the request was formally put to the ECC at a meeting on 12 March (ECC 1999b).

Concerns had evidently been put to the Vice-President (Administration) (VP (A)) by members of the ECC about the recommendations and the information presented. The Director of ITD wrote to members on 7 March 1999 setting out the reasons for the review (IT Director 1999b). These included:

- The inadequacies of the existing student records system, despite the fact that it had recently been updated to guard against Y2K issues and could now handle the 4-term year.
- There is a need in the university for more integrated and efficient administrative processes—the Arthur Andersen report was cited as evidence for this.
- The University desperately needs a new SRS, and there were only three potential vendors, making the selection decision relatively easy.

The Director invited further comments and questions. The only documented questions came from one member of Council, who wrote several questions on 5 March (Council Member 1999). Questions were asked about the state of projects at other universities, the associated costs of the project (as opposed to the relatively straightforward cost of purchase), and contract details—especially performance measures. Of particular interest is question two:

> Is there a separate IT review underway at CQU? If so, when was it commissioned, what were the terms of reference and when is it due to report (Council Member 1999, p.1)?

The Council member was apparently surprised by the appearance of a potentially large scale project, and the sudden demand for approval. The Director of ITD replied on 8 March 1999 (IT Director 1999a), responding to all questions. In response to question 2, the Director wrote:

> A draft terms of reference for a review of university-wide IT provision and services was prepared by the Vice-President(Administration) last year. This document was debated by the university senior management group at at [sic] least two of their monthly meetings. The conclusion of the group was that whilst a Review was desirable that the most urgent need was to address the administrative systems and the business processes involved with those systems. The Director, ITD was then requested to develop a Request for Proposals (RFP) for integrated administrative systems. Reports from the meetings of the University Senior Management Group are available from [name withheld] in Education Services (IT Director 1999a, p.2).

Council, through its Executive Committee, was being asked to provide immediate approval for a $1.4m software purchase, with the certainty of undisclosed associated expenditures to follow. The request was developed by University officers outside of the Council processes and with no reports provided to Council or its committees over this period. The Vice Chancellor's Committee received regular reports from several IT committees, but there had been no reference to such a project contained in those reports. The Vice Chancellor's Committee ceased operating in the second half of 1998, but opportunities still existed to bring this important initiative to Council's notice. There are no indications in the minutes why Council was not informed, but clearly executive officers such as the VP (A) were aware, if not actively participating. It is unclear how a budget item for $2m was approved without apparent debate within Council.

No further formal questions were put, and the responses of the Director of IT were not questioned further. As the minutes of the 12 March meeting of ECC noted:

> The Committee discussed the possibility of acquiring an independent second opinion and decided not to. The Committee resolved to purchase the PeopleSoft software for Student Management, Financials and Human Resource Management at a cost of $1.4M, subject to being satisfied as to the contractual terms of the purchase, and to engage Andersen Consulting at a maximum cost of $230,000 to conduct an implementation planning study for the project (ECC 1999c, p.2).

With this decision, the ECC—on the insistence of the VP (A), and supported by the University's Director of IT—committed the University to undertake a purchase of a large enterprise resource planning (ERP) system. Its suitability as a complete system was still untested, and a planning study was approved.

5.4.3 The planning study (March to June 1999)

CQU's decision to purchase a large ERP system without a full analysis of its requirements was unorthodox. Such an analysis was clearly performed for its student records requirements, but its analysis for the other major administrative systems was rudimentary. Organisations following a textbook approach to software acquisition would develop a list of business requirements and undertake a survey/review, compared the existing software with the requirements. This would occur prior to purchasing or building the new software (Romney and Steinbart 2009). In defence of the those driving the review of potential systems, the focus was on the urgent need to find a replacement for the Student Record System (SRS). In a prudent approach, they sought vendors who offered further options for the other major systems:

> The [request for proposal] invited three organisations to demonstrate principally the Student Administration System, but also to demonstrate the degree of integration possible to two other systems—Finance and Human Resource Management (Ivers 1999, p.1).

At some point in the selection process, the objective of the project grew from a replacement of a single system (with options for the later replacement of other systems) to a full ERP implementation project with associated business process changes. It is likely that the motivation for this change in objective came from careful lobbying and price enticements from vendors.

> Our initial thought too was to do the scoping study and then buy the software. But the purpose of the scoping study is, amongst other things, to see how PeopleSoft goes on existing equipment; how PeopleSoft fits with our existing business processes and the extent to which we will need to change our processes to fit the software.
>
> …
>
> There is a special price on offer, as I explained in my initial memo, if we buy by 15 March. This is because PeopleSoft's financial year ends 31 March and the Australian operation is trying to boost its year's sales figures. The discounted enterprise purchase we have been offered is $1.4M. The standard list price is $2.7M (VP(A) 1999c, p.1).

This new objective caught not only the Council by surprise, but the University itself was unprepared for a project of this scale. To its credit, Council and the senior executives were aware of this. With the approval to purchase the software came the approval to conduct a scoping study to answer some important questions: what modules of PeopleSoft should be installed, who will do it (CQU alone, or with third party assistance), and what resources would be needed. It would be a five-week study involving representatives from CQU, PeopleSoft, and Andersen Consulting (Secretary to Council and VP(A) 1999; VP(A) 1999c).

The report from the Steering Committee was tabled at a special Council meeting on 8 June 1999 (Implementation Planning Study 1999). The Steering Committee making the presentation consisted of the VP (A), the PVC (R&AD), and Directors of divisions (including the Director of IT). There were also two Associate Deans of Teaching and Learning (ADTL), representing the faculties (ISP Steering Committee 1999; Central Queensland University 2000). The Steering Committee recommended a three-stage implementation, with sections of each software module addressed or implemented in each stage[16]. The proposed stages are shown in Table 5.4.

16. The case study will make repeated reference to the three stages of the project. However, the reader should know that although three stages remained the basis for the schedule throughout, the third stage was abandoned at the conclusion of Stage 2.

Table 5.4: The project scope and schedule, as originally proposed in June 1999

Stage	Target Date	Service
1	23 July 1999	HR/payroll operating model.
	17 January 2000	General ledger, budgets, purchasing, payables.
	14 February 2000	Student admissions, student records (initial).
2	30 October 2000	Billings and receivables.
	16 April 2001	Student financials, student records (completed).
3	8 January 2001	Projects, inventory, assets.
	Unknown	HR/Payroll (work effort was not known until after the completion of the operating model).

The Steering Committee also recommended that Andersen Consulting should be retained as the implementation partner, with an overall project commitment of 40% for Stage 1. The Steering Committee expected Stage 2 to have less involvement from the implementation partner (subject to an assessment of Stage 1), with Stage 3 having no involvement from Andersen Consulting (Implementation Planning Study 1999). No alternatives to Andersen Consulting as the implementation partner were presented to Council.

Another key recommendation that would have implications for the project and the University was that the software be implemented as "vanilla"—being implemented as purchased wherever possible (Council 1999b). At the following Council meeting, the VC explained what this meant for the University (emphasis added):

> The University has been advised that no modification of the system requirements to suit our idiosyncratic historic ways of doing things will be contemplated without the approval of the Vice-Chancellor, and I have indicated that I will only give such approval for absolutely compelling reasons. *I expect to do so rarely, if at all* (Council 1999b).

The VC was a strong advocate for the project, and spoke strongly and often in support of it. In urging Council to approve the project as recommended by the Steering Committee, he reminded Councillors of the shortcomings with the existing Student Record System that represented real threats to the University:

- It did not provide enough information to determine course profitability.
- The current enrolment process was unsatisfactory—a leading cause of student attrition.
- It offered no support for fee-paying students.
- It could not accurately determine which students were eligible to graduate.
- It forced significant delays in despatching distance education materials to students.

Council accepted the recommendations from the Steering Committee, and the project formally commenced (ISP Steering Committee 1999).

> Motion:
> That Council agrees to the implementation of the three modules of PeopleSoft software (Student, Finance and Human Resources) in partnership with Andersen Consulting in the stages as proposed by the Steering Committee.
> Carried (Council 1999b, p.3).

Immediately following this approval, the VC 'recommended that the implementation of PeopleSoft should proceed immediately (Council 1999b, p.2).' With Council approval in place, the new project was official. It adopted a new name: Project Renaissance (to represent the new beginning for CQU).

5.5 Project Renaissance Stage 1 (July 1999 – April 2000)

Despite some controversies over the movement of University staff to the project—and the associated backfilling arrangements—Project Renaissance was essentially fully staffed and ready to commence in July 1999. The University's Project Director did not start until September, which meant that the project set-up was performed by the Andersen Consulting Project Director, and it was achieved very quickly with a full set of governance mechanisms and communications protocols. However, senior University decision-makers and managers soon found themselves subjugated by these arrangements. For example, the steering committee soon found itself to be part of the Project's workflows instead of acting as an independent oversight body.

Project Renaissance began as a multi-year, multi-stage, multi-module ERP implementation with high expectations. Beyond the urgent need to replace the current and unsatisfactory Student Record System, the new PeopleSoft system was expected to be the catalyst for improved business performance and financial reporting. In order to achieve this, it had senior executive support locked in behind it, and was driven by a highly experienced implementation partner—Andersen Consulting.

Stage 1's major focus was the implementation of significant parts of the PeopleSoft Financials module (general ledger, budgets, purchasing, and accounts payable). The student module was to focus on admissions and the initial part of student records. The main implementation of the student module was to be in Stage 2 (particularly the student financials component). Disruptions occurred that caused the implementation schedule to change, both in time and the "mix" of applications to be included in Stage 1. The most significant disruption was the imminent Goods and Services Tax (GST), and PeopleSoft's decision to give priority support for GST compliance to Financials 7.5 (and not the version 7.0 that was planned for Stage 1). Coupled with on-

going problems with the University's Finance Director and his subsequent resignation, and ongoing staffing issues in the Financial Services Division, Stage 1 struggled to meet its deadlines. Nevertheless, PeopleSoft Financials 7.5 would be implemented by March 2000, only two months past the scheduled date.

5.5.1 Staffing the project (July–Sept 1999)

As Andersen Consulting began to staff the Project to its agreed level of support, CQU also had to populate it with its own staff, and backfill the vacated positions left behind in the University. This was not a popular process, drawing criticism from Deans and senior managers. It fell largely to the VP (A) to make the backfilling arrangements work, while the DVC was the executive who liaised with staff unions and committees. While this was occurring, the University advertised externally for a Project Director and could not appoint a person until late September 1999.

Conditions of work in the Project

During the initial set-up phase, the local branch of the National Tertiary Education Union (NTEU) were in constant communication with the DVC over the conditions of employment for staff on the Project, and expressing concerns over delays in backfilling positions within the University (Coughlan 1999b; NTEU Branch President 1999; Coughlan 1999a). The archived documents suggest that the NTEU had direct access to the DVC to voice concerns. There is evidence that their concerns were listened to. For example, the original offer made to those staff filling senior positions on the Project said:

> As a member of the Project, you will be required to work a significant number of hours which will on average amount to 55 hours per week. Your level of remuneration has been set on the basis of this level of work activity (VP(A) 1999p, p.1).

This clause had apparently caused some concern, leading to a meeting between the NTEU and the VP (A).

> On 27 July 1999, I and staff of Personnel Services met with NTEU representatives … and heard their concerns about the statement on hours which had been made in the offer to staff to work on Project Renaissance. After reflection on their view we issued a clarification statement … (VP(A) 1999e, p.1).

The amended statement that was sent to staff on the Project read:

> The current General Staff Enterprise Bargaining Agreement recognises that, except for senior staff, full-time staff will normally work 36 hours per week. As a member of the Project, you will be required to work a significant number of hours in excess of this norm. While there will be peaks and troughs which will be addressed by a range of strategies, to give you an indication of the work hours which may be expected of you in the Project, the average number of hours per week you may need to work is estimated at 55 hours per week. Your level of remuneration has been set on the basis of this level of work activity (VP(A) 1999p, p.1).

At issue was the need for University staff to work at the same pace and effort as their Andersen Consulting counterparts who, for their part, were focused on deadlines and deliverables. This brief exchange shows that University management were aware of the fundamental changes to working conditions entailed, and undertook a considered dialogue with staff and unions to reach a reasonable set of conditions.

Backfilling

The process of seconding staff to the Project and backfilling their positions in the Faculties and Divisions caused considerable concern to senior managers. The task of implementing and reporting on the backfilling arrangements fell to the VP (A).

CQU managers had several reasons to complain. First, some of their most valued staff seemed to disappear to the Project before anyone knew what was happening. Second, the business units had to then apply for funds to backfill, and this was only to a limit of 75%. There was a delay between the movement of staff to the Project

and the resources being made available to backfill. Finally, regardless of the level of backfilling finally approved, the business unit would still be paying for the original staff member, as if he or she was still working there. The approved cost of the back-fill would be charged directly to the Project.

> The project has allowed for 75% of CQU project work days to be backfilled, but naturally we are interested in saving money if we can, consistent with the ongoing work of the University still being performed in an acceptable way (VP(A) 1999d, p.2).

Table 5.5 is an extract from University documentation that sets out the multiple stages a University manager had to endure in order to receive partial backfilling for seconded staff. When this process was conveyed to the Deans and Directors, it drew a critical response that indicated that the process of moving staff onto the Project had already been in progress for some time. The Dean of the Faculty of Business and Law wrote to the VP (A) on the day following the publication of the multi-stage process:

> Due to the centralised nature of decision-making, Deans were not even advised of the staff secondments to the Project Renaissance prior to the event, let alone asked for their consent to the release of what in the Faculty of Business and Law are two key general staff members (Student Services Manager and Web administrator).
>
> This is not the first time the Dean was only informed of the secondment of staff from the Faculty after the event. The same occurred during the scoping phase of the project. The Faculty accepted your apology at the time and trusted that the process would be different for the main phase of the project.
>
> On 13/04/99, the Faculty, as requested, indicated the costs incurred during the scoping phase to allow the Acting Vice-Chancellor to consider reimbursement. To date, the Faculty has not been advised of the outcomes of those considerations. For all intents and purposes, the Faculty has to assume that no reimbursement will occur.
>
> As a consequence of the above experiences, the Faculty has no confidence that the Project Renaissance will handle the secondments in a reasonable fashion or approve any application by the Faculty for backfilling funds (Dean of Faculty: Business and Law 1999, p.1).

This communication indicates the prime position that the Project had achieved in the minds of the Senior Executive group. Backfilling was to be funded at a maximum of 75%, and only if applied for. In the meantime, faculty and divisional managers were faced with the immediate withdrawal of some of their best staff. Once the Project commenced, this attitude towards the University's ongoing operations would have consequences for its financial function.

Table 5.5: The multi-stage process of applying for backfilling funds (Source: (VP(A) 1999d, pp.2–3))

1. Salaries for CQU Project Team members will continue to be paid by the Faculty or Division from whence they came - at their current level. This will ensure that budgets for Faculties and Divisions are not distorted due to project secondments.
2. The Faculty/Division which has seconded staff must formally apply for backfilling funds. A form will be created to facilitate this process. This will be designed to be as simple as possible, however must provide sufficient detail to justify the backfilling requirement. Backfilling in this context includes backfilling of CQU or contract personnel, increased overtime requirements and differentials in remuneration due to the requirement for employees within Faculty/Divisions to act at higher duties.
3. Based on the issued backfilling request, the Vice-President (Administration) will negotiate with the Faculty/Division to finalise the extent of backfilling that is to be support [sic] by the project.
4. Note that the Faculties/Divisions may not be able to finalise their backfilling requirements until they have an understanding of the total number of their staff that will be seconded to the project. For this reason, it may be beneficial to agree "in principle" backfilling arrangements based on the secondments of individual staff members. Final backfilling negotiations may then be required once the extent of secondments from the Faculty/Division are better understood.
5. Staff can be transferred to the project once an "in principle" agreement has been established between the Vice-President (Administration) and the Faculty/Division.
6. When negotiation for backfilling requirements have been finalised, a forecast will be developed to calculate the total funding required during the secondment. This agreed level of funding will be provided by Project Renaissance.
7. Projects will be created within the Project Renaissance cost centre to represent each of the negotiated backfilling arrangements with the Faculties/Divisions. Each project will be allocated a budget that represents the agreed backfilling arrangement between Project Renaissance and the Faculty/Division.
8. The financial transactions relating to the management of backfill will be as follows:
   - For each CQU project team member - the proportion of their project salary that relates to the Faculty/Division and to the project will be calculated. The proportion of salary related to their Faculty/Division will be calculated on their previous HEW level in their usual position. The proportion of salary related to Project Renaissance will be the difference between their previous HEW level and their Project Renaissance remuneration. These proportions will be used by Payroll to debit salaries within the Faculty/Division cost centre and Project Renaissance cost centre.
   - Where personnel within the Faculties/Divisions are required to work overtime and act on higher duties to support agreed backfilling for Project Renaissance, these activities will be charged directed to the Project Renaissance cost centre (to the project that relates to their Faculty/Division).
   - CQU staff and contractors engaged by the Faculties/Divisions to support agreed backfilling for Project Renaissance will book time directly to the Project Renaissance cost centre (to the project that relates to their Faculty/Division (VP(A) 1999d, pp.2–3).

Recruiting the Project Director

When Council decided to proceed with the PeopleSoft project with Andersen Consulting as the implementation partner, this meant that Andersen Consulting would provide their own senior project manager. Their choice had been involved in the CQU project since the first PeopleSoft demonstration. This allowed their project manager to rapidly establish the project protocols, relationships, and terms of reference. This position became known as a Project Director, and CQU had also resolved to appoint a person who represented the University's interests. However, as there was no-one at CQU with the required knowledge and experience, the senior executive of the University began advertising for a suitable candidate.

The decision to employ another Project Director was not without its own risks. In a brief email exchange (VP(A) 1999n), the VP (A) and the Director of IT identified these as:

- CQU would be unable to pay the rates demanded by the best contractors
- There was no guarantee that the appointed person would not leave within the period of the contract
- CQU could end up having to manage two contractors: the appointed Project Director and Andersen Consulting.

The VP (A) replied that he would brief the Chancellor on these risks. The Andersen Consulting Project Director had earlier—at the request of the University's Senior Executive—provided the VP (A) with an analysis of options for recruiting an independent project director. These ranged from training a CQU staff member during Stage 1, to engaging a fully independent person on contract for the duration of the project (Option 4, the option that CQU wanted). Although this option did satisfy 'Council's requirement for an external review of the project (Andersen Consulting Project Dir-

ector 1999b, p.3), there were risks attached to this option. These risks included the high costs involved and the loss of the resource to CQU when the contract expires (Andersen Consulting Project Director 1999b). Nevertheless, CQU proceeded with the search for its own Project Director.

A number of recruitment agencies were used before the University selected a candidate from Andersen Contracting (VP(A) 1999i). This was despite advice from the PVC (R&AD) that Andersen Contracting should not be used, unless it was 'demonstrably unconnected from Andersen Consulting' (PVC (R&AD) 1999, p.1). The PVC (R&AD) was responded to by the Associate Partner of Andersen Consulting who was responsible for Andersen Consulting's higher education clients in Queensland:

> For a recruitment process such as this, Andersen Contracting are to Andersen Consulting as arms length as [other recruitment agencies]. Andersen Contracting provide head hunting and contracting services to any client, Andersen Consulting just happens to be one of those clients. Contractors and/or head hunted personnel provided by Andersen Contracting have no relationship with Andersen Consulting, nor does Andersen Contracting have any lien over the contractor to make sure they "look after Andersen Consulting".
>
> In the [Northern Recruiting] recruitment process, it was my understanding that Frank was proposing a person who had worked for Andersen Contracting. This is a different story, and I support your not wanting to appoint someone with a previous close relationship to Andersen Consulting/Contracting. However to use the services of Andersen Contracting to source a Project Director external to both Andersen Contracting and Andersen Consulting, in my opinion does not formulate a conflict of interest. Of course it is your decision (VP(A) 1999b, p.2).

This response apparently satisfied the senior managers of CQU, as there was no further discussion on this point. CQU appointed a candidate to the position of Project Director in September 1999 (VP(A) 1999i; DVC 1999b).

The new Project Director was a senior accountant (a Fellow of the Australian Society of Certified Practicing Accountants), experienced in managing the implementation of ERP systems, and was skilled in change management issues and contract management (DVC 1999b). By the time the new Project Director started in October 1999, the Project was already staffed, with its decision-making structures in place, and the deadlines for Stage 1 approaching in the new year. There were, however, pressing is-

sues to be resolved, such as the state of the contract between CQU and Andersen Contracting, a new version of PeopleSoft to implement, and the staffing needed to reduce Andersen Consulting's commitment for Stage 2 (Project Director 1999a, b). These will be discussed Sections 5.5.7 to 5.7.

5.5.2 User groups

On 3 September 1999, the Andersen Consulting Project Director wrote to the University's most senior managers and the project Steering Committee advising them of the creation of two user groups: the Student User Group and the Finance User Group (Andersen Consulting Project Director 1999c). He described these groups as 'the project's window to the University, i.e. a decision making group required to represent the interests of the University' (Andersen Consulting Project Director 1999c, p.1).

As this advice indicated, the user groups performed a major part of the Project's workflow. The advice to the senior managers continued:

> Major process design issues and any issues requiring PeopleSoft System Modifications are forwarded to a User Group for resolution. User Group members are provided with papers prior to the meeting to allow them to consult within their respective areas.
>
> The User Group resolves issues and their decisions are then minuted.
>
> User Group decisions are forwarded to the Steering Committee via status reports.
>
> Decisions requiring System Modifications must be endorsed by the Steering Committee and ratified by the Vice-Chancellor (Andersen Consulting Project Director 1999c, p.2).

Although the User Groups were described as decision-making groups, their ability to make decisions were limited. The Finance User Group was constituted with 23 representatives from the University community (not serving on the project), plus one Andersen Consulting and one CQU project representative. The 23 University representatives included the Director of Finance, a collection of high-level, mid and low level managers, plus some Finance Officers. A similar arrangement existed for the Student User Group, except that the group was slightly larger.

How much decision-making power the user groups were actually intended to have is questionable. The same Andersen Consulting Project Director advised the Steering Committee:

> It was agreed that the Business Rules will be presented to User Groups as having been endorsed by the Steering Committee and approved by the Senior Executive. Each Business Rule will be presented to the User Groups and justification provided.
>
> Should the User Groups believe that the justification is inadequate, the Project Team will attempt to resolve this directly. If required, the User Group Chair will be provided the opportunity to present an alternative proposal to the Steering Committee. Any alternative proposal developed by the User Groups must be justified and fully costed (Project Renaissance Steering Committee 1999a, p.1).

The University's support of the user groups to develop and 'fully cost' alternative proposals was not specified, and evidence has not been found suggesting that the user groups were resourced sufficiently to do this.

5.5.3 Steering committee

The structure of the Steering Committee continued from the scoping study. Its membership at that time was representative of the administrative units that would be closely involved in using PeopleSoft after implementation: it consisted of the VP (A), the PCV (R&AD), and Directors of divisions (including the Director of IT). There were also two Associate Deans of Teaching and Learning (ADTL), representing the faculties (ISP Steering Committee 1999; Central Queensland University 2000). Luftman et al. (2004) confirmed this approach as evidence of "best practice" in IT governance. Although this steering committee was focused on the project level and not the organisational level, in the absence of an overall IT governance steering committee its structure was significant.

> Membership of the IT steering committee is also an important indicator of the organizational value executive management places on IT. If the steering committee lacks significant membership from the business executive committee or the senior business unit management it will not have the organizational authority to make decisions regarding IT that are enforceable across the enterprise (Luftman et al. 2004, p.306).

This case study places a strong emphasis on the role of the Project Renaissance Steering Committee (PRSC), and will show that while the University's senior executives were highly committed to the success of the project, the PRSC itself changed in its nature and membership. Ultimately, the PRSC was being directed by the project directors and the University's senior executive group.

Role and membership

The official descriptions the of PRSC's role followed an orthodox "direct and control" rhetoric. In an early statement on the role and responsibilities of the Steering Committee, project documentation stated that the Steering Committee should:

- provide direction to the Project Team about the scope of the project, timing and the content and structure of deliverables,
- provide policy direction to the Project Team through timely decisions on matters of concern,
- provide direction and resolve all cross-area issues in a timely manner,
- monitor the project's progress against performance criteria (via regular reports from the Project Management Team,
- review and approve all major deliverables and policy changes (Project Renaissance Steering Committee 1999b, p.10).

The Andersen Consulting Project Director (ACPD) on Project Renaissance also issued an email advice to University senior managers on 3 September 1999, advising them of the Steering Committee's role (according to the Project).

> Steering Committee—responsible for managing project scope, budget and schedule (Andersen Consulting Project Director 1999c, p.1).

This case study will show that the membership of the PRSC changed substantially through the course of the project, and the next section will show that, regardless of the official rhetoric, it in fact took direction from the senior executive group and the Project's directors.

Relationship with the Project

The archived documentation for this project suggests that the Steering Committee had a difficult time establishing itself as the chief oversight body for the project. Whilst its own terms of reference gave it the authority to 'review and approve all major deliverables and policy changes (Project Renaissance Steering Committee 1999b, p.10)', the reality was that approvals were reserved by the VC and the senior executive. At the same time, the ACPD was able to dictate the Steering Committee's role in relation to the Project. As part of the process of establishing the communications and decision-making protocols for Project Renaissance, the Steering Committee was placed within a workflow of approvals. Consequently, documents indicate that the Steering Committee spent a large part of its time reviewing organisational change documents from the project. The following excerpts show how the ACPD was able to position the Steering Committee in a workflow process between the Project and the User Groups. Within this workflow, the ultimate action for the Steering Committee is endorsement, not final approval.

> **Project Decision Making Process**
>
> Major process design issues and any issues requiring PeopleSoft System Modifications are forwarded to a User Group for resolution. User Group members are provided with papers prior to the meeting to allow them to consult within their respective areas.
>
> The User Group resolves issues and their decisions are then minuted.
>
> User Group decisions are forwarded to the Steering Committee via status reports.
>
> Decisions requiring System Modifications must be endorsed by the Steering Committee and ratified by the Vice-Chancellor (Andersen Consulting Project Director 1999c, p.2).

> It was agreed that the Business Rules will be presented to User Groups as having been endorsed by the Steering Committee and approved by the Senior Executive. Each Business Rule will be presented to the User Groups and justification provided.
>
> Should the User Groups believe that the justification is inadequate, the Project Team will attempt to resolve this directly. If required, the User Group Chair will be provided the opportunity to present an alternative proposal to the Steering Committee. Any alternative proposal developed by the User Groups must be justified and fully costed (Project Renaissance Steering Committee 1999a, p.1).

The scope for the Steering Committee to operate as a powerful governing body was therefore restricted on two sides. On the University side, the PRSC was dependent on the VC and senior executives for final approval of its matters; whilst on the Project side, it could only review what the Project management brought forward (or what the user groups might return to it). In effect, it operated as a joint consultative committee between the senior executives and the Project Directors. As Figure 5.5 on page 204 shows, in its final membership, the Steering Committee had become an amalgam of these two groups.

5.5.4 Supporting committees

Below the Steering Committee, there were a range of committees to assist with the implementation and change issues associated with such a large project. The key change management groups, at the application (module) level, were the user groups—one each for Student Records and Finance. These groups worked closely with the intended core users of the new system and passed information on from the Project. However, their ability to criticise or seek amendments from the Project was restricted within their terms of reference.

There were two implementation committees that allowed staff and union representatives to examine the staffing implications. Although there is evidence of staff and union concerns being listened to by senior executives within the University, there is no evidence of these implementation committees having concerns acted on by the Project.

The key committees assisting the Steering Committee were the Executive Action Group and—upon that group's disbanding in 2000—the Operations Coordinating Group. These groups represented senior managers in the University tasked with taking the outcomes of the Project and overcoming associated implementation issues. From the beginning, there seems to have been overlaps between these groups and the Steering Committee.

Renaissance Implementation Committee (RIC)

The RIC was one of two committees established to oversee and manage the impact of Renaissance on University staffing and positions. The RIC was the oversight body, chaired by the VP (A), and it consisted of the Project's Strategic Change Manager, senior managers from the Finance and Student Administration divisions, representative of the staff unions, and representatives of the Personnel Services Division. (Project Renaissance Steering Committee 1999b).

Renaissance Implementation Change Management Team (RICMaT)

RICMaT was designed to operate at the workplace level, for monitoring and reviewing the actual impacts on workloads and workplace effectiveness. It had the authority to make recommendations directly to Deans of faculties, or Directors of divisions, regarding the staffing structures of workplaces (Project Renaissance Steering Committee 1999b). RICMaT was chaired by a representative of the Personnel Services Division, and consisted of the Project's Strategic Change Manager, and senior staff from the Finance and Student Administration divisions (Project Renaissance Steering Committee 1999b).

Executive Action Group (EAG)

The Executive Action Group consisted of the Steering Committee members, plus the DVC and several Deans of faculties. Its purpose was to anticipate and resolve policy and business re-engineering issues that resulted from Project Renaissance (QAO 2000). It provided reports to the Steering Committee on regular occasions, and was accountable to that committee for its progress in resolving issues. A review of documents from the EAG's first meeting (EAG 1999) indicates that the committee did

take an operational view of the implementation, establishing a list of issues to be considered for the student enrolments system: For example, when considering the issue of improving the credit transfer system[17] and course pre-requisites, the EAG considered:

> Actions
> - Review program and pre-requisite rules to determine whether simplified exemption rules can be supported: "What does CQU require to satisfy the requirements for a program (EAG 1999, p.11)".

While the EAG appeared to be mindful of its scope, senior executives appeared to be concerned about its performance. As early as April 2000, the DVC addressed the EAG:

> [The DVC] began by reminding the meeting of the importance of Project Renaissance and of the EAG in facilitating the Project. In particular she stressed the role of the Vice-Chancellor and the EAG as primarily responsible for the establishment of policy. The meeting agreed on the following key points:
> 1. There is a need to make decisions based on the best information available to minimise the requirement to revisit these (there are several examples of decisions being rapidly revisited once challenged);
> 2. It is critical that decisions are effectively communicated and, unless there are pressing justified reasons to change, implemented without falter when challenged;
> 3. There is also a need to accept joint responsibility for those decisions and to support them publicly.
>
> It is a challenge for all in the University to invest the time in structural change. However, it is vital we take this opportunity to improve the operation of the University.
>
> There is also a need to set deadlines for action items and to ensure that these deadlines are met. It would be helpful for members to specify for each action what information needs to be gathered to resolve the issue (EAG 2000, p.1).

17. The method of evaluating a student's completed studies at other institutions, relative to the requirements of CQU.

Although the minutes of this meeting do not provide any further information concerning this address, a reader could conclude that the EAG were not being methodical enough, or being effective in their decision-making. A telling criticism is that there was ineffective communication with the rest of the University (and perhaps with the senior executive and the Steering Committee).

The DVC remained a critic of the EAG, and was also critical of the Steering Committee, as she expressed to the Steering Committee at their June 2000 meeting:

> [The DVC] confirmed the importance of Steering Committee and the EAG and the need to provide leadership and direction to University. There is a feeling that this has not happened and that there may be a need to review the operation of these committees.
>
> [The DVC] also raised need to reinvigorate the University into getting excited about the change possibilities that can come with the implementation of new processes and the need for the University decision making bodies to respond to the challenges (Project Renaissance Steering Committee 2000b, p.2).

The EAG was disbanded by the DVC when the Steering Committee was re-constituted in August 2000 (DVC 2000).

Operations Coordinating Group (OCG)

The OCG was identified as an implementation group as early as 1999, responsible for resolving Stage 2 implementation issues. It would be chaired by a Dean of faculty, and consist of Directors of divisions and the Project Directors (Project Renaissance Steering Committee 1999b). When it was finally implemented in late 2000, it served as a replacement for the EAG.

5.5.5 Structural overlays

The Andersen Consulting change methodology involved the establishment of project sponsors and change coordinators at all levels of the University, starting with the VC. As the key project sponsor and supporter, the VC was active in promoting a positive message for change. Below the VC, the network of sponsors were tasked with promoting the changes being wrought by the Project, and preparing the University community for them. The flow of communication was designed to flow one way: from the Project to the University. It was much more difficult for dissent or complaint to flow back, and be listened to. Meanwhile, University managers—already struggling with providing normal service levels after losing staff to the Project—were unhappy about staff committing significant amounts of effort promoting the Project, for which their work units were not funded.

Change leadership

The CQU leadership was aware that this project involved more than implementing new software, hardware, or even new processes. This project was about re-engineering the University. When Council approved the initial purchase of the PeopleSoft software, the VC advised them that 'Deans and Divisional Heads have had lengthy briefings on the importance of the project, and especially the importance of completing the major processes of re-engineering tasks before moving to migrating the processes to the appropriate software' (Council 1999b, p.7). The rhetoric of organisational change was given added weight with the appointment to the Project of a Strategic Change Manager and a Change Coordinator.

At the commencement of the Project in 1999, the Change Coordinator and the Project's change management team were heavily involved in establishing a network of change coordinators and organising training, while the Strategic Change Manager chaired the Executive Action Group (Project Renaissance Steering Committee

1999c). These groups, like the network of project sponsors, were overlaid upon the University's existing hierarchy. The Project explained this as 'it does not belong to the Project: it … will work within current structures to ensure appropriate consultation (Project Renaissance Steering Committee 1999c, p.3).

Between the change management team on the Project and the VC's senior executive team, a justifying message was passed on to the University. This message changed slightly, depending on its audience.

The change message

When the Executive Committee of Council was first asked to approve the purchase of the PeopleSoft software, the Director of IT identified the need to replace an inadequate student record system, and the improvement of business efficiencies as the motivations for the request (IT Director 1999b). The message developed further once the project staff completed the scoping study and reported the findings to Council:

> The many changes to government funding for Australian higher education institutions have significantly affected the income available for both capital and operational works. As a result, many institutions have been forced to seek alternate ways of generating substantial amounts of income through new educational markets or through internal cost savings. Changes to funding have also resulted in fierce competition between Australian higher education institutions for both domestic and overseas students (ISP Steering Committee 1999, pp.8–9).
>
> CQU must have access to timely strategic information that will allow the University to be more competitive. For example improved management reporting will lead to a better understanding of course costs. This would support the delivery of various course options (such as lower cost alternatives) based on market requirements. Note that at this point in time,CQU cannot readily report profitability by campus. As a further example, the proposed project will deliver significantly improved budgetary controls and commitment reporting leading to greatly improved financial management (ISP Steering Committee 1999, pp.8–9).
>
> This is not a systems focussed project - rather, it is a project focussed on making CQU more competitive in the future (ISP Steering Committee 1999, pp.8–9).

The VC was a vital and regular purveyor of the Project's message. The message changed slightly, depending on who the recipient was. When the project began to assemble its hierarchy of change sponsors, the VC wrote to all of those invited to take part. On this occasion, his message emphasised the need for improved and efficient business processes:

> PROJECT Renaissance is a change project—the introduction of PeopleSoft to CQU will transform business processes, information systems and operating procedures across the entire University (VC 1999b, p.4).

The University community was left in no doubt as to the commitment of senior management to this message. The VC began this process of inculcating it by promoting it to Council, and by writing the introduction to the handbook for project coordinators and sponsors. The Project also expended significant money establishing a change management team, with a senior manager, and a dedicated change coordinator. The following section describes how the Project defended its message, and how the change management team spread its influence, and message, through the University community.

Sponsors and coordinators

The Andersen approach to change management was based on hierarchies. Their Change Sponsor's Handbook (Change Coordinator 1999b) depicted a hierarchy beginning with the Project Champion. Next comes the Project Initiating Sponsor, followed by three levels of Sustaining Sponsors, representing different organisational levels (senior executive, senior managers of business units (faculties and divisions), and individual workgroups.

At the apex of the change hierarchy was the Project Champion. This was a shared role between the VC and the DVC.

The Project Champion is the key individual in the University who will establish the Project as central to the University's purpose. This individual must have the position and authority to both sanction the project and securely link it to the University's strategic intent. Typically, this individual would be the organisation's Chief Executive Officer. In the CQU example, however, the Vice Chancellor … is frequently absent from campus as a consequence of his commitment to positioning the University in the global context. The imperative for consistent leadership which is both visionary and visible has caused the position of Project Champion to be jointly filled by [the VC] and the Deputy Vice-Chancellor (Change Coordinator 1999b, p.4).

2. Project Initiating Sponsor

Successful implementation of transformational change requires both inspirational leadership - symbolic and political - and innovative management. The Project Initiating Sponsor has a quite distinctive yet complementary role to support the Champion. This particular sponsorship role will reinforce the vision for change and extol the benefits of the PeopleSoft implementation. The focus, however, will be on the structural and operational considerations which enable the change to be made on time and on budget. For PROJECT Renaissance this critical role has been assigned to the Vice-President (Administration), … who also has responsibility to chair the Project's Steering Committee (Change Coordinator 1999b, p.4).

3. Sustaining Sponsors

Sustaining Sponsors will support the initiating sponsor to reinforce the vision for change and extol the benefits of the PeopleSoft implementation. For the purposes of this project, sustaining sponsors have been identified as belonging to one of three tiers based. Each tier is consistent with the University's organisational structure and perceived power bases.

Tier 1 Sustaining Sponsors include members of the Senior Executive and the Project Steering Committee who will exercise the visible/top level support that is necessary for a successful implementation.

Tier 2 Sustaining Sponsors are members of the University's senior management - people who promote and support change, have the authority to allocate resources and budget and the authority to enforce change at a local level. These include Deans and members of each Faculty's Executive together with Heads of Campuses and Divisions.

Tier 3 Sustaining Sponsors comprise those who have influence at the level of local work groups. These sponsors will frequently have direct line management responsibility for those users who will be most heavily impacted by PROJECT Renaissance. This group includes heads of support units and other middle managers, a number of whom will play an active role as Implementation Coordinators and Regional Coordinators (Change Coordinator 1999b, pp.4–5).

The administrative burden

The networks of sponsors and implementation coordinators were mechanisms for engaging the University in the overall change processes. However, they also imposed significant burdens on work units already deprived of staff seconded to the Project, supporting intense User Group activities, and responding to Project requests for co-operation. At the same time, divisional and faculty leaders were forced to apply for backfilling costs, which would not be the total cost of replacing staff. One Head of Campus, when asked to nominate another staff member to act as the local implementation coordinator for that campus (with no reimbursement of cost), summed up the frustrations.

> … I think the concept is very supportable, BUT quite definitely not within the existing established positions at this campus. We have three (only) established positions on this campus. I won't bore you by reciting the very broad work-spectrum that has to be encompassed by that group. One of its characteristics is that in representing so many different aspects of University administration/ service provision here, when people … at CQU Rockhampton decide that it would be "a good thing" for a particular activity to be devolved to the regional campuses, all those decisions, while not large in themselves, focus … in a very, very accumulative way, much more so than ANYONE at CQU Rockhampton seems to realise.
>
> Our response, while positive in principle, has to be tempered by budgetary reality. You have evidently indicated [that there is no] provision for extra funding going to regional campuses to offset any part of the extra workloads involved. I find that extremely disappointing, and I am not at all convinced, nor indeed impressed, by your exhortation to "focus on the benefits ..."
>
> …
>
> However, I am driven to respond in a basically cooperative, collaborative manner. This campus WILL take up your proposal. We WILL appoint one administrative officer as "Regional Coordinator, Project Renaissance", for CQU Bundaberg. This response is conditional on the campus receiving appropriate offset funding in our salaries budget over the life of the project (Head of Campus Bundaberg 1999, pp.1–2).

5.5.6 Establishing the mechanisms

The University's senior management recognised that the University lacked experience and skills in running a project of this size and technical scope. When they turned to Andersen Consulting, it was not just to implement the new systems, but also to guide the project and share their project methodologies in management and quality control.

> When we contracted Andersen's [sic], we purchased (among other things) their change methodology. Their methodology envisages a hierarchy of supporters, or sponsors (VP(A) 1999g, p.1).

Andersen Consulting installed a very senior and highly skilled project manager (who would be referred to during the project as a Project Director) to oversee the Andersen staff and effort. CQU decided to recruit a suitably skilled individual from outside the University to oversee the whole project and represent the University's interest. This took time to achieve, and the plan was not without criticism from the University. In the meantime, the Andersen Consulting Project Director (ACPD) undertook the establishment of the Project's structures and communications protocols. Andersen Consulting brought strong, commercially tested project management skills to the project, coupled with a strong work ethic and a never-wavering focus on schedules and budgets.

In this set-up period, CQU was able to observe and participate in the unfolding of a standard Andersen Consulting project. One of the consequences of this was that the ACPD set up the communications protocols, change management structures and the decision-making responsibilities that were to be used to manage and govern the project. These same mechanisms would be used by the Project Directors to direct the efforts of the Steering Committee, and not the other way around.

Nevertheless, the ACPD moved quickly to establish these protocols and mechanisms, which allowed a rapid start for the Project. The Steering Committee rolled forward from the Scoping Study, with its membership and role unchanged. The ACPD established the communication protocols, workflows, change networks and responsibilities that allowed such a large project to commence in a way that was well-defined.

For its part, the University's senior executives were highly visible and willing sponsors of the project. Decision-making centred on a triumvirate of senior executives: the VC, DVC, and the VP (A). In partnership with the ACPD, these executives established a series of supporting committees around the Steering Committee; accepted defined sponsor roles within the formal network of project sponsors; and crafted, communicated and defended the core messages justifying the project.

5.5.7 Software updates

Once the various protocols and mechanisms were (quickly) established by the ACPD, a fully staffed project commenced work by July 1999. One of the reasons it was able to do this was because of the very quick scoping study undertaken prior to Council's approval to commence. However, this rapid progression to the commencement of the project, without the necessary careful planning and selection processes—and with hurried contractual negotiations with contractors and the vendor—came with its own risks. These risks were realised later in 1999 when the software vendor changed its approach to implementing the impending Goods and Services Tax (GST). The project then had to consider whether to implement a different version of the Financials module, which impacted on its strategy and schedule. This was further impacted by the sudden resignation of the Finance Director in late 1999.

The project was only months old when the first threat to its schedule appeared. The University had purchased PeopleSoft Financials 7.0, which was a tested and stable product (Project Director 1999a). With the GST legislated to start in July 2000, it was believed that PeopleSoft would support GST functionality in its 7.0 version. However, in September 1999, PeopleSoft advised clients that GST support in Financials

7.5 would take priority and advised clients to upgrade (Andersen Consulting Project Director 1999a). Project Renaissance was scheduled to implement the first stage of Financials 7.0 in January 2000. A change to version 7.5 would add cost to the budget and several months to the schedule .

The Andersen Consulting Project Director pressed the members of the Steering Committee for a quick decision on this matter (Andersen Consulting Project Director 1999a; Project Renaissance 1999). There are no minuted Steering Committee discussions of this matter within the archives, but the decision to upgrade to Financials 7.5 was approved by the VP (A) as Chair of the Steering Committee, and also by the University's Senior Executive in December 1999 (Andersen Consulting Project Director 1999d).

The change of software versions triggered fresh negotiations between the University and Andersen Consulting on the best contract terms. The original contract was on a time and materials basis, with contingency payments built in by Andersens Contracting to cover unforeseen work. This approach worked if the project was to proceed exactly as scoped, but was a significant risk to the University should the scope of the project increase. In December 1999, negotiations began for a fixed-price contract that would be agreeable to both parties (Andersen Consulting Project Director 1999d).

The GST

The Australian public knew that a Goods and Services Tax (GST) would be introduced when the Coalition parties won the Australian Federal election of 3 October 1998 (AustralianPolitics.com 1995). The GST is a value-added tax (VAT) levied on the supply of goods and services within Australia. It was introduced to the Australian Federal Parliament in 1999, and became operational on 1 July 2000 (Australian Times 2011).

Despite the GST being a significant change to the Australian tax system , the finance module of PeopleSoft purchased by CQU (version 7.0) did not support GST processing. CQU was aware of this, but intended to implement version 7.0 on 17 January 2000, and have the Project implement the GST-compliant upgrade as soon as it became available.

> [The 17 January 2000 implementation date] assumed that CQU would go-live with Finance V7.0 (which PeopleSoft would support from GST perspective). It was then assumed that the project team would upgrade to a later version of PeopleSoft as part of the Stage 2 implementation (Andersen Consulting Project Director 1999a, p.1).

This assertion must be taken at face value, as the issue of GST support was not put to the Council when the decision was made to proceed with the PeopleSoft project (as reported in ISP Steering Committee 1999). The earliest documents that bring the GST to the attention of Steering Committee and Senior Executive were written in September 1999, only four months before the scheduled implementation of the first stage of PeopleSoft Financials. PeopleSoft were the catalyst for this attention when they announced that Financials 7.5 would receive priority support for GST, but not 7.0. This suggests that the University had not contracted PeopleSoft to provide GST support for 7.0 when the purchase was made in 1999.

The University's Senior Executive and the Chair of the Steering Committee approved the variation of the project (to implement Financials 7.5) in September 1999 (Andersen Consulting Project Director 1999d). This urgent process of decision-making took place at the time of the Finance Director's continuing absences from Steering Committee, and his subsequent resignation. This had several impacts on the project.

> The disruption in FSD prior to and following the departure of the Director of Finance has been a significant distraction to the project. Policies and procedures that should have been finalised were not, and project resources have been used to support FSD to complete this task. In some cases this has also meant a rework of system designs within the Project (Project Director 1999a, p.2).

The revised Financials implementation and the negotiations for a fixed-price contract were the first items to be dealt with by the new Project Director when he commenced work in October 1999. There were further expectations, as the VP (A) communicated to him on 20 October 1999:

> At Council last night one member of Council again expressed the view (and doubtless some others think the same) that you as Project Director will be taking a hard look at the projected overall cost of the project and seeing where savings can be made (VP(A) 1999h, p.1).

PeopleSoft Financials 7.5 introduced its own problems to the project. While Financials 7.0 was a known and tested version, 7.5 introduced numerous bugs that had to be resolved with the vendor. Progress had been slow, and the Project Managers appeared to have concerns about PeopleSoft's commitment to support the implementation (Project Director 1999a).

> The relationship with PeopleSoft continues to improve but with significant failures in their software causing many workarounds to be developed to ensure CQU's go live dates are not compromised (Project Renaissance 2000b, p.1).

The GST functionality remained a troublesome issue. The University did not advertise for a GST Accountant on a short-term contract until November 1999 (Project Manager Strategic Change 1999). By the time Financials 7.5 was implemented on 20 March 2000, the GST functionality remained untested by the Project. The Project Directors reported to Council that the Financial Services Division was responsible for the lack of testing because a GST Accountant had not been appointed in time to verify results. At that time, there was no Director to provide a further perspective.

> [The] GST Accountant [was] not appointed in time to provide configuration detail. [The] PeopleSoft functionality [is] still being enhanced to support GST (e.g. procurement card) … patches to be provided [by PeopleSoft in] March 2000 (Project Renaissance 2000b, p.3).

5.5.8 Issues with the Finance Director and the staffing of the finance division.

When Project Renaissance began, the Finance Director was a strong advocate for the project (VP(A) 1999f) and a member of the Steering Committee (Project Renaissance Steering Committee 1999b; VC 2000a). However, the Director soon showed signs of disinterest in this role, as evidenced by numerous communications from the VP (A). On 15 September, the VP (A) wrote:

> At the Project Renaissance Steering Group meeting on 1 September 1999, concerns were raised that there has not been any project budgetary information available. You were asked to report on behalf of your Division on the project status at the next Steering Committee meeting to be held on 15 September1999 … At todays Steering Committee meeting again no budget information was available and unfortunately you were again not at the meeting (Finance Director 1999, p.1).

The Director of Finance replied the next day:

> I do not understand why a Project budget should originate from me. Surely this should be done by the Project Manager and the project team. I have already had this discussion with [the ACPD] on several occasions.
>
> In addition the project team continually calls for additional support from my staff to do project work. Coupled with having to sort out, as previously mentioned, issues which have been caused by the Change Management Team (Finance Director 1999, p.1).

Again, on 30 September, the VP (A) wrote:

> I understand that you didn't attend yesterday's Project Renaissance Steering Committee meeting. That is a concern to me as I really want your input on that committee (VP(A) 1999m, p.1).

The issue was never resolved, as the Director of Finance resigned on 8 October 1999 (VC 1999c). However, there were to be further consequences for the University and the Project. As a consequence of the Director resigning:

- The University's Management Accountant resigned on 29 October (VP(A) 1999k).
- The Purchasing Manager was suspended on 12 November, pending an investigation into financial irregularities that also involved the Director of Finance (VP(A) 1999o).

This event was to impact on the conduct of the Project and the quality of corporate governance in two ways. First, it became harder for the Project to have the Financial Services Division engage and work towards a successful implementation of the Financials module. Second, the quality of the University's financial reporting had not improved.

The Project's impact on the Financial Services Division

1999 had been a year of turmoil for the Financial Services Division (FSD). The year began with the appointment of a new Director to implement the recommendations of the previous year's review by Arthur Andersen (Council 1998). However, by September 1999, these recommendations had only been partially implemented as the events of Project Renaissance overtook them (VP(A) 1999f). The new Director had been a strong advocate for the implementation of PeopleSoft (including PeopleSoft Financials) and had assigned many senior FSD staff to the Project, without being backfilled. This meant that FSD was unable to adequately perform its organisational responsibilities, as the VP (A) indicated in the Director of Finance's performance review:

> The support you have given to PeopleSoft financials through [the] secondment of your senior staff from the Division to the project has been commendable. My concern is you may have seriously weakened the on-going operations of your Division (VP(A) 1999f, p.1).
>
> I have the impression that with your keenness to support PeopleSoft with secondments of senior staff and to save money by not filling some positions in your Division, your Division's ability to respond to requests for help or reports, or take initiatives as in improved reporting has been seriously weakened … staffing in the important area of improved financial reporting would appear to be an issue that needs addressing (VP(A) 1999f, p.2).

The late 1999 events surrounding the resignations of the Director and the Management Accountant were confirmed by the Queensland Audit Office:

> For approximately nine months prior to the go-live date for Stage One, the Financial Services Division did not have a permanent Finance Director. During this period, there appeared to be no champion for FSD in relation to the formulation of policies and procedures for financial aspects of the system and a lack of input from FSD into the development and implementation process.
>
> The decision to go live mid-month has created problems with key reconciliations. This decision may also be partly attributable to not having a permanent Finance Director to advise the project on the ramifications of a mid-month commencement for FSD.
>
> Another significant issue affecting FSD in the lead-up to the Stage One go-live was inadequate staff resourcing. A number of key staff were seconded to the project … and a number of FSD staff also left. These positions were not back filled, leading to a severe shortage of knowledgeable staff with appropriate accounting skills (QAO 2000, p.17).

Council's unhappiness over the quality of financial reporting at CQU had continued through 1999 and into 2000. As late as September, the VP (A) had raised these issues with the Finance Director:

> Improved financial reporting urgently needs attention. Reports coming forward in the last few months have lacked credibility and accuracy and have not been presented in a time frame which has allowed Senior Executive to look at them before they go forward to their intended destination … The lack of regular accurate financial reports … is an ongoing concern (VP(A) 1999f, p.2).

The resignation of the Finance Director, and the problems with the staffing of the Finance Division, did nothing to improve the quality or timeliness of financial reports. Council was optimistic that the new PeopleSoft system would be the catalyst for improvements.

> … Council members had been requesting changes to the format of the financial reports of the University for a number of years. The current format of the financial statements is a marked improvement over what had been received just a few years ago. It is hoped that the introduction of PeopleSoft's financial modules will greatly improve the financial information available… (Council 1999c, p.6).

The Financial Services Division had been managed poorly in 1999, as evidenced by the above quotes. Unstable leadership, partially implemented restructures, critical staff being sent to the Project, and the resignation of a large part of its leadership would flow into 2000, when Council would be confronted with critical audit reports and rebukes from Queensland Government ministers. The instability of FSD, and its unwillingness or inability to fully engage with the Project, would be an ongoing issue for all stages of the implementation.

1999 had begun with the arrival of the new Finance Director to replace the departing Bursar, and with a brief to move the University's financial functions towards a more commercial and effective reporting focus. By the end of the year, the University had initiated a large ERP project, the Financial Services Division was barely functioning, a new application system was about to be introduced (PeopleSoft), and a new tax was imminent (the GST). Complicating things further, the Finance Director had resigned, along with two senior staff members critical for the upcoming implementation. The review of Council documents for the year 2000 shows consequences of these events on University governance. Council could still not receive meaningful financial reports and the lodging of the 1999 financial report with the Queensland Government missed its deadline. The external audit of the financial report (performed by the Queensland Audit Office—QAO) identified numerous internal control deficiencies, resulting in a qualified 1999 financial report,[18] leading to rebukes from Queensland Government ministers. Adding to these problems, the imminent Stage 1 implementation of PeopleSoft would later be shown to be sub-optimal.

18. The qualification was for a Council investment decision and not for shortcomings in internal control. However, the reported shortcomings were so extensive that it is likely that the auditor would have qualified the reports on these grounds if needed—see section 7.5.1 on page 194.

5.6 2000

The year 2000 began with no emergence of the Y2K “bug” for CQU. For several years, the IT Division had run a small but effective project to make sure all University systems would be unaffected by the “bug”. The main target of this project was the legacy SRS. A review of Council minutes and communications at the start of 2000 showed that no University system showed signs of having a “bug”. However, just as 1999 had begun with the University's financial reports causing anxiety within Council, financial reporting was still causing concern as 2000 began.

5.6.1 High-level concerns

Despite the confident reports of benefits to flow from Stage 1, the evidence suggests that there was growing disquiet within the University’s decision-makers about the likelihood of realising these benefits. These concerns began to appear at Council meetings in April 2000, just as Stage 1 was completing, although they had been forming much earlier in 2000.

> In discussion following [the Project Director’s] presentation, Council members made the following comments:
> - Concern was expressed regarding the quoted figure of $4.482 million in actual benefits estimated for Stage 1 only, with several members expressing doubt that this is achievable.
> - A review of the Project to date is necessary to ascertain if there are savings to be made as projected.
> - There is a concern that the system is not capable of being fully integrated and there is no reporting facility available in the Finance Module as yet.
> - Additional costs are being incurred in the Faculties and Divisions to support the implementation of PeopleSoft.
> - There seems to be disquiet amongst staff regarding the implementation of the system (Council 2000c, p.2).

Council and Senior Executive then moved to review the contract negotiations (with Andersen Consulting) for Stage 2.

In 1999, the VC had communicated his support of Project Renaissance by highlighting the need for efficient and effective administrative systems. By 2000 the message had changed slightly to highlight the Project's role in securing the economic health of the University. In a communication to all University staff, the VC wrote:

> The benefits to flow from the implementation of Project Renaissance (Integrated Systems Project) must be captured to gain maximum efficiencies for the enhancement of the University's long term development. (VC 2000b, p.1).

When writing to senior managers and Deans within the University, the VC more specific:

> The Planning Study for Project Renaissance saw benefits to the University in terms of an increase in revenue and a reduction in costs, with cost reduction due to increased efficiencies representing the greater part (VC 2000e, p.1).

With the rhetoric of economic survival and strategic growth came the underlying message of change. Although this project was borne by the need for a new student system, it rapidly became one of re-engineering the University (the adoption of the project name of Renaissance supports this message of change).

After the VC wrote to the Deans and senior managers in February 2000 emphasising the benefits of Project Renaissance (for another example, see VC 2000d), the University's senior executive formulated a number of concerns about the direction of the project and its cost to the University. On 28 February 2000, they communicated to the PVC (R & AD) a number of issues for the Steering Committee and Project Directors to address (Project Director 2000a). Specifically, they wanted advice of:

- What can be done in Stage 2.
- Whether Stage 2 can be managed without Andersen Consulting.
- A proposed budget for Stage 2.

The senior executive wanted initial advice presented to it by early March 2000, and a formal budget for Stage 2 to be presented at the April Council meeting, for approval to proceed. Significantly, they instructed that 'Work on Stage 2 is not to commence until a final contract is signed (i.e., there will be no interim contract) (Project Director 2000a, p.1).'

Why did the senior executive communicate these concerns to the PVC (R & AD)? It is likely that the PVC (R & AD) was chairing the Steering Committee at the time, but this cannot be confirmed from the documents used for this review. However, the PVC (R & AD)'s involvement became significant later in this case study, when he provided a very strong criticism of CQU's decision-making processes.

The new Finance Director

The University was now in the process of recruiting a new Finance Director. With a major change of financial systems imminent, the choice of a financial management professional adept at driving positive outcomes from such a situation would be critical. Surprisingly, the position description and information sent to the recruiting company made no mention of any such project, or called for such skills (VP(A) 1999l). The new Finance Director was appointed in January 2000, to take up his post in March (Property & Finance Committee 2000b, p.4). At that time, Council was so concerned about the state of the University's financial reporting that the Chancellor invited the Director to attend the April Council meeting to hear the Members' concerns directly (Chancellor 2000c). It is unclear whether, subsequently to this invitation, undertakings were made between the Chancellor, Vice Chancellor and the Finance Director on how to improve the financial reports, or whether they were implied, but the Director immediately began to display a hostile attitude towards the Project.

Problems began when the Director began making demands of the Project, which were immediately rejected and reported to the University's senior executive.

> [The Finance Director] gave me the impression this morning that he was reporting directly to the Chancellor and that he therefore had the right to request any information he saw fit and to direct any member of the organisation at any time he chose. This is not at all my understanding of his role and my interactions with him this morning were on this basis. If in fact he has been empowered to inquire into the Project I think we should be advised, otherwise I think [the Finance Director] should be told to follow the proper channels … when making requests for information or assistance (Project Manager Strategic Change 2000a, p.1).

This led to the VP (A) writing a hostile letter to the Chancellor, which also exposed the frustrations that had built up during the period of the previous Finance Director.

> Dear Chancellor,
>
> I write to confirm my verbally expressed concerns to you about the actions you have taken with respect to Stage 2 of Project Renaissance.
>
> One of the problems I had with [the previous] Director of Finance was that the Vice-Chancellor had told [the previous Director that] he was welcome to see him anytime he wished. [The previous Director] used this offer to go around me as his supervisor and to allegedly obtain agreements from the Vice-Chancellor which I wouldn't support.
>
> … I believe both you and the Vice-Chancellor have similarly told [the current Director of Finance] that he can contact you at any time. This again gives me cause for concern as it bypasses established lines of advice, in this case the Project Renaissance Steering Committee, and established lines of supervision, and leads [the Director of Finance] to believe that he has certain authorities thereby, as you can see from the attached email (VP(A) 2000a, p.1).

The source of the VP (A)'s frustrations was not merely a transgression of reporting lines. The letter further described the Finance Director's attitude towards the Project.

> … the Deputy Vice-Chancellor reported to Senior Executive that [the Finance Director] had [some days ago] informed her that he had advised you that he believed the University could do Stage 2 without Andersens, that you found it appealing, and had instructed him to explore it. This option had already been considered and rejected by Steering Group. A nil Andersen involvement or a reduced Andersen involvement than that proposed had also been set out on pages 12 and 13 of the presentation to Council of 18 April and rejected (VP(A) 2000a, p.1).

The VP (A) wrote this letter on 25 May 2000, some five weeks after Council had already approved the progression to Stage 2 with Andersen Consulting, and with the VC in active negotiations with Andersen Consulting over the terms of the contract. While the VP (A) expressed frustration with the attitudes of the Director of Finance and the Chancellor, it is perhaps revealing of the wider unease about the cost of the project and its ability to deliver on its objectives that lead to the conversation in the first place.

By June 2000, the Director, although not a member of the Steering Committee, was attending meetings to raise concerns about the lack of security mechanisms in PeopleSoft Financials, and the lack of progress on delivering financial reports. In response to the issue of system security for the Financials module, the Project Director '… [advised that] the CQU approach was in line with other Universities and passed a pack of documentation on this to [the Finance Director]…' (Project Renaissance Steering Committee 2000a, p.4). There is no evidence of further discussion regarding the financial reports.

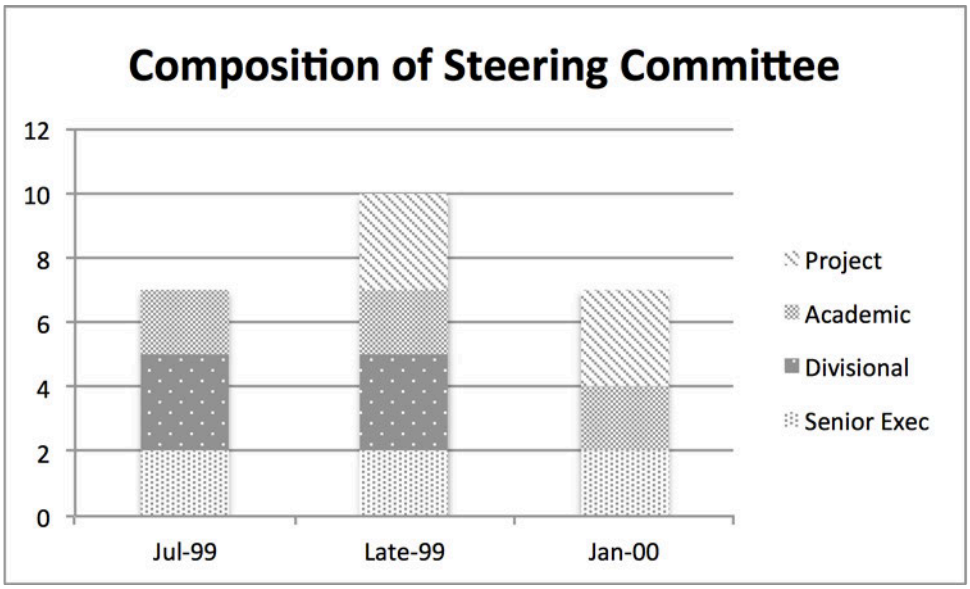
Steering Committee

In January, the Vice Chancellor moved to take over the Chair of the Steering Committee, and to recast its membership.

> With Project Renaissance moving into the critical stage of Phase I and the negotiating stage of Phase II, I have decided to Chair the Project Steering Committee.
>
> This decision is based on my personal need to fully understand and oversight all material elements of the project, for example, contractual obligations, costs, benefits and progress against budgets…
>
> …
>
> In addition to chairing the Steering Committee I have reviewed its current composition and based on the strategic importance of the Project I invite the following to form the new committee:
>
> … Vice-President Administration
>
> … Dean - Informatics and Communication
>
> … Dean - International
>
> … Associated [sic] Dean Teaching and Learning - Business and Law
>
> … Project Director - Andersen Consulting
>
> … Manager Strategic Change [within Project Renaissance]
>
> … Project Director - CQU (VC 2000a, p.1).

The immediate impact of this change, besides the VC's direct involvement, was the removal of all Divisional leaders and the augmentation of the Project's representation, as Figure 5.4 indicates.

Figure 5.4: Steering committee composition as at January 2000



Source: (ISP Steering Committee 1999; VC 2000a)

Council's priorities are not Project priorities

The University's Council had entered into this project with a clear expectation that financial systems and reporting would be improved. Unfortunately, the Project Directors did not appear to share Council's priorities, as shown by the delivery of Stage 1 Financials without a full set of standard management reports. The Directors reported to the Steering Committee prior to the implementation of Stage 1 on PeopleSoft Financials: '[The] Development Team did not have capacity to develop all required reports prior to go-live (e.g. due to extent of PeopleSoft issues)' (Project Renaissance 2000b, p.3). In the same report, the Project Directors identified something that would be a persistent problem for Project and University—the chronic understaffing of the Financial Services Division (FSD): 'FSD Staffing - reduced staffing and workload management issues in FSD has prevented desired involvement [with the Project]' (Project Renaissance 2000b, p.4).

5.6.2 Completing Stage 1

In its March 2000 newsletter, the Project announced the successful implementation of Stage 1 PeopleSoft Financials:

> Phase 1 of Financials Education & Government version 7.5 went live on 20 March as scheduled with 140 users across the University's multiple locations. All Phase 1 functionality has been delivered with the exception of GST, Budgets Explorer and some reports which are still in progress (Project Renaissance 2000c, p.1).

This announcement glossed over the shortcomings with the implementation: managing the GST, budgets, and improving the state of financial reporting were the critical issues for Council at that time.

Implementing the Financials module

Deficiencies in financial reporting might have been at the fore of Council's consciousness in early 2000, but Steering Committee's attention was elsewhere. Stage 1 of Project Renaissance involved the first implementations of both the PeopleSoft Financials and Student systems. In the period leading to the implementation of the first phase of PeopleSoft Financials, Steering Committee was working through policy and procedural issues for the new Student system implementation. There are no records of Steering Committee discussion of the implementation beyond the reports given to it by the Project Directors (see, for example, the absence of discussion of implementation strategies, implementation risks, or user sign-offs in the discussions in Project Renaissance Steering Committee 2000c; Project Renaissance Steering Committee 2000d).

At its meeting of 2 February 2000, the Steering Committee committed to a 20 March 2000 implementation date for PeopleSoft Financials 7.5. This included the General Ledger, Budgets, Purchasing and Accounts Payable modules (Project Directors 2000a).

The Steering Committee held its final meeting before the implementation of PeopleSoft Financials on 3 March 2000. Despite the Project Directors highlighting some risks with the implementation (Project Renaissance 2000b), there is no record that Steering Committee discussed the implementation of PeopleSoft Financials, in any detail, beyond planning for a presentation to Council, and inviting Council to a celebration.

> Members of Council will be invited to attend the CQU celebration after Finance go-live.
>
> A demonstration will be presented to Council on 18/4/2000. The demonstration will highlight the success and benefits associated with Stage 1 (e.g. Student Web interface, Travel process, Budgets Explorer etc) (Project Renaissance Steering Committee 2000d, p.2).

However, Steering Committee was mistaken over what was being implemented. Far from being implemented on 20 March 2000, the Budgets Explorer module was deferred (Project Renaissance 2000c), and 'major functional issues were encountered' in the module (Project Renaissance 2000b, p.3).

The first stage of Student Records remained on target to be implemented on 26 April, with few problems or concerns (Project Renaissance 2000a).

5.7 The intervening period (April – July 2000)

The period between the implementation of Stage 1 Financials and the commencement of Stage 2 was a period of uncertainty for CQU. Records show that despite the Vice Chancellor's enthusiastic support of the project, Council and members of the senior executive were far from convinced. This is the point where the University's failure to contract with Andersen Consulting for the entire period of the project started to have a negative impact on the conduct of the project. Council, concerned at the negative audit of the 1999 financial report and the costs involved in the project, began to place condition on the continuation of Stage 2.

5.7.1 The CQU Annual Report (1999)

The consequences of leaving the Financial Services Division under-staffed while simultaneously trying to support a large ERP project had manifested themselves during the preparation and audit of the 1999 Annual Report. The preliminary financial reports were provided to the Property and Finance Committee in February 2000 (Property & Finance Committee 2000b), but difficulties remained in bringing these reports to an auditable state. The financial statements were required to be submitted to the Queensland Parliament by the end of April (Audit Committee 2000b). By mid-April, the Chancellor was forced to write the Queensland Minister for Education:

> The significant staff shortages being experienced by FSD, due to a number of positions which are vacant or unfilled due to secondments to the new computer system project, and sick leave, have been identified and action is being initiated to address the issue.
>
> However, it will realistically take many months to bring the backlog of outstanding work comprehensively up to date, and recruit and train all the new staff…
>
> As a result, FSD is still facing grave difficulties in completing the statements for the financial year 1999.
>
> In accordance with the requirement of the Financial Administration and Audit Act 1977, CQU therefore seeks your approval to this request for a further extension of the lodgement date for the CQU Annual Report until Wednesday 31 May 2000 (Chancellor 2000a, p.1).

However, the new Finance Director had to familiarise himself with the financial situation of the University, and it appears that there were major issues to be overcome, requiring another letter from the Chancellor in May:

> It is clear that the challenges facing [the new Director] are formidable, but he has assured me they are surmountable, given time and resources. As a result of the briefing with [the new Director], I can advise you that myself and those attending the meeting now have a high level of confidence in his ability to deliver results, importantly, in due course, on time.
>
> However, as I outlined in my previous letter, the shortage of experienced and qualified professional resources, a problem throughout buoyant developed countries, and even more so in a regional town like Rockhampton, is hampering his efforts to make progress as rapidly as he would wish.
>
> …
>
> Therefore, in accordance with the requirement of the Financial Administration and Audit Act 1977, CQU therefore seeks your approval to this request for a further extension of the lodgement date for the CQU Annual Report until Friday 30 June 2000 (Chancellor 2000b, pp.1–2).

On 20 June 2000, the Audit Committee noted that the financial statements had been submitted to the external auditor (the Queensland Audit Office—QAO) some two weeks earlier, and that the report would receive a qualified audit opinion due to a large commercial transaction that the University had undertaken (not related to the Project) (Audit Committee 2000a, p.2). On the same day, the Property and Finance Committee noted the pressures faced by the Financial Services Division at that time:

> The Committee noted and appreciated the difficulties being experienced by the Director of Finance and the entire Financial Services Division with respect to staff shortages and the conversion of the financial system from Finance One (the previous system, and the one currently used to maintain Billings and Accounts Receivables) to the new PeopleSoft finance module, whilst concurrently implementing Finance One for Windows, which was required to cope with the introduction of the Goods and Services Tax (Property & Finance Committee 2000a, p.2).

In July 2000, the QAO wrote to the Vice-Chancellor to explain the findings of the audit. The qualification was for a business transaction with the University's subsidiary entity. There was one further issue of concern for the Auditor. While the audit found that the level of internal control around the major financial systems was strong in 1999,

> …the standard of University working papers provided to audit in support of the 1999 annual financial statements was generally of poor quality, and often required repeated requests for further information and data to enable verification during the course of the audit. This is of concern as the level of quality of information and working papers required by audit is no more than that which should be required by management to enable the preparation of the annual financial statements (Assistant Auditor-General (QAO) 2000, p.2).

5.7.2 Issues concerning the purchase of PeopleSoft

The Queensland Audit Office was also concerned about the processes followed to purchase PeopleSoft and to engage Andersen Consulting in 1999. Together with other identified weaknesses in financial reporting identified in the audit of the 1999 financial report, this issue culminated in a serious rebuke from the Queensland Government.

The issue was highlighted by the University's Audit Committee in June 2000:

> The Committee noted the correspondence between the University and the QAO in relation to the purchase of PeopleSoft software and engagement of Andersens Consulting. The Committee was advised that at the time of the initial planning for the purchase and implementation of the new administrative systems, it was considered that the correct purchasing procedures had been followed. However, the QAO has highlighted a number of areas of weakness in the processes followed by the University during this process. It was also considered by the Committee, that at that time the University did not have an appropriately structured purchasing unit from which to seek expert guidance on purchasing matters.
>
> The Committee expressed concern that the University may not have followed correct purchasing procedures, as required under the Financial Administration and Audit Act (Qld) 1977 through the State Government Purchasing Policy (SGPP), when purchasing and implementing the PeopleSoft system. The University has to ensure, as a result of this experience, that appropriate procedures are in place to ensure the highest level of compliance in all future purchasing transactions.
>
> The Director of Finance informed the Committee that the new Purchasing Manager is undertaking a review of all purchases made by the University since 20 March 2000, so as to ensure compliance with the SGPP (Audit Committee 2000a, p.2).

This was followed by a rebuke from the Queensland Government's Public Accounts Committee (PAC), as it was communicated to the Vice-Chancellor in October 2000:

> **RE: CENTRAL QUEENSLAND UNIVERSITY 1999 AUDIT FINDINGS**
>
> The Public Accounts Committee is a committee of the Queensland Parliament whose statutory responsibility is to consider the reports of the Auditor-General.
>
> Some serious financial management issues were disclosed in Audit Report No.6 1999-2000. The issues are predominantly about basic financial accountability and the committee is concerned that university management may not be paying sufficient attention to its legislative responsibilities in this regard. Would you please advise what remedial steps are being taken to avoid the recurrence of similar problems in future.
>
> In addition, your specific comments are sought on the following.
>
> …
>
> **Procurement and Implementation of the Financial Computer System**
>
> The Auditor-General has advised the committee that the university's purchasing division was not involved in the procurement process. Given the level of resources expended on this project, would you please explain why staff with relevant purchasing expertise were not involved in the process (Chairman—Queensland Public Accounts Committee 2000, pp.1–2).

In November 2000, the PAC wrote to the Vice Chancellor and the Queensland Minister of Education, advising them that the PAC would be taking no further immediate action, but would be reviewing the outcomes of future audits:

> Dear Minister,
>
> **RE: CENTRAL QUEENSLAND UNIVERSITY**
>
> I am writing to inform you of action taken by the Public Accounts Committee in response to the 1999 audit findings for Central Queensland University.
>
> As you are aware, the committee has a statutory responsibility to consider the reports of the Auditor-General. A number of issues that are of concern to the committee were raised in *Audit Report No.6 1999-2000* in relation to the university including qualification of the financial accounts. The committee sought comment on these matters from the university's Vice Chancellor and President, Professor Chipman. The committee has considered his response, which included details of proposed remedial action.
>
> I advise that while the committee does not intend to undertake a separate inquiry into the audit findings at this stage it will monitor the outcome of this year's audit and will liaise with the Auditor-General following completion of the forthcoming interim audit.

It is clear from this correspondence that accurate and timely financial reporting was a pressing matter for Council. Their hope was for PeopleSoft Financials to deliver these characteristics. Unfortunately, Stage 1 delivered limited accounting balances, limited reporting capacity (if any), and adversely impacted on the Financial Services Division's ability to perform critical reconciliations (such as the bank reconciliation).

5.7.3 Stipulations on the start of Stage 2

Even though Council had already approved a three-stage project, it is a measure of the growing unease within Council and the Senior Executive that contracts with Andersen Consulting were approved on a stage-by-stage basis. The following section shows that a failure to undertake effective contracts for this major project had adverse consequences for both the conduct of the project and for Council's ability to fulfil its corporate governance obligations.

The senior executive's—and Council's—concerns over Andersen's involvement in the project reached a critical stage in March 2000. At that time the University's senior executive instructed the Steering Committee that there was to be no interim contract for Stage 2, and the Project Directors should provide ideas for reducing Andersen Consulting's involvement in Stage 2 (Project Director 2000a). The CQU Project Director and the Manager for Strategic Change responded immediately.

> **1. Stage 2 Work not to Commence Until Final Contract Signed**
>
> Obviously it would be ideal to have signed a final contract before commencing Stage 2, indeed, even before Stage 1. However, at this stage there are some risks associated with rigorously following this approach. Stage 2 of Finance is due to commence in four weeks' time. Given the length of time taken to negotiate the Stage 1 contract, and the likelihood of further negotiations over price for Stage 2, it seems a very tight timeframe in which to have the contract agreed and signed. If the contract is not agreed within the timeframe, there are risks that the attendant uncertainty might affect the successful completion of the project (Project Director 2000b, p.1).
>
> **2. Scope of Stage 2 Work and Possible Inclusion of Stage 3 work**
>
> The initial planning study identified the following as Stage 2 Development:
>
> - Student – student financials, complete student records and workflow.
> - Finance – billing and receivables[19]
>
> We believe we should undertake asset functionality and workflow which was planned for Stage 3 (Project Director 2000b, p.2).

19. Documents from Stage 2 show that the Financials Billing and Receivables module was never implemented.

The Project Director then moved to the vexed issue of the implementation partner. The senior decision-makers of the University were clearly uneasy about Andersen Consulting's contributions, but the Project Managers explained the reality of the situation.

> **3. Could we do Stage 2 Without Andersen Consulting?**
>
> Andersen Consulting bring the following things to the Project: an estimating and project management methodology, experience of previous similar projects, general project and change management experience and PeopleSoft system expertise. Whilst there has been some knowledge and skills transfer to CQU staff, to date this is not sufficient to allow us to run the Project by ourselves. If Andersen Consulting were not chosen as the implementation partner for Stage 2 we would need to find a way to compensate for the missing skills and knowledge identified above.
>
> Employing an alternative consulting partner would presumably not be an acceptable option. Another consultant would need to scope the project from scratch, and would also be likely to assess it as an increased risk due to the break in continuity. They would therefore be likely to submit a higher quote than Andersen Consulting for the equivalent work (Project Director 2000b, p.2).

The Steering Committee appeared to show disregard for the Senior Executive's directive on interim contracts (albeit the Vice Chancellor was chairing the Steering Committee at this time, and the VP (A) was also on Steering Committee) at their 3 March 2000 meeting:

> Andersen Consulting would continue under an interim arrangement with terms as initially established for Stage 1. This contract would terminate on 19/4/2000 but with options for renewal in three-weekly periods (Project Renaissance Steering Committee 2000d, p.2).

At their April 2000 meeting, Council accepted the reports by the Project, authorising Stage 2 to proceed, to include Student Financials, Accounts Receivables & Billings, and Assets. In addition, Council approved retaining Andersen Consulting at 40% effort (they were originally planned to be reduced to 30%). The Vice Chancellor was authorised to proceed with contract negotiations with Andersen Consulting, the exact amount to be approved by the Executive Committee of Council (VP(A) and Project

Directors 2000; Council 2000b). An interim agreement was entered into until 31 May 2000 (VP(A) 2000b). By June, however, a contract had still not been finalised, with the Executive Committee of Council insisting on a review of Stage 1 benefits and performance (Property & Finance Committee 2000a).

The University had not undertaken effective contract negotiations throughout this project. Even though Council had committed to the purchase and implementation of a large ERP—with an implementation partner—they remained ambivalent about the value they were receiving for their investment. Council could not find a way to commit to a whole-of-project contract with Andersen Consulting. Consequently, there was not only a delay in finalising a contract in Stage 1, no negotiations had commenced, or continued, for Stage 2, even though its commencement was imminent.

The involvement of the Executive Committee of Council

When Council approved the progression to Stage 2 at their April 2000 meeting, they left the details of the Andersen Consulting contract with the Executive Committee of Council(ECC) to finalise (ECC 2000a). The ECC took note of Council's concerns over the cost of the project, and their scepticism over the claimed value of benefits from Stage 1. They therefore set a series of conditions upon the commencement of Stage 2:

- There must be an independent review of Stage 1, and a verification of what value was achieved.
- Likewise, ECC wanted an independent assessment of what could be achieved in Stage 2, and where costs could be trimmed.
- There must be a review of CQU's readiness for the implementation of Stage 2.
- Options for reducing the involvement of Andersen Consulting must be considered (ECC 2000a).

These conditions were communicated to the Steering Committee through the PVC (R&AD), who reacted angrily to them.

> 1. I regard the decisions of the Executive of Council in relation to Stage 2 of Project Renaissance, conveyed to me by [the DVC as Acting VC] and [the VP (A)] last night, as a vote of no confidence in the Steering Committee.
> 2. I certainly have no confidence that the approach adopted by the Executive Committee will enable Stage 2 to be successfully implemented.
> 3. In view of this I no longer wish to serve on the Steering Committee.
> 4. The way in which this matter has been handled has routinely by-passed the structure to which the Council has entrusted the management of this University. The effect has been to erode confidence—including my own—in that structure (PVC (R&AD) 2000).

The ECC's conditions were ultimately ineffective. By August 2000, Council was still openly sceptical about the benefits to be derived from Stage 2 and still wanted costs reviewed. Meanwhile, the Project was still functioning under an interim contract (Council 2000e). By September, no independent reviewer could be found; the interim contract with Andersen Consulting had expired without a final contract being signed. Negotiations between Andersen Consulting and the Vice Chancellor had progressed only to the point where it was considered counter-productive to continue, and a contract was concluded.

> … Executive Committee was advised that as a result of these negotiations it was believed to be unrealistic to attempt to further improve the contract position without negatively influencing the positive relationship needed to implement Stage 2 successfully.
>
> …
>
> Executive Committee agreed to approve the payment of invoices from Andersen Consulting for work completed between the expiration of the interim contract and the execution of the final Stage 2 contract (ECC 2000b, p.1).

The final contract was approved by Executive Committee of Council in late September 2000 (ECC 2000b). Although no independent review could be conducted within the timeframe required (Council 2000d), the QAO finally undertook to perform an audit of Stage 1, to take place in October (Project Renaissance Steering Committee 2000e).

5.8 Project Renaissance Stage 2 (August 2000 – June 2001)

Stage 2 suffered delays due to staffing and contract negotiations. There was also uncertainty over what would be delivered from Stage 2: ultimately, Assets Management was brought into Stage 2 from Stage 3, and Billings/Accounts Receivable was dropped from the Project.

Following the problems with the financial reports and weaknesses in corporate governance, identified by the previous audit, the Project might have come under pressure to ensure that the financial data and reports associated with the newly implemented systems were of high quality. Documents show, however, that both the Steering Committee and the Project management were focused on the student records issues, and Stage 2 followed the path of Stage 1: rivalries, a lack of engagement, and the resignation of the second Director of Finance at a critical time, all helped to reduce the effectiveness of the Project.

5.8.1 The Steering Committee rearranged

Until the end of Stage 1, the Steering Committee provided a report to Council; this ceased with the start of Stage 2. From July 2000, Project Renaissance reports were provided by the Project Directors to the Vice Chancellor, and were included in his report to Council (see, for example, Project Directors 2000c).

On 15 August, the fourth and final iteration of the Steering Committee was announced. With the announcement, the ECG was abolished, to be replaced by the Steering Committee and the Operations Coordinating Group. The Project Directors and Andersen Consulting were retained in both groups. A review of Figure 5.5 shows how the balance of membership of the Steering Committee has shifted decisively to the Senior Executive group and the Project Directors.

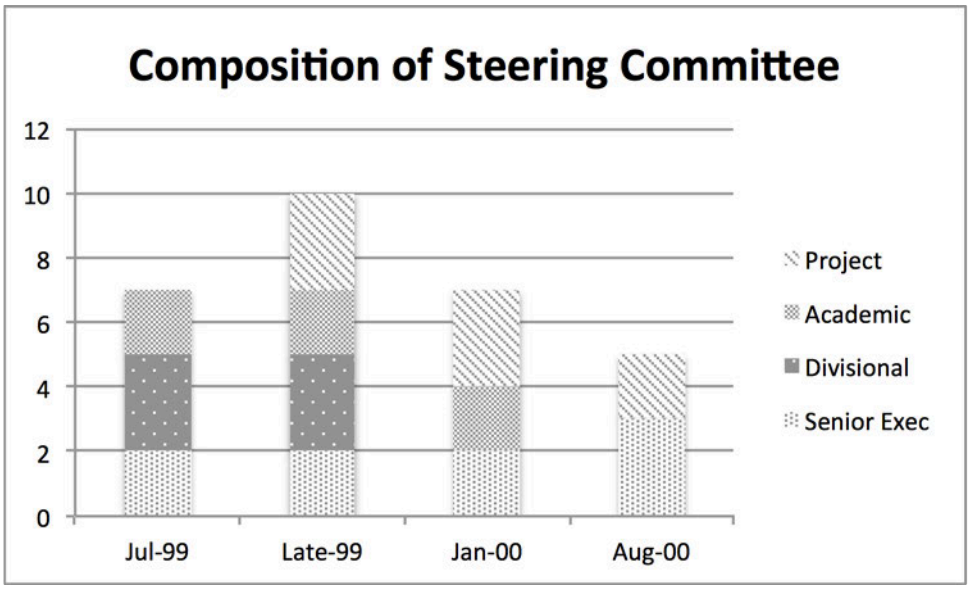
> Membership of [the Steering Committee] is as follows:

> Deputy Vice-Chancellor…
>
> Vice-President (Administration)…
>
> Vice-President (Corporate Development)…
>
> Project Director, Project Renaissance…
>
> Project Director, Andersons [sic]…
>
> It is proposed that the Steering Committee will have representatives of Council, Peoplesoft [sic], Deans and Heads of Division attending at particular meetings as required (DVC 2000, p.1).

The terms of reference for the Steering Committee was as follows:

> The Steering Committee will:
>
> 2.1 provide direction to Project Rennaissance [sic] and the Operations Coordinating Group about the scope of the project, timing and the content and structure of deliverables.
>
> 2.2 provide policy direction to Project Rennaissance [sic] and the Operations Coordinating Group through timely decisions on matters of concern.
>
> 2.3 monitor the project's progress against performance criteria (via regular reports from the Project Management Team and the Operations Coordination Group).
>
> 2.4 review and approve all major deliverables and policy changes (DVC 2000, p.1).

Figure 5.5: Steering Committee composition: August 2000



5.8.2 Operations Coordination Group (OCG)

The Operations Coordinating Group (OCG) met for the first time in September 2000. Its membership consisted of the Directors responsible for information technology, finance, human resources, and student administration, together with the two Project Directors and the Project Manager for Strategic Change (OCG 2000). The first item for the first meeting was to consider the '… degree of confusion about the terms of reference and reporting relationships in respect to many of these entities' (OCG 2000, p.1). Table 5.6 lists the various committees and groups in operation around Project Renaissance at that time, while Figure 5.6 shows their relationships. The OCG made the following recommendations (it is not clear to whom these recommendations were made, but it is most likely to the Steering Committee):

- That the User Groups and Implementation Coordinators report to the Steering Committee on policy matters, to the Operations Coordinating Group on resource issues, and to RICMAT on operational matters.
- That the Fees Working Party and the IT & T Policy Committee report to Senior Executive.
- That the relevant Directors, e.g. Finance, Student Administration, Personnel, Information Technology, have access to make recommendations and speak to the Steering Committee on policy matters as appropriate (OCG 2000, p.3).

Table 5.6: Committees involved in Project Renaissance as at September 2000 (Source: OCG 2000, p.1)

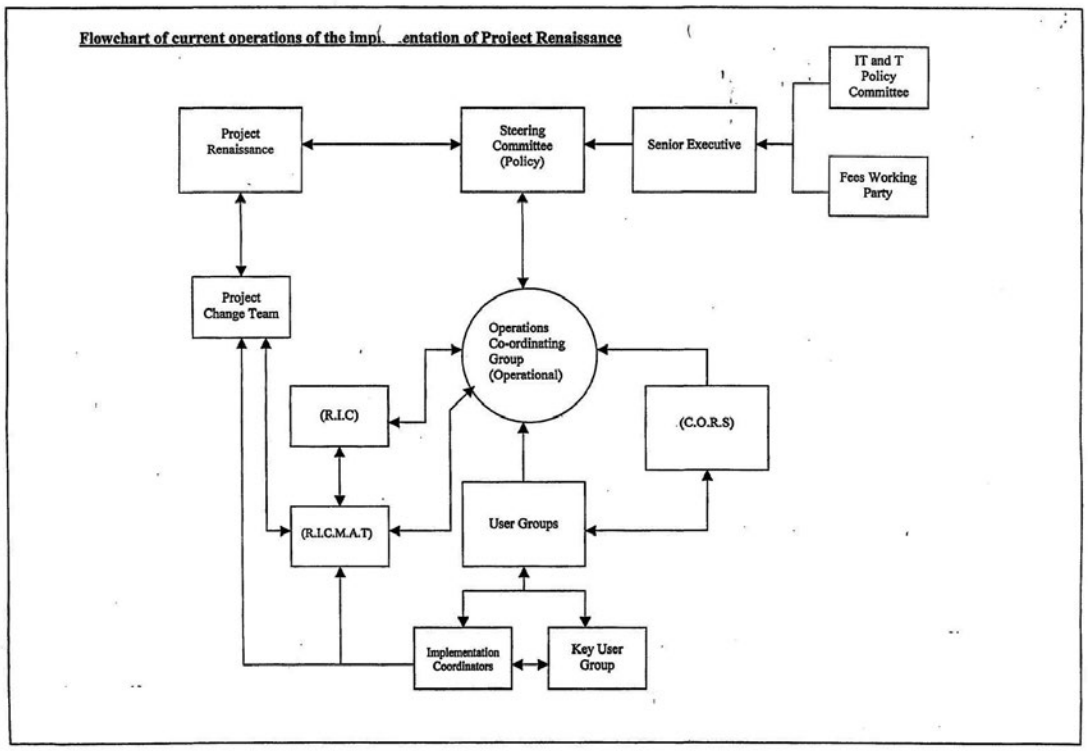
Steering Committee
Operations Coordinating Group
Renaissance Implementation Committee (RIC)
Renaissance Implementation Change Management Team
User Groups
Implementation Coordinators
Committee to Operationalise Renaissance Students (CORS)
Fees Working Party
IT & T Policy Committee

The next important issue was a recognition of the workloads imposed upon the University by the Project.

- That the enormous workloads being experienced by the User Groups, Implementation Coordinators, their resource issues, and resourcing of the conversion of data from legacy systems to PeopleSoft systems, and the configuration of the PeopleSoft database be addressed;
- To articulate the enormity of the problems, the Directors from Finance, Student Admin, and the CQU Project each produce a report addressing the issues pertaining to resources, assets, timeframes (OCG 2000, p.3).

The OCG considered its own role and terms of reference in relation to the Steering Committee, and whether the Project Directors should be on both committees. This was unresolved, but the OCG noted that '… there was some concern expressed that unless the Project Directors were in the Steering Committee, the Committee may not have the expertise available to make decisions…' (OCG 2000, p.2). The OCG's own terms of reference were held over for debate at a future meeting.

Figure 5.6: A flowchart of groups involved in the PeopleSoft implementation, August 2000 (source VP(A) 2000d, p.2)



From the time of this restructure, neither the Steering Committee nor the OCG provided reports directly to Council. Instead, the Project Managers reported to Council and its committees.

5.8.3 Relationships between Project and Management

The year 2000 was marked by widening divisions between the University's directorates (particularly IT and Finance), Chancellery, and the Project. The archives indicate an increasing tension between the Project and the new Finance Director, the latter clearly not satisfied with the quality of the Stage 1 implementation. In June 2000, the Project's Manager for Strategic Change complained about the Finance Director to the DVC and the VP (A):

> …he considered it "preposterous" for us to claim that a working system had been delivered at the end of Stage 1. The particular issues were apparently interfaces, conversions and "accounts".
>
> In relation to interfaces, I am at a loss to know what the issue is. We•sent a document on conversions and interfaces to FSD on 12 May, and have had no substantive response to that document to date. As far as we are aware, the only technical issue of any kind with interfacing has been an error in the ITD extraction program for the modem charges which was corrected by them. All other programs have operated successfully. We provided handover sessions for FSD staff prior to go-live, have repeatedly communicated with FSD on what needs to occur to manage interface information and have agreed this is their responsibility as system owners. We have provided support to the FSD staff operating the extraction programs for an extended period of time. There have obviously been extensive problems with payroll due to budget check errors, this can only be permanently resolved by turning off budget checking or providing the final 2000 budget figures. However,the workaround of using budget override to force transactions through has been applied in the short term.
>
> In relation to conversions, the history relating to conversion of 1999 data has already been well documented, but the issue here was really FSD's inability to deliver closing balances in a timely fashion.
>
> In relation to "accounts", we take this to be a reference to the lack of monthly financial statements. As we have explained on numerous occasions, a rigorous process was followed in relation to reporting from the system, including approval by User Group, the VP(A) and members of Council. The fact that the Director of FSD arrived at the end of this process and does not agree with the results cannot be taken as an indictment of the process itself, or the deliverables from that process. We were directed by Adrian to suspend work on reports on 12 May.
>
> In short, we do not see how it could be argued that a working system was not delivered by the Project. Of course, one could make a case that the total system, including FSD and Finance staff across the University, was not fully functional but this did not seem to be the intent of Adrian's comments.

> Again, our view would remain that the most productive way to resolve Adrian's concerns would be for him to detail them and communicate them to the Project so that we can examine them and frame a reply. At present, we do not understand in what sense Adrian believes we did not deliver a working system. I am mindful of Adrian's comments to Steering Committee that he had serious concerns about the Business Performance Model document but that he was not willing to articulate them in that forum. I believe…that he should bring these concerns to the Project but we are yet to hear them. In my view if we are to have, as we must, a productive and healthy relationship with FSD there is a need for openness about problems and a common willingness to get to the heart of issues and resolve them (Project Manager Strategic Change 2000b, pp.2–3).

This communication sums up the difficulties facing the University. While taking issue with the attitude of the Finance Director, this senior Project manager highlighted significant problems with the implementation. Interfaces were not working as planned, the system lacked financial reports, the budget processing functionality was not operating as it should, and general ledger balances were problematic. This conversation was occurring at the very time when Council and the Chancellor were corresponding with the QAO and State Government ministers regarding the poor state of the University's financial reporting. Any one of the issues indicated by the Strategic Change Manager should have alarmed Council. Perhaps the most serious concern would be that no-one within Financial Services Division signed off on the implementation. Instead, the User Group was used as a signatory to implementation—a role that was not supported by the Project's own definition of the User Group's roles. The User Group was to be made up of functional experts, whose role was to advise the Project of user requirements, and to provide expert business functional input (Change Coordinator 1999a).

5.8.4 The DVC's concerns

The communication from the Project's Strategic Change Manager on 27 June 2000 (Project Manager Strategic Change 2000b) heightened the DVC's concerns about the conduct of the Project. She wrote to the VP (A) the following day (writing as Acting Vice Chancellor) to express her own concerns.

> At the moment, it would appear that the CQU Project staff…the Andersen's Project staff…[the] Financial Services Division…ITD…and Student Administration…have all clearly defined for themselves, the territory for which they are individually responsible. A problem seems to be that while they "fight" about what they can/can't, will/won't do, there is no effective coordination occurring. It would appear that the Steering Committee has not been able to provide that coordination…(DVC/Acting VC 2000, p.1).
>
> …
>
> The e-mail sent to us by [the Project Manager for Strategic Change] on Tuesday 27 June outlines a range of issues that need to be addressed in a coordinated way. At the moment, the ball is being passed from one group to another and the fundamental actions required to get the ball into the goal space, just [sic] are not being taken.
>
> Action Suggested: That you be identified as the person accountable for delivering the coordination and that you do this by weekly (or more frequently when required) meetings of no more than one hour's duration. At the meetings you should require total cooperation on the resolution of issues and each officer must understand their own accountability for being part of cooperative solutions not for generating problems…I propose that the Executive Action Group be disbanded and that the work it was trying to achieve be dealt with by the Coordinating Group and the Steering Committee as appropriate.
>
> …
>
> With a coordinating group working effectively, the role of the Steering Committee would be to focus on the overall supervision of the delivery of the systems, including determination of university policy changes which may be required and setting expectations and time-lines for delivery of solutions by the Coordinating Group. Given the role of the Coordinating Group, core membership of the Steering Committee should not include the unit managers, but should include you as Chair of the Group. I would envisage the Steering Committee being very small—say Vice-Chancellor/Deputy Vice-Chancellor as Chair, you and [the VP (Corporate Development)] and one representative of academic users (e.g. a Dean) and one of general staff users (e.g. someone at HEW 10 level) as members. For particular items, and as appropriate other people (e.g. one or more members of the Coordinating Group) would be asked to join (DVC/Acting VC 2000, p.2).

With her concerns about the coordination of the University's efforts explained, and a future change to the Steering Committee flagged, the DVC turned her attention to the University's relationship with Andersen Consulting. Clearly concerned about their influence over the Project, she wrote:

> One of my assessments of the current situation is that the University is not seen to be operating at arm's length from the Andersen's Consulting Group. As Andersens are our implementation partner, clearly there has to be a close working relationship and the University has to have a forum in which the Andersen's Consultants are given direction, their work monitored and their concerns heard. It is my view that the appropriate place for this is the Coordinating Group, not the Steering Committee. As Chair of the Coordinating Group, it would be your responsibility to ensure that Andersens are delivering as required and that their performance and their concerns about our performance are accurately represented to the Steering Committee. The Andersen Consulting Project Director] would have access to the Steering Committee on request by either the Committee or by him (DVC/Acting VC 2000, p.2).

The DVC next expressed her concerns about the proximity of the VC (who at that time was chairing the Steering Committee) with the Project:

> I also assess that by having the Vice-Chancellor as Chairman of the Steering Committee, we have left him in an invidious position. As Chair of the Committee he has not had the opportunity to maintain objective control of this very high profile project and has therefore been left to wear the flack when displeasure has been expressed. This is only my view and has not yet been tested with [the VC]. To enable him to operate at arm's length so that he can exercise objective control, I will discuss with him the feasibility of my chairing the Committee and reporting directly to him on the actions of the Committee and hence on the performance of the Project (DVC/Acting VC 2000, p.3).

The VP (A) replied, taking issue with some of these proposals:

> I have some difficulty in seeing how the new Steering Committee would work, particularly as regards policy changes.
>
> I thought the idea of the Executive Action Group to identify and investigate major policy and procedural issues and to suggest improvements was a good one. The last consolidated listing from the EAG (that of 31/03/2000) showed 48 identified opportunities and possible courses of action. My view is the EAG hasn't worked because those identified to undertake the actions have been too swamped to do so. That problem will still persist if the function was moved to the Steering Committee. I don't see the Co-ordination Group as being the policy formulation group too (VP(A) 2000c, p.1).

In regards to the relationship with Andersen Consulting, the VP (A) is most emphatic:

> I agree there are those who see the University as not operating at arms length from Andersens. I certainly don't operate at arms length from them. They are our implementation partner and I don't operate from arms length from my partner. We are synergistic and mutually dependent. I would need to be instructed to work at arm's length from Andersens, in which case I would no longer regard them as a partner and my relationship with them would change. Would that be for the better (VP(A) 2000c, pp.1–2)?

At some stage following this exchange, these proposed changes were put to the Vice Chancellor, and resulting changes indicated the dominant relationships at that time. The EAG was disbanded in favour of the Operations Coordinating Group (OCG); the Steering Committee was changed (for the last time during the Project), and although the DVC would take over the Chair, the Project Directors (including the Andersen Consulting Project Director) were present in both groups.

5.8.5 The audit of Stage 1

At the University's request, the Queensland Audit Office (QAO) undertook a review of Stage 1. This was conducted in the week of 23–27 October 2000, seven months after the implementation of PeopleSoft Financials. As the student records implementation was minimal in Stage 1, the audit team focused on the Financials module: the conduct of the project, and its impact on the University operations (QAO 2000, p.8).

As the audit's findings indicate, the conduct of the Project was positively reviewed, but with some important caveats . Overall, the project management had put appropriate processes in place for project planning, monitoring and management. This conclusion was supported by the following observations -

- The Project Directors and Project Manager have relevant and appropriate experience.
- The implementation partner, Andersen Consulting, have a number of methodologies and tools that were used in this project such as BIM (Business Integration Methodology) and PEP (Process Excellence Principles).
- A comprehensive level of documentation on the project has been maintained.
- A planning study was performed at the outset of the project.
- Team Status reports and Steering Committee reports were prepared regularly.
- Sign-offs by relevant stakeholders occurred at key milestones. *However, it was noted that in relation to the General Ledger Conversion sign-off, the Financial Services Division representative did not sign off the conversion documentation.*
- User Groups for the Financial and Student Administration areas were in place, monitoring and providing input into the project process.
- A Quality Plan outlining the quality processes such as reviews of documentation to be undertaken was developed.
- Problems to be actioned were logged by the Project Team in the project's incident recording database (SIR).
- At the conclusion of Stage One, a "Lessons Learned" process was conducted to identify areas for improvement for Stages Two and Three.

> The scope of the review did not incorporate a review of the effectiveness of these processes. Although all appropriate processes appear to have been in place and followed, other issues identified during this review indicate that these processes may not have been successful in identifying and resolving users and stakeholders' problems during the implementation process (QAO 2000, p.10).

In reviewing the governance of the Project, the auditors noted that two key stake-holders were not represented on the Steering Committee, but were on the OCG. In addition, the two Project Directors were on both groups. In the auditors' opinion, the Project Directors should be on the OCG, to clearly delineate the roles of the two groups, and so that they do not influence the strategic direction of the Project (QAO 2000, p.11).

The review of the Project's impact on business operations was less positive. While noting that the staffing situation within the Financial Services Division (FSD) had improved since the end of Stage 1,

> …it is important that key user areas remain adequately staffed while a major project such as Project Renaissance is being implemented to ensure that the qualify of the project decisions and the reliability of the University's operational processes are maintained (QAO 2000, p.17).

The auditors went on to note the following consequences for Project Renaissance and the University's financial reporting:

- The resignation of the Finance Director meant that FSD had no project champion as it approached the implementation time.
- The implementation date occurred mid-month, which had consequences for financial reconciliations.
- Because of resignations and many key FSD staff committed to the Project, there was a shortage of accounting and finance skills and knowledge in FSD, and across the University.
- The PeopleSoft Financials module was implemented without adequate security in its purchasing and general ledger functions:

  > …the University has decided on a policy of transparency where the faculties and other business areas are able to view each other's transactions. While this is a desirable goal for the University, an outcome of this decision has been that users with appropriate access have the ability to enter and approve purchase orders against any cost centre in the University and to report on or view any cost centre's transactions (QAO 2000, p.16).

- Ineffective communications between the Project and the University have allowed an inappropriate devolution of financial responsibilities.
- Ineffective communication between the Project Team and users has contributed to a lack of understanding of processes and ownership of the system by users and inappropriate devolution of responsibilities occurring within faculties.

  > It further appears that in some areas of the University, consideration has not been given to the most appropriate level to which accounting responsibilities should have been devolved, and to the current and required skill levels of these staff.
  >
  > It is acknowledged that the Project Team is already attempting to address this issue in Stage Two through greater direct communication (QAO 2000, p.18).

Finally, the audit found issues with the quality of data conversions, particularly with ledger balances, and with the lack of usable reports in the delivered system.

> One major problem occurred with the initial conversion of general ledger opening balances, as only one month of transactions was initially converted instead of twelve months. This was quickly corrected. It was also noted that signoff [sic] of the results of the conversion of General Ledger Transactions was not obtained from the Management Accountant in the Financial Services Division (QAO 2000, p.12).

The audit found that FSD staff were having to design and develop reports outside of the production support area.

> An issue was identified in relation to PeopleSoft report development procedures. The Financial Services Division (FSD) is currently performing some report development although the Production Support Unit is primarily responsible for PeopleSoft report development.
>
> While the person performing this function in FSD is qualified, it would be more appropriate for all PeopleSoft report development to be performed centrally by the Production Support Unit. This would ensure that appropriate documentation, report testing, and integration testing procedures are performed, as this is not the case currently with FSD- developed reports (QAO 2000, p.14).

The Project Directors provided a response to Council in November 2000, whereby responsibilities were assigned to FSD, questioned, or rejected.

> Stage 1 of the Project was implemented in March and did not include GST functionality (as determined by the Steering Committee in conjunction with FSD). This was implemented by FSD later in the year and was not an initiative of the Project (Project Director 2000c, p.4).
>
> …
>
> We find QAO's recommendations on Steering Committee composition confusing and request that QAO provide clarification regarding:
>
> - Why membership of 2 committees must be mutually exclusive given that the Steering Committee has a charter to "steer" and direct the Project regarding budgetary and policy issues and OCG is intended to implement the actions identified relating to the Project. There can be a clear distinction between 2 committees with obviously independent charters while an overlap in membership exists. If it was agreed that there is benefit in the Project Directors residing on only one committee, we would be willing to be removed from the OCG (theChair of the Steering Committee is also a member of the Steering Committee to serve as a conduit between the two committees).

> • Why the Project Directors would not undertake a critical role in Steering Committee when the major policy and reengineering issues identified within CQU at this time derive from the Project? These issues are best communicated to Steering Committee members by the Project Directors, responsible for raising the issues from User Groups and the Project Team.
>
> • How the Project Steering Committee can effectively "steer" the Project without Project representatives being in attendance. A general meeting of Senior Executive members already occurs without participation of the Project Directors.
>
> • Where examples of your recommendation are implemented at other organisations that have engaged a Consulting partner and are contractually required to resolve issues within a "reasonable" timeframe under a fixed-price contract (Project Director 2000c, p.4).
>
> …
>
> Technical security associated with password management within PeopleSoft - CQU is not considering modifications to standard PeopleSoft password security due to the prohibitive costs associated with ongoing maintenance and upgrades (Project Director 2000c, p.5).

The response to the Queensland Government's state audit office was dismissive, particularly in regards to the membership of the Steering Committee. The Project Directors were not about to release their influence of the Steering Committee.

5.8.6 The changing scope of Stage 2

The scope of what would be included within Stage 2 changed during the course of the Project. A number of factors influenced this, but key considerations were:

- the delay in signing a contract with Andersen Consulting (Project Directors 2000b, pp.1–2).
- budgetary and cost-saving considerations (Project Renaissance 2000a; Project Renaissance Steering Committee 2001b).
- time spent supporting Stage 1 Financials, including providing financial reports (Project Directors 2000b).
- difficulties in obtaining staff from the Financial Services Division to serve on the Assets Management team (Project Directors 2000b).

Table 5.7 sets out the multiple changes to the Stage 2 and 3 scope.

Table 5.7: Scope changes to Stages 2 & 3

Date	Stage 1	Stage 2	Stage 3
May 1999: Recommendations of the Steering Committee to Council, post-Scoping Study (Implementation Planning Study 1999, p.3)	Student Records (phase 1) General Ledger Purchasing & Payables	Student Records (phase 2) Student Financials Billings & Receivables	Projects Inventory Asset Management Human Resources & Payroll
March 2000: Proposed changes to Stages 2 & 3 submitted to Council in response to demands for cost savings (Project Renaissance 2000a, p.4)		Student Records (phase 2) Student Financials Billings & Receivables Asset Management	Human Resources & Payroll (By April, the Project submitted to Council that Stage 3 should only progress '...if [a] Business Case justifies implementation' (VP(A) and Project Directors 2000, p.3).
November 2000: The Project reports to Council that with delays to finalising the contract with Andersen Consulting, time spent developing financial reports following Stage 1, and problems obtaining staff to work on the Assets Management, the mix of Stage 2 must change (Project Directors 2000b, pp.1–2).		Student Records (phase 2) Student Financials Asset Management. (Billings & Receivables would now be reassessed in 2001.)	Human Resources & Payroll
June 2001: Asset Management went live in April, and the Project began to assemble a team for Billings & Receivables. At the June Steering Committee meeting, the Project Director recommended that Billings and Receivables be abandoned in favour of some other solution (Project Renaissance Steering Committee 2001b).		Student Records (phase 2) Student Financials Asset Management (completed). ~~Billings & Receivables~~	Human Resources & Payroll
August 2001: The Steering Committee recommends to Council to defer Human Resources & Payroll implementation beyond the scope of the Project (Council 2001b, p.5).			~~Human Resources & Payroll~~

5.9 2001

2001 was the final year of Project Renaissance; the idea that began in 1997 with Council's consideration of strategic risks would end with an incomplete system, and financial reporting still problematic. Stage 2 would be completed late in 2001, and there was no desire remaining at the University to contemplate Stage 3. Consequently, the ideal of an integrated administrative system, with improved budgeting and reporting processes, would remain unfulfilled.

5.10 Completing Stage 2

The issues of resourcing and cooperation that had plagued Stage 1 continued into Stage 2. The Assets Management system went "live" at the scheduled date of 2 April 2001. However, there were problems with this implementation, as the Project Directors reported to the Property and Finance Committee.

> The Fixed Assets system went live, as scheduled on 2 April 2001. Unfortunately the Project Team did not receive a reconciled, final extract file of depreciating assets from the Finance 1 system; accordingly no depreciating asset details could be converted. The new system does include information on University leases, both operating and financial.
>
> The loading of the information into the PeopleSoft Asset Management system will now be the responsibility of FSD, although it is recommended this be achieved through Production Support (Project Directors 2001, p.1).

Similar issues were besetting the Student Financials implementation:

> The Project is compromised by the inability of FSD to provide, to date, the configuration of item types and related General Ledger disbursement needed to meet the University's reporting requirements. This information can only be provided by FSD as it dictates where and to what level student debt is recorded. Discussions have been ongoing since last year with FSD. The final agreed delivery date was 19 March 2001, this date was the last day to avoid schedule and cost slippage. This has a direct impact on the Project's delivery schedule.

> One option is to delay current delivery, estimated at $32,000 per day. However, the preferred option is to provide additional resources to recover as much as possible of the 22 day slippage to date. The costs of this have been estimated at $250,000.
>
> …
>
> The information necessary for the population of the Student Debtors Ledger was originally expected to be satisfied by the provision of Student Debtors into the Finance 1 system by 31 December 2000; the Director FSD advised this was necessary to satisfy audit and GST requirements. The original deadline for a test file of 2 March was extended to 16 March 2001 but to date only a subset of files have been received yesterday. The last available date for receipt without compromising go live in July is 12 April 2001.
>
> The Project's proposal is that we take over management of student debtor conversion at additional cost. Detailed cost estimates will be produced once the scope of work has been established.
>
> All of the above costs are outside the responsibility of the Project and have been managed to the extent that the position has been referred to CQU's responsible and Senior Managers in endeavouring to eliminate or minimise the associated costs. Accordingly these costs should not be deemed Project costs as they are outside the Project's scope of management and responsibility (Project Directors 2001, pp.1–2).

Despite critical problems being identified with the University's financial report in 2000, the Project had been allowed to continue within a vicious cycle, where the Financial Services Division would not, for one reason or another, cooperate with the Project, and the Project delivered systems with inadequate or questionable data. The issue of sign-offs concerned members of Council, as the following excerpt from the February 2001 Council minutes shows:

> The Vice-President (Corporate Development)…raised the question as to whether there has been sign off from system owners, to which [the CQU Project Director] advised that all issues that have been raised during User Group meetings have been catered for and have been signed off at User Groups (Council 2001a, p.3).

The Steering Committee did not appear to be concerned with this. The minutes of the last Steering Committee meeting before the implementation of the Asset Management system shows discussion about operational issues, such as a student services telephone line, a business performance model, and about the proceedings of the previous PeopleSoft conference. The Assets Management implementation was recorded as a general business item, but no discussion was minuted (Project Renaissance Steering Committee 2001a).

In the midst of these problems, the Finance Director resigned (around 15 June 2001). In a repeat of 2000, the University was struggling to submit its annual financial report to the Government, and its Finance Director had resigned in the midst of critical systems implementations (VC 2001; Chancellor 2001).

The University immediately transferred the CQU Project Director into the position of Finance Director, and the Project's Associate Director undertook the role of Project Director until the end of Stage 2.

5.11 Stage 3 (August 2001 – October 2001)

With Stage 2 completed and Andersen Consulting withdrawing from the Project, the University rapidly lost any enthusiasm for a Stage 3. At their August 2001 meeting, Council accepted advice to not proceed with either the Billings/Accounts Receivables or Human Resources/Payroll modules until alternatives are investigated (Council 2001b).

Project Renaissance ceased operations on 19 October 2001.

5.12 Conclusion and consequences

The completion of Project Renaissance brought to a close the largest single project the University had ever undertaken. The 2001 Annual Report summed up the experience as such:

> The final stage of the implementation of the PeopleSoft educational administration system dubbed 'Project Renaissance' was completed in October 2001.
>
> CQU committed $20 million to the project to re-engineer its academic administrative and management processes, and progressively migrate them to e-commerce platforms to improve efficiencies and reduce costs.
>
> Lasting two years, it was the biggest single project undertaken in the history of CQU, and included financial and student administration, as well as asset management (Central Queensland University 2001, p.65).

By the University's own expectations, it had been of limited success. Instead of a fully integrated administrative system, key elements were not implemented (Accounts Receivable, Budgets Explorer, Workflow, Human Resource Management, and Payroll). Financial reporting had not improved, and the management of the University's finance function was still in flux, as the VC wrote in the 2001 Annual Report:

> The impact of the extraordinary growth of our student population, predominantly in the international segment, the introduction of a new software system and changes in leadership of our Financial Services Division, has caused the University to struggle during recent years to meet the requirements of the Queensland Audit Office. Positive progress was made during 2001 to address problems in our financial management. It is imperative that this progress continue in the years to follow, with improvement in our management systems being a key priority (Central Queensland University 2001, p.8).

The VC's comments represented an understatement. In fact the external auditor had found material errors within the University's accounts, particularly in the valuation of assets. This led to the qualification of the annual report, for the second time in three years:

> Section 46C(e) of the *Financial Administration and Audit Act 1977* requires the University to ensure that its procedures, including internal control procedures, afford at all times adequate safeguards over and accounting for moneys due to it and under its control.

> With regard to the University, my review found that key financial controls including monthly or quarterly reconciliations over investments, borrowings, fixed assets, purchase cards, student receivables, and bank accounts were not performed effectively throughout the financial year. In addition, as referred to in Note 1(w) to the accounts, the bank reconciliation statement as at 31 December 2001 could not be balanced due to unmatched items totaling [sic] to a net value of $166,878. These items principally related to the months from July 2001 onwards (Central Queensland University 2001, p.131).

Nevertheless, the University had performed better than other Universities that were implementing PeopleSoft at around the same time. The University of New South Wales experienced greater cost blow-outs (see Lawnham 2001), while the Royal Melbourne Institute of Technology (RMIT) suffered severe financial hardship following the mismanagement of its project (Avison et al. 2006).

This case study may well be a useful study for the success and failure factors in an ERP implementation. However, its purpose for this thesis is to provide a scenario for analysing the developing decision-making and structures around the project. The following chapters will take this scenario and analyse it from several perspectives: that of the IT governance literature, and of social and organisation theory, in order to add depth and richness to our current understanding of IT governance.

Chapter 6: Applying the IT governance literature.

6.1 Introduction

The case study in the previous chapter portrayed the decision-making and organisational structures that oversaw a large information systems project at Central Queensland University. There were two recurring themes within the case study that required further attention: the relationship between IT governance and corporate governance, and the form and nature of IT governance in a situation of fluid power relationships. To investigate these aspects, this chapter will review those elements of the IT governance literature most relevant and most capable of offering explanations for IT governance in this context. The publications of Sambamurthy and Zmud (1999) and Weill and Ross (2005; 2004) are held up as being the most applicable, although they fail to explain the full dynamics of power relations and organisational discourse within the case study.

6.2 The role of corporate governance in IT governance

One aspect of the IT governance literature that suffered from an inconsistent approach was the relationship with corporate governance. The review of the literature in Chapter 2 concluded that although many writers assumed a relationship, and even maintained that corporate governance was integral to IT governance, others held that IT governance was a concept quite separate to corporate governance. Where a relationship was found to exist, it was limited to one of contingency: the form of IT governance was contingent on the form of corporate governance in place at an organisation. However, the case study described a major project where there was constant interaction between the governance of the project and those charged with corporate governance. The first task of this analysis is to seek an explanation of this relationship.

6.2.1 Corporate governance in the IT governance literature

The early IT governance writers paid little attention to corporate governance, seeing it chiefly as a contingent influence on the form of IT governance. For Weill and Ross (2004), IT governance was derived out of corporate governance, but was also separate from it. The board of directors provided direction on what was desirable (ethical) behaviour, and also provided (or approved) the organisation's strategy. Out of these twin directions of ethical behaviour and corporate strategy arose the governance of organisational assets, which included finance, information, and technology. However, once the Board had given these directions, it remained remote from the governance of information and IT assets.

This model of corporate governance and IT governance substantially extends the work of Sambamurthy and Zmud (1999) which saw corporate governance as a contingent factor, but just one of many.

> However, in reality, the evolution of firms' IT governance arrangements depends on the confluence of many contingency factors. To add even more complexity, these contingency factors (in practice) interact with one another in shaping firms' IT governance arrangements. The advancement of our knowledge of why and how firms exhibit particular IT governance arrangements requires accounting for the effects of complex interactions among the multiple contingency forces that are likely to simultaneously prevail in practice.
>
> ...
>
> IS researchers have found that the mode of corporate governance significantly influences the mode of IT governance: firms that have centralized their corporate governance also tend to centralize their IT governance, whereas firms that have decentralized their corporate governance tend to decentralize their IT governance Sambamurthy and Zmud (1999, p.264).

Both Sambamurthy and Zmud (1999) and Weill and Ross (2004) shared a fundamental view of the role and influence of corporate governance in IT governance: the relationship was an asynchronous one—the influence flowed from corporate governance to IT governance—and they did not envisage the relationship flowing the other way.

Following the corporate scandals and collapses that occurred around the turn of the century, later writers saw a more tightly coupled relationship between IT governance and corporate governance. In response to a greater emphasis on the board's obligations to direct and control an organisation, Nolan and McFarlan (2005) urged boards to undertake a more "aggressive" approach to IT governance as part of their risk management strategy, an approach that has been supported by others (for example, Gillies 2005; Huff et al. 2004). Other writers (particularly Musson and Jordan 2005; Jordan and Musson 2004) saw the board of directors as active stakeholders in IT governance . So where some writers saw IT governance as an addition to the responsibilities for the board of directors, others saw it as a necessary component of corporate governance—a quite different proposition to that put forward by Sambamurthy and Zmud (1999).

The case study showed that while the form of IT governance at CQU was indeed influenced by its corporate governance culture, there was a dynamic and synchronous relationship in existence. The following part of this chapter will show that while the case study confirms much of what has been written on the relationship between corporate governance and IT governance, there is still a dynamism present in the interaction between corporate governance and IT governance that is not well explained by the literature.

6.2.2 The interaction of corporate governance and IT governance at Central Queensland University

The form and practice of corporate governance at CQU had directly enabled the establishment of Project Renaissance. It allowed the project to come into existence, set its boundaries, and gave it its objectives. The case study shows that Council's involvement with the governance of the project was neither static, nor one-sided. On the contrary, the interactions at the corporate and IT governance levels occurred regularly during the project.

In 1997, when the case study began, the University's Council was focusing on the risks and threats for the Australian higher education sector. These came primarily from the anticipated deregulation of student fees, and the change this would mean for future government funding of universities. The catalyst for these changes would be the West Review, commissioned by the Federal Government and published in April 1998 (DEST 1998). Council's responses included the establishment of multiple teaching terms for its students, and to become more committed to the international student market. By considering these strategies, Council found that its current IT systems, business processes, and financial reporting were inadequate. The University's Student Records System (SRS) was incapable of producing all of the information needed to support Council's strategies, it could not support a multi-term enrolment pattern, and doubts existed about the quality of the information it produced. Council was also dissatisfied with the quality of the University's financial processes and re-

ports. It responded by approving upgrade projects for the Student Records System, and by commissioning an independent review of its financial systems and processes. This eventually led to the removal of the Bursar, an act that led to problems with the University's financial functions in coming years.

By responding as it did, Council was fulfilling its corporate governance responsibilities. This is evident when international principles for good corporate governance are considered. In 2004, the Organisation for Economic and Cooperative Development (OECD) made many recommendations for corporate boards of directors, including the review and guidance of:

> ...corporate strategy, major plans of action, risk policy, annual budgets and business plans; setting performance objectives; monitoring implementation and corporate performance; and overseeing major capital expenditures, acquisitions and divestitures (OECD 2004, p.24).

Additionally, the OECD principles stated that the board should ensure:

> ...the integrity of the corporation's accounting and financial reporting systems, ... and that appropriate systems of control are in place, in particular, systems for risk management, financial and operational control, and compliance with the law and relevant standards (OECD 2004, p.25).

With hindsight, it is possible to see a direct link between Council's corporate governance activities and the establishment of Project Renaissance in 1999. When Council was asked to approve the purchase of PeopleSoft in early 1999, its dissatisfaction with the current IT systems was used as a justification for the expenditure. However, Council had not acted in anticipation of implementing a large ERP system; it did not contemplate such a project when it laid out its strategies. On the contrary, it believed that the existing administrative systems were adequate (albeit with substantial modifications and upgrades performed on the SRS during 1998).

6.2.3 Those charged with governance at Central Queensland University, and their influence over Project Renaissance

The University's enabling Act of Parliament shows that the Council was entitled to delegate most of its executive powers (State of Queensland 2012), yet it retained the approval of budgets and significant expenditures. Through this approval of significant expenditure, Council was able to remain as a significant governance influence throughout the project, though as the case study shows, when expenditure approvals were no longer required, Council's influence waned. However, beyond the role of Council, those charged with governance at CQU remained significant influences, largely due to a combination of governance culture and direct involvement of key executives.

First, Project Renaissance was overtly governed by means of committees and formal groups--in the same way as the University itself was governed. Committees and formal groups are a favoured mechanism at universities in general, and the case study shows the VC and his senior executives trying to streamline the committee structures surrounding the Council and VC. A major re-design of the committee structures occurred in the year prior to the commencement of the Project, and this in turn contributed to a lack of Council's awareness of an imminent major project. In a key example (described in section 3.5.4, starting on page 143) the reluctance of the new Property and Finance Committee to question and review the preparation of the 1999 Budget allowed the allocation of initial funds for the Project to occur without explanation.

Second, the Council retained approval rights for all significant expenditures, and the appointment of senior executives. In this way, Council maintained a direct decision-making role, forcing the Project's decision-makers to defer to its decisions (at least to some extent). However, the case study shows a degree of difference between formal roles and actual behaviour, and Council's will was not always heeded, especially when approval for expenditures was not required. An example of this was Council's ineffectiveness in effecting changes to contracts and the management of Stage 2.

Third, the Council (and especially the VC) provided the strategic objectives for the Project. In this case study, Council were acutely aware of the inability of present systems to support its strategies and were able to insist on project outcomes that directly supported strategies: student enrolments, better financial reporting, more efficient and responsive administrative systems[20]. Consequently, the governance of this project had direct involvement from Council and its supporting committees. This became particularly apparent in the later stages of the Project, as Project directors and managers were required to make extensive reports to various University committees.

Finally, there was a governance culture at CQU that was, if not secretive, then lacking in transparency. One important source of that influence was the budget process used to approve the 1999 budget. While there is no evidence of improper or unethical behaviour by those involved, the process was not transparent, and therefore the form of the project that was finally approved by Council was most likely to be different from one could have occurred if a more transparent process had been followed.

The case study's review of the governance culture at CQU indicated that the governance of Project Renaissance was formed and influenced not only by the corporate strategy, direct decisions, and directions from those charged with corporate governance, but also by the governance culture existing at that time. This governance

20. Some authors in the IT governance literature—especially Avison et al. (2006)—found that such consciousness by senior executives and governing bodies is not common.

culture can be identified by the priority given to corporate governance principles. In 1999, accountability and control had achieved primacy over transparency, and this leads to an interesting reflection on the definition of IT governance provided by Weill and Ross (2005; 2004).

Weill and Ross (2005; 2004) had stated that corporate governance provides IT governance with standards of desired behaviour in the governance of IT. This case showed what constitutes desired behaviour is contingent on the corporate governance culture. The project was born out of a lack of transparency in the budget process, and the lack of transparency was a recurring feature of the project. One manifestation of this occurred towards the end of the project, when Council members asked the Project Directors whether anyone had signed off on the Financials module prior to implementation. The answer was that the Finance User Group had provided the authorisation to proceed, which was beyond the terms of reference for the user groups. Rather than being rebuked by Council for implementing a financial system that had not been accepted by the University's financial management and for exceeding the terms of reference of user groups, Council apparently accepted this answer (at least, the Council minutes have not recorded any dissent). This response is understandable when Council's acceptance of the 1999 budget process is considered.

Ultimately, the lack of an established IT governance framework, together with the corporate governance culture at the University resulted in project outcomes that failed to support the some of University's corporate governance obligations, especially that of financial reporting.

6.3 The elements of IT governance: arrangements and mechanisms

There is no doubt that governance arrangements are a critical element within IT governance. As Chapter 2 noted, the IT governance literature, at least in its formative years, placed a heavy emphasis on IT governance arrangements; in some cases equating IT governance arrangements with IT governance itself. And despite some inconsistency in the literature whether mechanisms are a part of IT governance or not, it is now generally accepted that both arrangements and mechanisms are important components of IT governance. There is evidence within the literature that a weak application of IT governance arrangements and mechanisms leads to problems in the management of IT and IT projects, such as the commentary on a major project at Royal Melbourne Institute of Technology (RMIT):

> Looking at RMIT, the auditors attributed the failings in the student system directly to the issue of governance. A report by the Organization for Economic Co-operation and Development (OECD) found that RMIT did not plan comprehensively and apply governance arrangements—including senior management involvement and support—to ensure its project was properly managed. As a result, the system did not provide the desired functionality, and RMIT today faces significant challenges in moving to a higher-quality student administration system Avison et al. (2006, p.90).

The CQU case study confirms that both IT governance arrangements and mechanisms are important components of IT governance; but their relative importance changes over time, with power relations between key executives and governing institutions proving to be a dynamic concept.

6.3.1 The deployment of mechanisms for Project Renaissance

Project Renaissance employed a range of mechanisms that would be considered standard governance mechanisms in the IT governance literature. These included the use of

- structural overlays, including formal groups (a steering committee with subordinate executive and managerial committees, and user groups)

- formal roles (various implementation coordinators and sponsors, plus project managers and directors)
- coordination (newsletters and emails) and project oversight (steering committee, multiple project directors, an active Council and senior executives) mechanisms.

These mechanisms have been described in Chapter 5 and will now be reviewed in the following section using the IT governance literature to determine how well the literature can assist in analysing the Project Renaissance case study.

6.3.2 Relational mechanisms for Project Renaissance

When Brown (1999) introduced mechanisms to our understanding of IT governance, she was specifically interested in how various relational mechanisms could support an organisation to achieve a flexible and lateral structure. Brown also referred to these mechanisms as horizontal mechanisms, or structural overlays:

> Horizontal mechanisms are structural overlays (such as roles and groups) and non-structural devices (such as physical colocation) that are designed to facilitate cross-unit collaboration (Brown 1999, p.421).

Brown's focus on structural overlays is supported by other authors in the IT governance literature:

> Of the many mechanisms that have been identified in organizations, two of them are called structural overlays. Structural overlays can either be formal groups, such as a steering committee, or formal roles, such as cross-unit integrators (Hvalshagen 2004, p.54).

Similar to the cross-unit integrator is another popular mechanism for bridging organisational structures, the "user liaison" (Pawlowski and Robey 2004).

Structural overlays played a significant role in the governance of Project Renaissance. Most of these were established under Andersen Consulting's project management methodology. Some important mechanisms, such as the steering committee, were already in place when the project commenced, but became subjugated to the Andersen methodology and influence.

The nomenclature for relational mechanisms varies widely within the IT governance literature. Peterson et al. (2000) refers to structural integration mechanisms as structural overlays specifically concerned with systems integration:

> Structural integration mechanisms for IT governance describe formal integration structures and staff-skill professionalization. Formal structural mechanisms range, with increasing complexity and capability, from direct supervision, liaison roles, task forces, and temporary teams, to full-time integrating roles and cross-functional units and committees for IT (Peterson et al. 2000, p.437).

Beyond structural integration mechanisms, Peterson grouped other mechanisms into functional integration mechanisms (which refer to the IT-specific decision-making processes and communications (Peterson et al. 2000, p.437)) and social integration mechanisms (which 'describe the active participation of key stakeholders in IT decision making and the shared understanding between stakeholders' (Peterson et al. 2000, p.437)).

Without initiating a taxonomic study of how mechanisms are classified in the literature, it is sufficient to understand that the Andersen methodology provided for three key types of mechanisms: formal committees, formal roles, and formal communications channels. These–including the Steering Committee–were tightly controlled by the project management team and decisions and communications tended to flow in one direction only: from the Project to the University. Also, as the case study showed, it is one thing to recognise that these mechanisms existed, but their performance relative to their specified role or objectives was quite another matter.

Formal committees: Steering Committee and other groups

The Steering Committee

Most authors concerned with IT governance consider steering committees a central mechanism. To be effective, the steering committee should have a membership that is representative of the business, while retaining expertise; be able to reduce–cut through–bureaucratic barriers; have sufficient authority and influence to make the appropriate decisions, and enable effective communications across the organisation.

The decisions to be made by the steering committee can include prioritising projects, setting objectives and accountabilities, setting structures appropriate to the IT "solutions" being sought, and determining risks, returns, and funding for priorities (Luftman et al. 2004). However, other authors warned of the alternative scenarios for steering committees. Meyer (2004) contended that steering committees with inappropriate membership, conflicting objectives, and/or multiple roles are unlikely to be effective.

Some authors were not convinced about the effectiveness of steering committees, or the criticality of governance oversight:

> Although oversight is occasionally the right approach, there are far better ways to coordinate and control an organization, without disempowering its staff. We view oversight as a mechanism of last resort (Meyer 2004, p.25).

Although Project Renaissance was able to "check the box" for having a steering committee, the reality was that the committee changed its membership several times during the project, and by the end was a different body to its first version. Where originally it reflected a federal structure, by the conclusion it was more aligned to a duopoly archetype (as described in Weill and Ross 2004).

User groups

Under the Andersen Consulting methodology, user groups were established for each major system to be implemented: there was a Student User Group and a Finance User Group. While these groups were tasked to work closely with management and staff in those operational areas that would have to work with the new system, in effect their role was to pass on and explain decisions made by the Project (and approved by Steering Committee). There was little prospect of a user group rejecting a decision or proposing a new solution: the requirements to have alternatives fully scoped and costed–without resources to do so–were onerous. Nevertheless, the user groups met regularly and provided a vital integration service.

Coordination groups

Supporting the Steering Committee was the Executive Action Group (EAG), which was later disbanded and replaced with the Operations Coordination Group (OCG). These groups comprised of high-level University managers tasked with preparing the University for the operational and systems changes that were coming. These and other groups are detailed in Chapter 5.

Formal roles

Senior executive involvement and oversight

A recurring theme in the IT governance and IS project is senior management involvement (for example, Sumner 2000; Ewusi-Mensah 1997) and involvement by those charged with governance (senior executives and boards of directors) (for example, Weill and Ross 2005; Musson and Jordan 2005; Nolan and McFarlan 2005; Bart and Turel 2010). CQU had a significant level of senior executive involvement in their project. Many executives had formal roles defined for them in the Andersen Consulting methodology: so the VC became the project champion, the DVC and VP (R) became project sponsors, and so on. In addition, Council tried to assert itself at times beyond its approval of expenditure (for example, its unsuccessful attempt to impose conditions upon the conduct of Stage 2). Indeed, the level of oversight applied to the project could have had a negative effect on it.

The corporate oversight of information systems has long been recognised as an important governance mechanism (Brown 1999). However, another study found that strong oversight, rather than being an effective governance mechanism, actually suppressed effective project decision-making:

> Oversight transfers some authority from those doing the job to those judging and controlling them. Whenever oversight separates accountability and authority, trouble can occur. In the worst case, those with authority but no accountability become tyrants; those with accountability but lacking concomitant authority become victims and scapegoats, set up to fail. The result is poor decisions by those with the power, ineffective performance by those who lack needed authorities, and an overall damper on entrepreneurship, creativity, and initiative (Meyer 2004).

Hence, with the Project having two directors, oversight from its steering committee–with conditions being periodically placed on it by Council–and regular involvement from senior executives (in particular, the VP (R) and the DVC), it is possible to conclude that Project Renaissance had excessive oversight, which may have contributed to the variations in power relations so evident in the case study.

Systems integrators: project sponsors, champions, and coordinators

A clear example of formal roles being used in Project Renaissance as a structural overlay is the assignment of project roles to senior executives. Hence, the VC became a project champion (a role he undertook with enthusiasm in the early stages of the project, communicating clear messages to University staff for the need to implement the new system), and the DVC and the VP (A) became project sponsors. These executives not only devised and communicated the central message about the need for the project, but they also defended the message. Dissent was discouraged at all levels, which included the Chancellor!

Acting separately from these executives, but in concert with them, was the Strategic Change group operating out of the Project's structures. This group comprised of University managers and employees who devised and managed the change management protocols, which included further mechanisms: change coordinators in almost every operational area affected by the Project, and coordinator groups to help coordinate the change coordinators' efforts.

Communications

The Project initiated a regular newsletter, which was emailed to all University staff. It was entirely comprised of the official Project messages of the time, and was unfailingly upbeat about the activities happening in and around Project Renaissance.

Of more significance were the official communications protocols put in place from the very beginning of the project. These were initiated by ACPD, and were unquestioningly adopted by University management. The protocols involved a rigid reporting structure within the Project and also the University. Those in the University who attempted to bypass these protocols (such as the Director of Finance and the Chancellor) were firmly reminded of the "proper channels" for communicating concerns. If this occurred within senior level of the University, the "reminder" was often delivered by the VP (A).

6.3.3 The impact of the governance mechanisms on CQU

When CQU engaged Andersen Consulting as their implementation partner for Project Renaissance, they bought into a methodology that was replete with mechanisms that had solid professional precedents, supported by research: formal roles, formal groups, and formal communications. Yet the project still suffered difficulties and finally it failed to achieve many of its objectives. Although the project was established from clear corporate governance needs–which included improved financial systems and reporting–it moved instead into a software implementation project. Given the size of the project and the resources available to CQU, this is understandable, yet the consequences were potentially dire for the University. Two possible reasons for this were the unwillingness of those charged with governance to recognise the capabilities and skills already at the University, and instead to rely entirely upon their implementation partner. There was also the failure of the University's Council to uphold

the primacy of its own governance needs (especially financial reporting). In other words, the discourse of project management—implementation must be on time and on budget—was allowed to override the discourse of corporate governance. These two issues are briefly discussed in the following sections.

Project capabilities

Project Renaissance commenced with Council and senior executives of the University convinced that the University did not have sufficient capability to run a large project on their own, that project management skills and methodologies would have to be purchased. It is likely that this was an accurate assessment, but it took no account of the fact that the University had already been running long and complex IT projects with their own staff. One example was the Y2K project to identify and rectify all areas of possible risk introduced by the world's computer clocks reaching Year 2000. This was a multi-year project that was complex, yet it was run with minimal disruption to the University, and provided various governance committees with accurate updates. Once Year 2000 arrived, there were no instances of problems arising due to that event. The University's IT division had also routinely provided upgrade services to the legacy Student Records System. This indicates that competent project and project management skills existed at CQU in 1999. Nevertheless (and it must be remembered that the Y2K project was continuing at that time), Council believed that these were insufficient: a view that set the fundamental framework that would become Project Renaissance.

In contrast to the structured approach favoured by Andersen Consulting and implemented by CQU, research by Peterson found that those organisations which favoured more informal and voluntary mechanisms tended to have better formal mechanisms and more effective lateral governance:

> In a highly competitive and changing environment, successful companies are characterised by increased lateral mechanisms. Moreover, informal roles and network-building, in terms of actions that promote voluntary, collaborative problem-solving and socialisation across stakeholder communities provide a foundation for formal mechanisms and increased 'lateralism' (Peterson 2000, p.673).

Although speculative, it is likely that a more inclusive and informal set of mechanisms would have provided for a different project, and possibly one that made greater use of the skills within the University.

Governance discourse

At the commencement of Project Renaissance, and for some period during the project, the discourse accompanying it was grounded in internationally accepted principles of good corporate governance: direction and control; accountability; and transparency. All of the communications from the VC to the University's managers followed these themes. Even the establishment of the Project followed the direction and control theme, with Council determining that the University should appoint its own Director to manage the Project according to the University's (and Council's) interests. Gradually, however, the implementation partner began to impose its own methods of managing the project, and the discourse shifted to the classic project management discourse of implementing a system on time and within budget. The project management discourse was perfectly proper, and project management would be expected to pursue these objectives relentlessly (which they did). However, Council and senior executives of the University failed to maintain the primacy of good corporate governance discourse. This is evidenced in a number of ways:

- Despite needing improved financial reporting, Council was surprised at the end of the Project to find that the University's financial management had not signed off on the implemented finance system (it was implemented anyway on the approval of the User Group, an approval that was beyond the scope of its responsibility).

- This followed problems that were already evident with Stage 1 of the Finance system implementation being implemented with sub-standard reports available (or in some cases, no reports at all).

- University executives had allowed a known problem to develop with the staffing of the Financial Services Division (FSD). As early as 1999, the VP (A) was expressing concern that FSD had been denuded of financial management expertise by the Finance Director. However, this was never rectified, possibly because the return of staff from the Project to FSD would have adversely affected the ability of project management to achieve implementation on time and within budget.

- When a replacement Finance Director was being recruited in 1999, the process used a position description that made no reference to a large ERP project currently underway at the University, and made no requirement of skills in working together with such a project. Perhaps unsurprisingly, the appointee soon proved to be disruptive and uncooperative with Project Renaissance management.

- The Steering Committee was gradually stripped of all faculty and divisional management, ultimately becoming a joint committee of senior executives and project management.

These observations suggest that there were social issues of power relations and discursive practice beneath these observations of governance mechanisms at CQU. The issue of discourse requires further investigation, and this will be done in the following chapter using the literature of organisational discourse. Also, the issues of variations in performance of these mechanisms, the oversight of the project, and the unwillingness to recognise existing capabilities suggest that a review of the case study in terms of organisational and political power is needed. This will also be further investigated in the following chapter. Before this chapter concludes, however, a review of the decision-making patterns (arrangements) used in Project Renaissance is required. The work of Weill and Ross (2005; 2004) is used as the basis of analysis.

6.3.4 Weill and Ross' framework, and the dynamism of governance arrangements and mechanisms

Of all of the published IT governance scholars to date, Weill and Ross (2005; 2004) provide the most multi-dimensional and behavioural view of the complexity of IT governance arrangements. Almost alone in the IT governance literature, these authors conceived of a dynamic set of arrangements that could change as and when the decision required it. The following analysis will show that while this model allows for considerable dynamism and complexity in IT governance, it still does not reflect the changes in arrangements and mechanisms that occurred at CQU during Project Renaissance.

Archetypes and political systems

Weill and Ross (2005; 2004) extended the concept of centralised vs. decentralised arrangements by adopting a range of arrangements, or archetypes, based on political systems. These well-known political systems included monarchy, duopoly, feudal, federal, and anarchic patterns. However, the authors went further than mapping IT governance arrangements to one or more of these political systems: within a single organisation, different decisions could be undertaken by different patterns. The archetypes were discussed earlier in Chapter 2, and will not be elaborated on here, except that the Project Renaissance case study has revealed a weakness in this model. The archetype varies not only for the decision, but also over time.

The best illustration of the variations in archetypes over time is the composition of Project Renaissance's Steering Committee. Although its terms of reference did not change, its make-up did. Initially, the Steering Committee was likely to represent a federal pattern, that involved the "centre" (whether that centre was the group of senior executives, or the IT division) and representative of the business units (faculties and divisions). By the end of the project, however, through a series of restructures at the decree of the VC, the Steering Committee resembled a duopoly between the ex-

ecutives of Chancellery and the senior Project management. For Project Renaissance, IT governance was not a static construct to be set in place. Rather, it was an evolving and changing concept that changed according to the power structures and relations at different points in time.

Decision domains

The second part of the Weill and Ross model shows the decision domains against which the archetypes are applied. While these domains resembled the decision domains of other authors, notably Sambamurthy and Zmud (1999), Weill and Ross (2005; 2004) added the dimensions of who had input to the decision as well as who had the authority to make it. A brief description of the domains and their application to the case study is provided in Table 6.1 on page 247. Again, while this is a useful extension, it failed to take into account the variation in decision-making over time. Within the Project Renaissance case study, all decisions eventually polarised to either the executives in Chancellery, or to the Project.

As useful as the Weill and Ross model is, it has proven to be insufficient to explain and guide a user through the ever-changing field of political and power relations that exist in a governance environment. However, there is one further element in the Weill and Ross model that is useful in explaining the Project Renaissance study. The decision domains were not considered equal: IT principles were given primacy over other domains, and this provides a useful analysis of how the governance discourses at CQU were eventually overwhelmed by the project management discourse.

IT principles

> IT principles are a related set of high-level statements about how IT is used in the business. Once articulated, IT principles become part of the enterprise's management lexicon and can be discussed, debated, supported, overturned, and evolved (Weill and Ross 2004, p.27).

Weill and Ross (2004) assigned primacy to IT principles over all other decision domains: they saw that such principles, when clearly linked to an organisation's management principles, informed and guided the subsequent decisions (contained in the other decision domains). So these are the guiding principles of IT governance; strong, documented, and current principles lead to good and defendable decisions. Therefore, this is a very good domain in which to begin to analyse CQU's decision making structures and mechanisms—and a core problem immediately emerges.

In 1999, CQU's IT principles were still evolving and had not yet been formalised. Weill and Ross (2004) recognised that important IT-related decisions must first be shaped and informed by the dialog–or discourse–on IT principles. At CQU, however, this had yet to occur. The driving discourse for the project originated from the Council, and it followed standard corporate governance themes of directing and controlling the organisation. Even when University management initiated a review of potential vendors for an integrated information system, the justification put to Council for approving the purchase was framed within these themes: supporting Council's strategies, improving financial reporting, and making business processes more effective and efficient. Even though CQU had some significant IT project capabilities, IT management did not have sound principles for project management, implementation, or risk management. To their credit, Council and the University's senior executives identified this shortfall early; they made the decision to purchase the principles and practices needed for such a large project, in the form of an implementation partner.

The danger of importing IT principles–rather than developing them–became clear as the project progressed. By the end of the project, all principles that were derived from corporate governance considerations–support for strategy, improving business processes and reporting–were subsumed by the project management principles of "on time, on budget". As a consequence, the project was completed without significant scope, budget, or schedule penalties, but the University was left exposed to a severe failure of financial reporting.

6.4 Conclusion

This analysis of the Project Renaissance case study using the principles and tools of the IT governance literature has shown that while the literature is useful for identifying and classifying elements of IT governance, it is of less benefit in explaining the relationship between corporate governance and IT governance, or in explaining the variations in decision-making arrangements or other mechanisms over time. The dynamics of IT governance suggest that there are social aspects that require investigation, especially the role of discourse, politics, power, and power relationships. The following chapter will use the literature of these social concepts to examine the underlying phenomena of IT governance.

Table 6.1: Analytical questions for the decision domains (based on Weill and Ross 2005, p.30)

Decision Domains	Analytical questions	When applied to the case study:
IT principles	• What business principles guide IT decision making? • What is the role of IT in the business? • What are desirable IT behaviours? • How is IT to be funded?	The University Council had a clear idea of the role of IT in enabling their strategies to be enacted.
IT architecture	• What are the core business processes of the enterprise, and how are they related? • What information drives these core processes; how must it be integrated? • What technical capabilities should be standardized to support IT efficiencies and facilitate process standardization and integration? • What activities must be standardized enterprisewide to support data integration? • What technology choices will guide the enterprise's approach to IT initiatives?	Council had been considering these questions, as had the senior executives. However, answers only began to be formulated during the implementation planning study, which was driven by the implementation partner.
IT infrastructure strategies	• What infrastructure services are most critical to achieving the enterprise's strategic objectives? • What infrastructure services should be implemented enterprisewide and what are the service-level requirements of those services? • How should infrastructure services be priced? • What is the plan for keeping underlying technologies up-to-date? • What infrastructure services should be outsourced?	These questions were being addressed while the project is in progress, but the task of addressing them was pushed down to the University's directorial level, and especially the Director of IT.

Decision Domains	Analytical questions	When applied to the case study:
Business application needs	• What are the market and business process opportunities for new business applications? • How are strategic experiments designed to assess success? • How can business needs be addressed within architectural standards? When does a business need justify an exception to a standard? • Who will own the outcomes of each project and institute organizational changes to ensure the value?	The VC repeatedly pushed the message that the project was necessary for achieving strategic objectives, operational improvements, and economic survival. To achieve these ends, the PeopleSoft system was considered necessary because of its integrated design, its improved financial reporting capabilities, and its support for improved business processes. Once implemented, it was planned that business units would determine how the systems would be used, while the centralised IT division would maintain the system.
IT investment and prioritisation	• What process changes or enhancements are strategically most important to the enterprise? • What is the distribution in the current IT portfolio? Is this portfolio consistent with the enterprise's strategic objectives? • What is the relative importance of enterprisewide versus business unit investments? Do actual investment practices reflect their relative importance? • How is the business value of IT projects determined following their implementation?	The investment decision that led to Project Renaissance was heavily influenced by a secretive budget planning approach, which highlighted the lack of transparency in CQU's corporate governance.

Chapter 7: The discursive formation of IT governance

7.1 Introduction

The case study in Chapter 5 and its analysis in the previous chapter showed that IT governance is a complex and dynamic concept. The IT governance literature, which is highly normative in nature, was able to provide a sense of "best practice" in IT governance, and show where the governance of Project Renaissance might have been improved. However, it also became clear that IT governance is a social phenomenon, with strong themes of power, knowledge and discourse running through it.

The conclusion reached from the literature review in Chapter 2 was that a lack of theoretical and ontological development in the study of IT governance led to confusion in its form, nature and scope. The case study and its subsequent review provided in the previous two chapters confirmed this. The literature is useful for providing "best practice" guidance, but is also lacking an ontological development. Confusion over what is , and what is part of IT governance persists. Are mechanisms components of IT governance, or are they produced by IT governance? Where is the demarcation between IT governance and corporate governance on one hand, and IT management on the other? Finally, and perhaps most importantly, how does IT governance achieve outcomes? How can it align technology with organisational objectives? How does it provide the environment in which this can be done?

Chapter 5 showed that significant variations occurred in the power relationships between key decision-makers. These relationships proved more significant than the apparent formal power invested in these individuals. For example, the IT Director was significant at the start of the project, but struggled to have a role by the end. Successive Finance Directors were ignored, while conversely the Project Director from the implementation partner had a clearly influential role and senior executives constantly deferred to him.

Behind these power relations was the use of discourse and knowledge to construct the social reality necessary to give the project relevance, and to consolidate the power relations of key decision-makers. There is therefore a need for a theoretical framework to explain the role of power , knowledge and organisational discourse in IT governance. These are also prominent topics in the social theory literature. This is not a coincidence if IT governance is recognised as a social phenomenon.

After analysing the events described in Chapter 5 from the perspective of power, knowledge and organisational discourse, this chapter provides a theoretical framework of IT governance that explains the ontology of IT governance. This is not another normative study. It does not explain what IT governance *should* be like: the framework provides analytical tools for examining IT governance *as it exists*.

7.1.1 Introducing the interpretivist perspective

To gain further insights into the form, nature and scope of IT governance, this chapter moves the analyst from the objective and normative view of IT governance as a construct of structures, rules, documents, and formal roles. This shift of focus is necessary to begin to see IT governance at the social and discursive levels. The reasons and benefits involved in using the interpretivist approach is described in Section 4.1. In the developing interpretivist perspective of IT governance, concepts of roles and structures remain, but they lose their defining importance. The unit of analysis becomes the conversation, or statements, from which factors that enable the various conversations to occur can be discerned.

The interpretivist shift in this chapter begins with the introduction of the relevant aspects of social theory and their broad application to the case study. This will then lead to the development of a discursive framework for IT governance, which is strongly based on the concept of the discursive formation, as described by Foucault (1971) and Dreyfus and Rabinow (1983). This framework will provide insights into the form, nature and scope of IT governance to the extent that it will be capable of providing answers to all of the research questions posed in Chapter 1. However, a framework based on a discursive formation is also shown to be not sufficient.

In explaining his concept of the discursive formation and the exploration of power relations, Foucault (1971) urged the analyst to explore those factors that allowed the discourse to exist, in that particular form, at that time. In effect, Foucault had been exploring the governance of discourse. Foucault and others referred to this approach as *interpretive analytics* (see, for example, Dreyfus and Rabinow 1983; Foucault 1971). When using this approach to analyse IT governance, it became clear that the impact of the discursive elements upon the discourse'e statements is not a direct one. Indeed, building a context within which the statements take on an authority is a central aspect of the discursive framework. The case study supports this and indicates that a *regime of truth* is constructed and defended within the discourse, and that this is the initial priority of the discursive framework.

The chapter concludes by amending the developed discursive framework to include the *regime of truth*, before using the framework to answer the thesis' research questions in the following—concluding—chapter.

7.2 The domains of complexity within the case study

It should not be surprising that the complexities of the case study converged into a number of broad issues, or domains, that have been identified as important contemporary issues in social theory. The case study portrayed a major project and its governance in a social, organisational setting. Table 7.1 summarises the broad domains of complexity from the case study, and the social theory issues that help to explain them. The key issues involve the construction of a social reality (or a regime of truth), issues of power, politics and power relations, and the interaction between power, knowledge and discourse.

7.2.1 Setting and defending the official narrative

At face value, the case study seems to reflect aspects of "best practice" in this regard: there was a consistent senior management message to the organisation, mechanisms were put in place to spread this message, and it was supported by persistent senior management involvement in the project. The executive management of the University clearly took this message seriously, as it was strongly defended at all levels, whether it was in a Council meeting, in the project team, within the senior management team, or in the broader university community. Not only was the message defended, but so too were the protocols for communication and reply.

From the time the purchase of the software was approved by Council, the Vice Chancellor drove an official narrative extolling the benefits of the coming project: the University needed better information, better systems, and greater efficiencies in order to survive and prosper. This message was delivered first to Council, then to the seni-

or managers of the University, and finally to the employees. It was an effective message, yet one which changed slightly according to the audience. For Council, the emphasis was on improved information and better decision making. For senior managers, the emphasis was on improved efficiencies.

Table 7.1: The social issues driving complexity in IT governance

Issue	Social theory relevance	IT governance relevance
Senior executives established and defended an official narrative, which then became the justification for establishing not only the project, but also the governing mechanisms.	Searle (1995) would see this as the construction of a social reality. Foucault would recognise the inherent knowledge and power dynamics and refer to this as a regime of truth.	The establishment of a regime of truth is the first and most important outcome of IT governance.
There were significant fluctuations in the power relations between key executives involved in the project.	There are a range of studies and concepts in power research, but Foucault's idea that power is something that exists between subjects, rather than something that is held and exercised by individuals, resonates with this case study.	Formal decision-making responsibilities are less important than the dynamic shifts that occur between individuals. These shifts drive the dynamics within IT governance.
The project came into existence through organisational communication and discourse, with all of the enabling power and responsibility structures supporting that discourse.	IT governance is discursive in nature. At the discursive level, the relationship between corporate governance and IT governance becomes clearer, as discursive themes come to be grouped into broad governance themes of transparency, accountability, direction and control.	The IT governance literature has failed to provide a theoretical perspective of the relationship between IT governance and corporative governance. Social theory provides an explanation once governance is viewed at the discursive level.
Knowledge of key facts held by some and not others shifted the power relationships at critical times, and therefore changed not only the form of the project but its outcomes.	Knowledge is power, but Foucault explained the intimate connection between power and knowledge. It was on display in this case study, notably during the budget negotiations for the 1999 budget .	Knowledge is recognised in the IT governance literature, especially in the role it plays in various mechanisms.

The narrative extended beyond the language and printed word. There was much that was not said, that nevertheless served to form the narrative. For example, the Vice Chancellor's express demand that the purchased software be implemented as close to "vanilla" (free of modifications) as possible. This was a significant decision that was critical in establishing the form and nature of the project, yet it was not communicated widely. Members of various user groups, and staff in organisational units being readied for the new system began to find out that, despite the communication protocols, and the regime of change management agents and procedures, there was in fact little scope for changing the system to match what the organisation needed. In fact, they were faced with *fait accompli* decisions: decisions were made by the Project and ratified by the Steering Committee before they were passed to the user groups and the network of change managers. While there were sound financial and project management reasons for this approach, it nevertheless ran counter to the objectives given to Council and senior management. It also indicated an important shift in priorities, even at the earliest stages of the project: project management requirements were already ascendent over organisational requirements.

IT governance can therefore be seen to have substantial discursive features. The organisationals discourse used to govern this project directly brought the project into existence, and gave it form and shape. Yet there are other social issues that need to be explored and explained before the issue of discourse can be properly addressed. There were issues of power evident in the case study: both in the establishment of formal decision-making rights and responsibilities, but also in the variability in the power relations between decision makers. This is the focus of the next section of this analysis.

7.2.2 Knowledge and power

Fait accompli decision making

The decision making approach used for the approval of the 1999 budget, and the subsequent approval of the purchase of the PeopleSoft software, is not only an example of the formation of the social truth to justify the project, but also a challenge to the use of discourse as a means of analysing governance. Knowledge is a key element to this form of decision making: knowledge that some decision makers have, but not others. This method of decision-making depends as much on what is not said, as much as it does on language and discourse. If organisational discourse is to be a valid lens through which IT governance can be observed and understood, then clearly it must not rely on a linguistic concept of discourse alone. This will be explored further at a later part of this chapter.

Knowledge is power

The maxim 'knowledge is power' must surely apply to this case study. It was certainly borne out in the 1999 budget process: Council had dismissed the University's Bursar and appointed a replacement Director of Finance, approved extensive system upgrades for the Student Records Systems, and approached 1999 expecting to undertake an operational and strategic restructuring of the University's financial operations and reporting. At the same time, however, it is now clear that senior executives and managers were aware that serious efforts were underway to embark on a major software project. The documentary evidence does not identify who knew what at that time, but the budget process is revealing. A multi-million dollar reserve was established and kept throughout the budget process, despite the haggling over the allocated funds. For that to happen, the proponents of the software project must have had very senior supporters in the budget process, to not only put this money into the budget, but also to keep it there.

Power and power relations

The concept of power has received a belated recognition within the IT governance literature. Yet even here the recognition does not extend to the variations in power shown in the case study. In the reality of the project, there were fluctuations in the influence key managers held, which contrasted with the formal specification of their roles as managers and project sponsors. These fluctuations occurred in terms of who was allowed—or expected—to speak within the general project discourse, and (perhaps more importantly) who was listened to. The key examples of these fluctuations occurred at several levels: the roles of IT Director, Finance Director, Council and Steering Committee serve as illustrations.

As the University's senior IT practitioner, the IT Director rightly influenced the decision to invest in a major software project. He was a member of the first steering committee, but before long he and other business unit managers were removed, not only from the steering committee, but from all other decision making roles involving the project. Instead, he and the Finance Director were relegated to the role of planning for the operation and maintenance of the system once it was implemented.

The first Finance Director began as a strong supporter of the project, but like the IT Director, soon disappeared from the ranks of decision-makers. Following his resignation in 1999, his replacement proved to be openly hostile towards the project and was largely ignored by the decision-makers.

Over time, the real power consolidated between a small group of senior executives in the University and the Project's management team—and especially the Andersen Consulting managers. The power shift is clearly documented in the changing membership of the project steering committee. When Project Renaissance began, the steering committee consisted of business unit directors and deans of faculty. Below these were a series of committees and user groups tasked with reviewing and implementing steering committee decisions. Very quickly, however, the Project's management team had co-opted the steering committee into its own workflow. The steering

committee could only act on what the Project sent to it. And although a steering committee should exist to exert independent oversight, the documentary evidence indicates that this steering committee was soon "put to work" to debate the policy issues and challenges presented by the new system—as they were put to the steering committee by the project directors. In contrast, only some examples are shown in steering committee minutes of the committee acting critically of project decisions.

One explanation for the steering committee not behaving as an independent oversight mechanism is that it was certainly not independent from the project. From the beginning of Project Renaissance, the Andersen Consulting project director was involved in steering committee deliberations. Later, when the University appointed its own Project Director to work in concert with the Andersen Consulting project director, both directors were appointed to the steering committee and University directors and deans were gradually removed. By the end of the project, the steering committee accurately reflected the dual centres of power that had existed from the project's inception, and which was not reflected in the Project's own defined roles and responsibilities.

The lack of independence of the steering committee had concerned some senior leaders in the University. However, attempts to reduce the influence of the Andersen Consulting directors were unsuccessful. When the DVC expressed concerns about Andersen's influence in the steering committee, the VP (A) [21]:

> I agree there are those who see the University as not operating at arms length from Andersens. I certainly don't operate at arms length from them. They are our implementation partner and I don't operate from arms length from my partner (VP(A) 2000c, pp.1–2).

21. This quote, and the one following it, have already been presented in Chapter 5. They are re-presented here for ease of reference.

The University's Council were also quite concerned, and insisted on an external audit of the project's performance in Stage 1. When the auditor questioned the Andersen Consulting membership of both the steering committee and the Operations Coordination Group which existed below the steering committee, the response was dismissive:

> We find QAO[22]'s recommendations on Steering Committee composition confusing and request that QAO provide clarification regarding:
>
> - Why membership of 2 [sic] committees must be mutually exclusive given that the Steering Committee has a charter to "steer" and direct the Project regarding budgetary and policy issues and OCG is intended to implement the actions identified relating to the Project…
> - Why the Project Directors would not undertake a critical role in Steering Committee when the major policy and reengineering issues identified within CQU at this time derive from the Project…
> - How the Project Steering Committee can effectively "steer" the Project without Project representatives being in attendance…(Project Director 2000c, p.5)

There were no further moves to reduce the influence of Andersen Consulting on the steering committee, or to make the steering committee more independent.

Council found its role in the project to be restricted to the approval of expenditures. When this power was used to impose oversight conditions on the project—such as when Council insisted on an independent audit as a condition for approving funding for Stage 2—the imposition would not result in any significant change. As the above reply from the Project's Directors shows, even the QAO could be dismissed. Consequently, in spite of a worsening audit situation for the University's financial reporting, Council was unaware until too late that the financial models had not even been signed off or approved by the University's financial managers.

These variations in power and influence occurred in one instance of a large ERP project. A single case study cannot be generalised upon and applied to other projects. However, it does represent a single instance of reality that clearly poses problems for the more orthodox views contained in the IT governance literature. An analyst of IT governance will encounter different realities with each case examined: what is analysed is a case of "what is", as distinct from "what should be". However, if IT gov-

22. Queensland Audit Office

ernance is seen as a concept more abstract than the frameworks portrayed in the literature, then the formal descriptions and specifications of decision-making responsibilities are only an aspect of IT governance, and not representative of IT governance itself. Beyond such specifications, the reality of who speaks, or who is listened to is dependent on a range of conditions. A theoretical framework for IT governance must be capable of representing these fluctuations, or at least the conditions under which they can occur.

7.3 Organisational discourse and IT governance

Discourse is everywhere, in and around this project. It is the prime vehicle for initiating changes, for initiating the project itself, for setting the conditions for the project's existence, and for establishing the criteria for success. However, for this project, discourse was much more important than a language or vehicle for communications. Combined with power and knowledge, discourse was the means for specifying the regime of truth, from which the project took shape, began, and ended. It was the common, ever-present element throughout the case study, and it expressed itself in covert—or latent—statements in addition to the linguistic statements.

There should be no surprise that organisational discourse is a feature throughout the case study. The case study was built upon documents, which are discursive artefacts. And the literature makes constant reference to discursive features: lateral mechanisms, reporting mechanisms, committees, and so on. However, the role of discourse is never actively investigated in the literature, it is simply treated as a fact. And while the construction of the case study certainly has been influenced by the discursive nature of the evidence, the role of discourse in IT governance is not diminished because of this.

The discourse that underlies the IT governance scenario in the case study does not directly contribute to complexities. However, it is the key enabler in the narrative that builds the official "truth", out of which the eventual project became possible. Discourse is also means by which power relations fluctuate, and is integral to the concepts of power and knowledge that have contributed to the complexities of the case study. For these and other reasons, organisational discourse is an important concept for the study of IT governance.

A later section in this chapter will outline the theoretical development of the importance of organisational discourse. Discourse is now recognised as a far more substantial concept than a linguistic construct of process. Within the case study, its importance is certainly beyond linguistics. It is possible to discern a broad "conversation" occurring within the University about the project, its importance, and the costs—in effort as well as money and resources—that would be required to make it succeed.

The governance conversation surrounding Project Renaissance consisted of both linguistic communications and latent statements: the hidden dialogue, the unspoken statements. The case study was built out of the former, and within the discursive evidence were examples of parts of the conversation that were known to some and not to others. Beyond this, there were statements that were purely latent and had to be implied by the analyst. The increasing primacy of the project management conversation (where "on time, on budget" considerations overrode the need for an efficient and effective management information system) is a key example.

The conversation had changed during the project, as the various themes vied for primacy. The project was born out of the direction–control–accountability themes, where it was seen as an opportunity to improve efficiencies and financial reporting (and also decision making), while also enabling the University's strategies. By the end of the project, the conversation was all about completing a software project on time and within budget (it failed on the latter and only achieved the former by jettisoning a whole stage). At the discursive level, then, the governance of a major project can be seen as issuing out of broad governance themes. Yet these can change as dif-

ferent themes shift in primacy, and competing themes can compete with these core governance themes. Left unrecognised or unmanaged, these shifting themes could signal problems and weak governance. For the University, the immediate consequence of the shift in priorities was the near destruction of the University's finance and reporting capabilities, with dire results in the external audits.

7.3.1 Beyond structure: Discourse, IT governance and the relationship with corporate governance

The case study depicted a scenario where the organisation's prime governing body (the Council) was instrumental in establishing a major IT project, and maintained an oversight role. This is not universal for all organisations, nor for all projects. There are so many combinations of structures (and as this case study highlighted, established structures and responsibilities can change over time) that it has been difficult, at the structural level, to find a comprehensive concept of this relationship. At the discursive level, however, these problems are no longer valid. The governance of Project Renaissance was a continuance and specific application of the broader governance themes running through the governance of the University at that time.

At the discursive level, the relationship between corporate governance and IT governance is clearer. The concept that the relationship is based on structure is not supported in the case study. Clear governance roles, structures and mechanisms existed, but they did not always act as would be expected. Council could be ignored by the steering committee, which in turn could be changed by the VC. Key roles, such as the Directors for IT and Finance were sidelined during the project and were forced to act only at the level of integrating the project outputs with corporate systems. In other words, for these people, the project became a black box. At the discursive level, the analyst must ask “who speaks?”, and immediately the real power relationships become apparent. Power and oversight rested with two key areas: Chancellery and the Project directors (especially the ACPD).

Of course, the power relationships were fluid. At times the Council could re-exert control, but ultimately they were unable to gain the corporate governance benefits they sought. The Directors of IT and Finance were both instrumental in the establishment and form of Project Renaissance, but their ability to exert influence on what was possible and what should be done soon waned.

By analysing the case study at the discursive level, another (unexpected) feature emerged. Not only was there was a clear and constant interplay between corporate governance and IT governance, but also between them and two other forms of governance: the governance and management of finance and the governance of human resources (HR)[23]. Without opening this thesis up to a greater scope of having to simultaneously define these forms of governance with IT governance, this is an area that is best left to further research following the completion of this thesis. However, it is important to note that:

- the financial reporting requirements of corporate governance was a significant driver for Project Renaissance, and Project Renaissance was in turn expected to enhance the oversight of financial resources.
- the project—both directly through its delivery of sub-optimal deliverables and indirectly through the drain on the Financial Services Division's resources due to the project—contributed to the near collapse of effective financial management and financial reporting.
- if HR governance is at all concerned with enabling the delivery of the required people and competencies to the right place and at the right time, then clearly it was weak at CQU at the time of Project Renaissance. The Council, the Project and FSD were all adversely affected by the placement (twice) of Finance Directors who did not have the skill needed to interact and integrate with the Project for the successful delivery of a new finance system.

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23. Because this awareness was arrived at quite late in the analysis, there has been no opportunity to further explore these concepts by way of a literature review. A quick search of academic research in governance, HR or financial management did not reveal any substantial literature on HR or financial governance.

However, as mentioned, it must be sufficient for this thesis to notes these interplays. They are important, and they represent an interesting prospect for further research. What is important for this thesis is that such interplay would not be so clear using the orthodox view of IT governance. At the discursive level, however, the interplay becomes very clear.

The case study was useful for making, in that specific scenario, a clear link between existing corporate governance themes and the establishment of Project Renaissance. This will not always be so clear, yet the link must be there. It may come from clear statements made by a governing body, or by latent reference to broad governance themes, such as the need for control or strategic direction of an organisation. This becomes clearer when the analyst works at the discursive level.

7.3.2 Governance themes

Although Council did not initiate the review of administrative systems that eventually led to Project Renaissance, that review was only possible in an environment of discontent with the usefulness of existing systems. Council had been quite clear in their need for systems that supported new strategies and provided clearer, more timely reports to support better decision making. These desires were not the random result of chance: they issued out of generally accepted principles for good corporate governance—accountability, control, direction, and transparency.

The most prominant corporate governance themes present prior to Project Renaissance were direction, control, and accountability. The Council needed greater control over the organisation: financial reports (and other reports) were lacking usefulness, so decision making was not as effective as it could otherwise have been. Similarly, the Council's strategic direction for the University (international education, a multi-term year) was at risk because of the shortcomings of the existing systems. Accountability was also prominant in Council's actions, as was evidenced by the removal of the Bursar and the layers of oversight that was imposed on the project.

Not all governance themes were prominent. Transparency was not strong during the entire period of the case study. It was lacking in the budget processes for the 1999 budget, it was lacking when senior University managers were actively evaluating ERP systems without Council's knowledge, and it was lacking in the Project's later dealings with Council: the lack of management sign-off of the financial modules is evidence of this.

So not only does the discourse surrounding IT governance fall within the broad themes of corporate governance principles, like power relations, the themes may, over time, vie for ascendancy.

7.4 The benefits of Foucault's discursive formation

After reflecting on the social aspects impacting on IT governance, it becomes clearer how Foucault's discursive formation offers greater clarity. The double reduction described in Section 3.5.7 on page 81 provides an opportunity to apply Foucault's work that Foucault himself did not anticipate[24]. Nevertheless, it applies seamlessly to the concept of governance in two critical ways:

- Where critics of Foucault are concerned about the apparent contradiction of removing truth, meaning and medium from discourse, when applied to governance studies it clearly delineates the separation of governance and management. Within discourse, the message—with its medium and all of its applied truth and meaning—equates to management discourse. Conversely, the discursive formation is the governance of the discourse, with its rules of formation, the conditions of its existence, and its conditions of possibility.

24. Foucault made no study of corporate governance or any form of governance in a corporate environment.

- This means that discourse and discursive formation are inseparable and interdependent, as are management and governance. This provides an answer to the critics of Foucault and at the same time provides the first critical insight into IT governance provided by this thesis: IT governance and management are not separated or related by structure or rules, but are in fact two sides of the same discourse.

The review of Foucault's discursive formation has been provided in Section 3.5.6 (see page 83) and will not be covered again, except by way of summary. It is clear; however, that basing the analysis on the discursive formation and Foucault's interpretive analytics shifts the focus from empirical observations to a more abstract level, where rules and structures are no longer the defining characteristics of governance, but are instead elements of the discursive formation. Governance is now defined—not by formal plans or roles that say "this person undertakes governance duties"—as something that sets conditions for what is possible and what exists. This will become clearer in the following section, which takes the discursive formation and applies it to the case study.

7.5 Constructing a discursive framework for IT governance

Foucault described the various aspects and elements of the discursive formation in *The archaeology of knowledge* (Foucault 1971), and these have been detailed in section 3.5.6 (starting on page 83). The remainder of this chapter will explore whether the discursive formation can be representative of IT governance. This will involve a two step process. First, the elements of the discursive formation need to be mapped to the important factors within the case study. This stage will be guided by the application of Foucault's *analytics:* analytical questions (also known as *interpretive analytics* (Dreyfus and Rabinow 1983)) that were provided as a guide for the discursive analyst. Finally, because this thesis seeks a deeper understanding of IT governance and does not seek to reject or replace the extant literature, a clear linkage between a discursive formation and important aspects of the literature must be shown. The outcome of this mapping will be a discursive framework of IT governance.

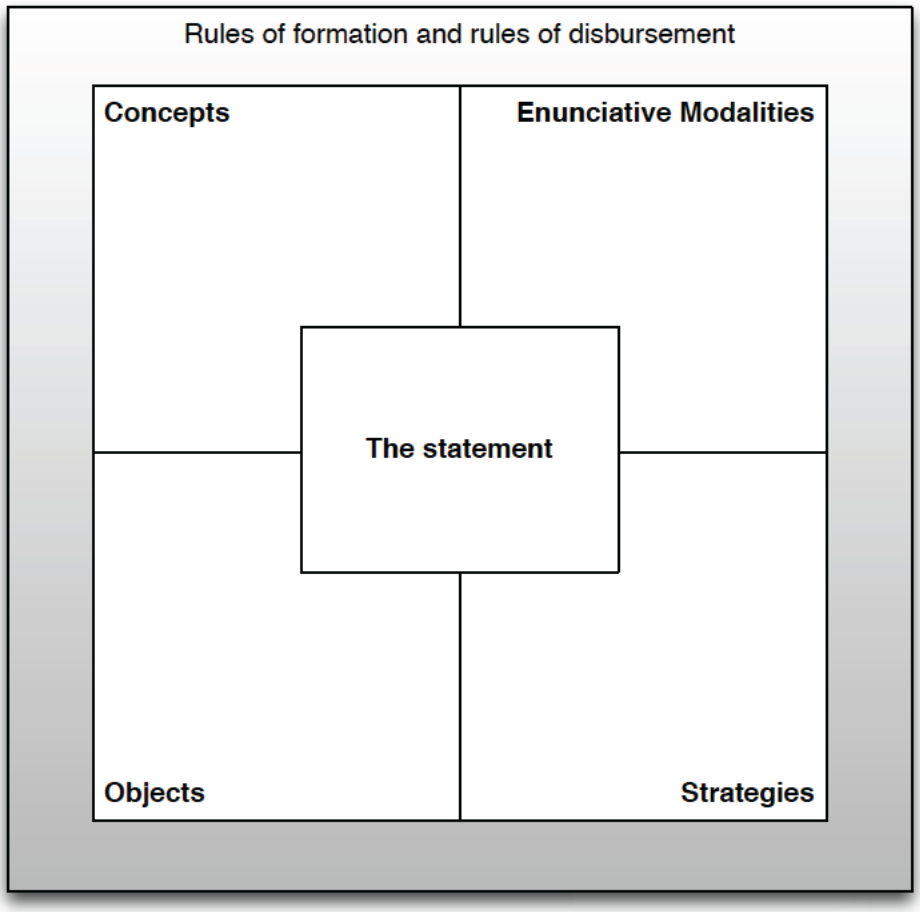
The discursive framework being developed in this chapter is a theoretical framework of IT governance using Foucault's discursive formation as its reference. It is not a critical evaluation of Foucault's work, but rather an application of Foucault's work in an area that was not originally conceived of. Nevertheless, presenting a discursive formation as a theoretical framework is dangerous, not least because Foucault never claimed that his work represented a theory. However, commentators have at least recognised that Foucault was working towards a method of interpretive analytics (Dreyfus and Rabinow 1983) that had clear theoretical underpinnings.

Another danger with constructing a theoretical framework is that Foucault never provided a graphical representation of his work, and any attempt to do so invites further criticisms of misinterpreting Foucault's works. Nevertheless, given that this thesis is not intended to be a critical appraisal of Foucault's work, and given the pur-

pose of this proposed discursive framework, a graphical representation is appropriate to at least guide the mappings to the case study and the literature. An initial framework is presented in Figure 7.1. As the analysis progresses, an amended framework will be presented later in this chapter.

To further assist the reader of this discursive framework of IT governance, the element names have been retained from Foucault's work on discursive formations. This will assist the reader to evaluate both the mappings with Foucault's work, and the validity of the supporting analysis. Further research may conclude that more appropriate labels should be used in this framework.

Figure 7.1: The discursive framework for IT governance



7.6 Overview of the framework

On first viewing Figure 7.1, a reader may conclude that the discursive framework is simplistic and merely a representation of Foucault's elements from the discursive formation. It is true that the graphic is a representation of Foucault's elements: their names are retained to maintain links with the Foucault's work. Nevertheless, since Foucault did not provide any graphical representation of these elements, it is important that any representation of the elements and their inter-relationships be consistent with Foucault's writing. While maintaining that consistency, the framework makes some important observations about the cohesiveness of the discursive formation.

- First, the statement is at the centre of the discursive formation. The elements act upon the statement and shape it, just as the statement can influence the elements.
- Second, the entire formation is contained within its rules of formation and disbursement. These rules dictate the conditions of existence and possibilities for the formation, and it in turn will dictate the conditions of possibility and existence for the statement.
- Finally, there are no arrows within this model. Each element interacts with each other and the statement, and none have primacy over another. All elements are subjected to the same rules of formation and disbursement, and all act upon the statement.

The discursive formation consists of objects that are created and acted upon by the discourse's statements, concepts (the ideas and theories that underscore the discourse), strategies (the knowledge that gives the discursive formation a defining cohesion and provides a point of difference with other discursive formations) and the enunciative modalities (the points within the discourse that allow some people to speak and not others). The discursive formation is formed and shaped by its own *rules of formation and disbursement*. These are the rules that create the conditions for a discourse to exist, change and disappear. Finally, the most important and hardest to define element is the statement, with which a discursive formation can enact upon objects within a discourse.

7.6.1 The cohesion of the framework

Foucault's discursive formation did not exist as a unity in isolation. On the contrary, the regularity and cohesion of a discursive formation was subjected to rules:

> The conditions to which the elements of this [discursive formation]…are subjected we shall call the *rules of formation*. The rules of formation are conditions of existence (but also of coexistence, maintenance, modification, and disappearance) in a given discursive division (Foucault 1971, p.38).

As mentioned in “The rules of formation” (Chapter 3, starting on page 93), Foucault believed that discourse—specifically, the discursive formation—was in fact a ‘rule-governed system’ (Dreyfus and Rabinow 1983, p.53), a reference to governance that is of particular significance for this thesis, which contends that:

- IT governance can be seen as a collection of statements (discourses) about the function of information and technology, and that
- Since a discursive formation represents the governance of discourse, it can represent the governance of the information and technology discourse.

IT governance as a rule-governed discourse

At the discursive level, the IT governance discourse is certainly bounded and governed by rules. When the University’s Council approved the purchase of ERP software, and later approved the establishment of the project, they were not acting as free agents: there were clear legal and stakeholder obligations. There were also budgetary and capability constraints that meant that the project had to be limited in its scope. At the same time, the governance of Project Renaissance was possible because there were legal authorities giving effect to Council’s decisions.

Specifically, Project Renaissance was subjected to the following rules:

- The legal requirements of corporate governance meant that the University's Council maintained control of expenditure and budget approvals.
- The limited availability of economic resources placed a limitation of what was possible in this project. It is likely that this limitation lead the VC to declare that there would be limited customisation to the new system. It is also likely that the focus on economic limitations was a key factor in ascendency of project management considerations over corporate governance requirements.
- Perhaps more than any other factor, CQU's perceived limitations in project management capabilities shaped Project Renaissance in terms of what was possible and how the project existed. It was the perceived lack of capabilities that lead the University's senior executives to rely heavily on Andersen Consulting's methodologies, and on the ACPD.

Foucault also explained that a discursive formation is subject to rules of disbursement: the rules that allow a discourse to end, to disappear. Just as the Project was established and governed in an environment that was limited by rules, so too it ceased due to certain rules. The Project did not end when it did (with functionality still not implemented) because of legal and contractual limitations—Stage 3 was always intended to be run without an implementation partner. The Project ended because of budgetary issues, but also because of a general exhaustion of capabilities and goodwill towards the project and its intended benefits. The VC's messages extolling the benefits of Project Renaissance were no longer enough. When a socially constructed truth is no longer perceived as true or sufficient, governance loses its authority and its ability to act upon the objects of the discourse.

The statements

At this point of analysing the case study from the perspective of a discursive formation, the discursive framework shows that statements are at the centre of the discursive view of IT governance, while the entire discursive formation is governed by enabling and limiting rules. The chapter now explores the application of each of the elements of the discursive formation to IT governance.

As the Statements section (beginning on page 84 of Chapter 3) explains, Foucault's concept of *the statement* is difficult to conceive: a statement is not defined by its linguistic nature or linguistic rules, yet the collection of statements along some common theme constitutes a discursive formation. For the purposes of this thesis then, the concept of the statement must be recognised and defined. It is presumed, therefore, that Foucault did not deny the linguistic nature and properties of statements, but they play no part in this analysis. This analysis, therefore, pays no attention to theories or rules of discourse analysis, or to the meaning contained within the statements. At first this seems to be a strange restriction on the recognition of statements, but for the purposes of this thesis, it is presumed that the meaning and interpretation of each statement (that is, the *truth* within the statement) lies within the domain of management and not governance. Therefore, the structure, linguistic rules and meaning/truth of statements are of course important, but not for this thesis. Of far more interest to this thesis is not *what* was said within the statements, but *who* said it, *whether* the statement was listened to or not, and *why* this statement was made by that person or institution (its enunciative modality) at that time, and not by some other. So it is not the content of the statement that is of primary interest to this analysis, but what surrounds it: the factors that made it possible, limited its application, and gave it the recognisable features that allowed it to exist within the discursive formation.

There is another aspect of the statement that is useful for this thesis. The idea of the statement as a *serious speech act* (Dreyfus and Rabinow 1983) serves to limit the statements requiring analysis under this discursive framework. Only those statements that *command a performance* are considered for analysis: that is, they have an executive element. These statements are performances that are made valid because of knowledge, authority and power that are wrapped around them.

So the focus on statements is not on the message but the enabling and limiting elements that surround them. This is the central feature of Figure 7.1 (presented on page 269). Statements are the first point of focus for the IT governance analyst.

- First, the analyst looks for those statements, or communications (and discerns the presence of latent statements that modify or add power to linguistic statements) that bring the objects of the discourse into existence, and limits their scope. As a later discussion on objects will explain, these objects correspond to the roles, rules, authorities and positions more familiar in the IT governance literature.
- Second, the elements of the discursive formation and its rules of formation that interact dynamically with the statements effectively govern those statements. Therefore, when those statements describe the acquisition, management and use of information and technology, then the governance of those statements represents the governance of the acquisition, management and use of information and technology.

An analytical guide to searching for evidence of IT governance within statements—and the defining characteristics of statements—are presented in Table 7.2. The elements of discursive framework that surround the statements are discussed next. They can be broadly identified by their dominant defining feature: either power-based or knowledge-based. All of these elements have strong power and knowledge aspects, yet the elements of *objects* and *the enunciative modalities* are considered by this thesis to be fundamentally defined by their power relationships, while *concepts* and *strategies* are considered to be fundamentally knowledge-based.

Table 7.2: The analytics of statements

Issue	Relevance
The discursive formation is the accumulation of statements.	The analyst looks for evidence of IT governance within the organisation's discourse. Just as this thesis' case study was constructed from documentary evidence, an understanding of an organisation's IT governance can be gained from reviewing the communications and implied statements.
Statements characterise the discursive formation, and the rules that form the discursive formation also apply to the constitutive statements.	Just as the local existence of IT governance is defined by the accumulation of local statements, those statements are shaped and limited by the rules of IT governance.
Statements, and the discursive formation, are defined and limited by a discrete group of conditions for their existence.	IT governance then, as a discursive formation, is principally concerned about the conditions of existence of its constituent statements. The analyst should begin to ask "Why does this statement exist, at this time?" and "Why not some other?".
Statements are not governed by linguistic rules.	Latent or implied statements can have as much power and influence within IT governance as linguistic statements. For example, the VC's insistence that PeopleSoft would be implemented as close as possible to its "off the shelf" form (i.e. no customisation) had clear implications for the governance of the project. This was at odds with his advocacy of the system as an opportunity to improve processes and information reporting. The analyst should also be unconcerned about following rules of language and meaning. Statements are "serious" statements in that they command performance. Beyond that, the analyst is interested in who made the statement, and why that person/institution and not some other. The analyst is also interested in whether that statement was listened to.

7.6.2 The power elements: Objects and the enunciative modalities

As the previous section stated, statements bring objects into existence. However, once objects of a discourse exist, some will be able to speak with authority and be listened to, while others will not. This implies that the power relations between objects determines not only an object's authority to speak, but also the institutions and methods by which it can be done. As such, objects and the enunciative modalities of a discourse are representative of the power relations at work, and are therefore identified as the power-based elements of the discursive framework.

Objects

Objects are probably the most easily identified elements of a discursive framework for IT governance, as they equate to the mechanisms already identified in the literature. Many of those mechanisms are present in the case study: an organisational leader in the IT function (in the case study, this is the IT Director), a steering committee, and various structural overlays and committees. However, the analysis of objects involves more than the recognition of mechanisms. The discursive framework offers further guidance and, as a consequence, further insights. Table 7.3 provides a summary of the analytics involved in identifying objects within the discursive framework, and Figure 7.2 uses a small selection of objects to show how objects in the discursive framework are created from one or more different (but related) discourses.

- The discursive framework tells the analyst to search for evidence of objects within the discourse's statements. Therefore, this is more than a listing of formally recognised mechanisms. The analyst looks for those objects created, shaped and ended by the discourse's statements, and concepts of formal or informal mechanisms become insignificant.

- Foucault's challenge to investigate how objects are specified soon shows that not all objects involved in IT governance were created by the IT governance discourse. When searching for the creation of objects, the case study shows that there are several discourses involved. The senior executives of the university—and its Council—played important and recurring roles within the governance of Project Renaissance. Yet these objects (the formal roles and committees) were created long before Project Renaissance and continued after the end of the Project. This suggests that a discursive formation—or more accurately the discursive framework for IT governance—contains more than the discourse on information and technology (and its management). It is closely intertwined with the discourse on corporate governance, and perhaps also governance discourses for human resources (HR) and finance. Here is an indication of the real relationship with corporate governance: the relationship is not based on roles, rules, or structures. Instead, at the discursive level, the two discourses are intertwined to create the objects of the discourse. At some point, the discursive framework must provide a way of distinguishing these intertwined discourses, so that they can be recognised as the discourse on corporate governance, IT governance, and so on. This will be discussed further in the discussion on *strategies*.
- The relationships between the objects in this discursive framework reveal the complexities and dynamics within the case study. Very few objects worked to their specification. When seeking answers to the questions "Who speaks?" and "Who is listened to?", variations in power relationships quickly emerge. For example, Deans of faculties quickly found that they had no power to direct and control their own staff, as many of their best staff disappeared to the Project. The Directors of IT and Finance began the project as members of the Steering Committee, but were eventually removed, to take no further part in the governance of Project Renaissance. User groups were used to approve the implementation of Finance modules, despite this not being within their terms of reference. Finally, power seemed to accrete around particular senior executives of the University and the Project Directors, and this was manifested in the final membership of the Steering Committee.

Table 7.3: The analytics of objects

Issue	Relevance
Look for the surfaces of their emergence. Within which conceptual code or theory do these objects make sense?	Different objects emerged from different discourses. Council emerged by way of a parliamentary Act. The steering committee arose from management decisions on the best way to govern a project, while a number of committees and roles arose directly from the governance of Project Renaissance. Although the University did not consider itself having a sufficiently high enough competency in project management, the initial appearance of the steering committee shows that a mature discourse was already occurring over how best to govern a project. The objects within the case study are easily recognised by those familiar with two separate disciplines: university governance in Australia, and project management and governance.
What authority delineates these objects? What is it that makes us recognise these objects as part of this discursive formation?	The ultimate authority in this case study belonged to Council, yet at the same time it was unable to act as it wished. Council had retained the authority to approve expenditure, but all other authority pertaining to this project had been delegated to management. Council was only able to impose its will when expenditure approvals were needed. Yet it is Council's involvement in this case that highlighted the integral role of enterprise governance in IT governance.
Determine the *grid of specification*, the system by which the objects are divided and classified.	The disciplines of corporate governance and IT governance provide the language and specifications for most of the objects within this case study. There are university–specific objects involved such as Council and Vice Chancellor. These are immediately recognisable within the corporate governance discourse as corresponding to the board and the CEO. Other role-based objects are not so easily recognised, such as the DVC or PVC, making their contributions to the governance of this project vague.
What are the relationships between the objects?	The relationships in this case were very dynamic, but the strong trend was towards a polarisation of the relationships to two centres of power: Chancellery and the Project's management (most especially the Andersen Consulting Director). The key lesson from this aspect is that key objects within an IT governance discourse may not be part of the internal roles and structures. A more orthodox, normative review of IT governance would surely not have discerned the key role this external object played. On the other hand, a search for the key objects within a discourse immediately highlights this object.

When Project Renaissance is analysed, not all objects lie within the discourse of IT governance. The key objects of Council, the Vice Chancellor and other senior executives were established by a much earlier discourse. The University and its Council were established by an Act of the Queensland parliament. Other roles and institutions were established out of the University' discourse on corporate governance. This establishes that IT governance is clearly not an isolated concept; it is deeply linked with the discursive formations that precede it: corporate governance and the legal framework of Queensland and Australia.

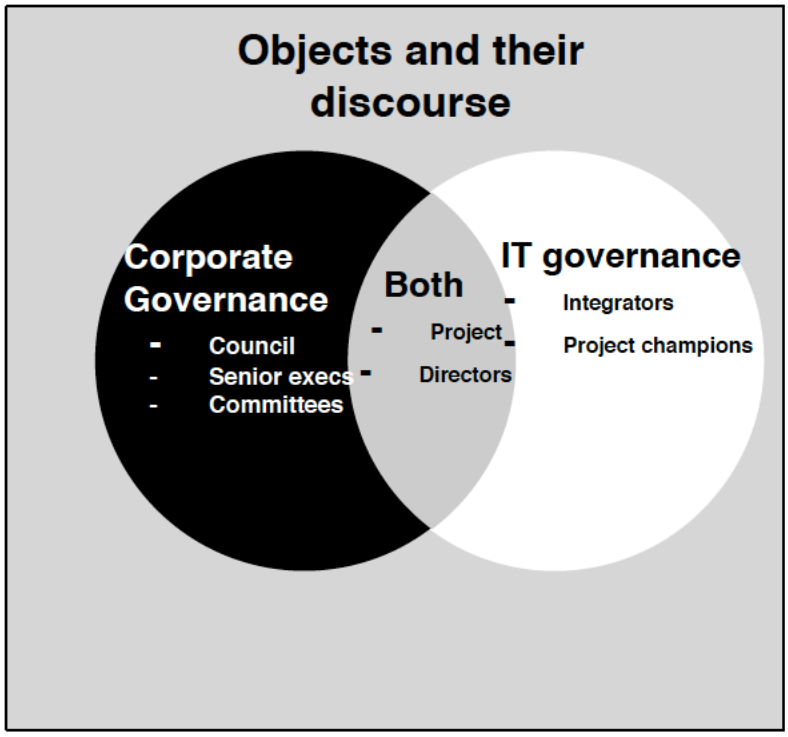
The project's steering committee was formed from the University's discourse on technology acquisition, but could only have happened under the umbrella of corporate governance. Once Project Renaissance began, however, the steering committee's structure and nature changed several times as part of the University's new discourse on IT governance. Other objects, however, were directly established from the University's discourse of IT governance. These included the user groups, the project and its management, and the formal roles (such as project champion, or change manager).

It can be seen, therefore, that objects within the discourse of IT governance are acted upon, not only by that discourse, but also by others—notably corporate governance. However, Foucault also compels the analyst to consider the relationships between these objects, and it is here that much of the complexity of the case study falls.

The relationships between objects in the IT governance discourse are critical for the understanding of IT governance as a discursive formation. All of Foucault's writings on power, knowledge and power relations are implicit in those relationships, as are the relational mechanisms in the IT governance literature. These relationships also explain much of the dynamism and complexities within the case study. The clearest example of this is the steering committee.

The steering committee was not formally appointed by Council or the VC. Instead, it carried over from its role in selecting a candidate solution for acquiring an integrated management information system—a process Council was ignorant of at the time. When it began as the steering committee for Project Renaissance, it did so as the kind of independent oversight committee described in the literature. That situation soon changed as its relationships changed on two fronts. First, the project directors immediately began to incorporate the steering committee into its approval processes and workflows: that is, steering committee worked on whatever the Project gave them. Second, it is clear that the University leadership group had other ideas about the form and role of the steering committee. Gradually its membership was stripped away until it came to represent the dominant power bases for this project: Chancellory and the Project. The object "steering committee" was formed and given its scope of operations from the discourse of IT governance, but its ability and scope to be a part of that discourse was also modified by the IT governance discourse *at that institution, at that time*.

Figure 7.2: Objects belong to different discourses



The enunciative modalities

Foucault's question "who speaks?" is probably the single most important question in the analytics of IT governance. The objects (people, roles, institutions or committees) that the answers to this question uncover are not limited to any preconception of IT governance. In analysing the case study, this question served to rapidly uncover the roles of VC, VP (A) and—most surprisingly—the Andersen Consulting Project Director (ACPD). This insight strips away the assumption that governance is performed only by those within the organisation, or by those appointed to formal governance roles. In a discursive framework, those who contribute the statements that make up the discursive formation. Those who are listened to are able to exert influence.

In the discursive framework, the enunciative modalities are closely related to objects. This relationship is most closely represented in the IT governance literature by the relationship between mechanisms and arrangements. Just as the IT governance literature identifies arrangements as the patterns of decision-making responsibilities, that may or may not reflect the formal reporting hierarchy of the organisation, the enunciative modalities represent those who are able to speak—and how they are able to speak—and those who are listened to. Just as arrangements are not limited to formal reporting hierarchies, the enunciative modalities are not to be found in formally defined decision-making responsibilities. An analyst using the discursive framework looks for the enunciative modalities within the statements. Table 7.4 provides a summary of the analytical questions to be used to discover the enunciative modalities.

Table 7.4: The analytics of the enunciative modalities

Issue	Relevance
Who speaks (and who is listened to)?	Starting with the discourse's statements, the analyst can quickly determine the voices of authority: those who speak in the discourse, and are listened to. These are the people, roles, or institutions capable of influencing the object of the discourse. This is a different analytical perspective to that of the IT governance literature, where the focus in on formal arrangements. Very quickly, two surprising issues arose within the analysis of the Project Renaissance discourse: the ACPD was as influential as any person in a formal governance role (in most cases, the ACPD was more influential). The second issues was that individual voices moved in and out of the discourse. This was especially significant in the cases of Council, and the Directors of Finance and IT.
From which institutional sites?	Although a number of institutional sites were identified in the case study (Council, Steering Committee, Project Directors etc.), the the project was essentially governed between the sites of Chancellery and the Project Directors in a "two towers", or duopoly scenario.
Is the speaker positioned within a critical group of objects?	For the ACPD, the answer is unquestionably yes. Yet other speakers were also substantially positioned within critical objects or groups of objects, and were not listened to. The Chancellor chairs the Council, yet received reprimands. The Deans of faculties were obviously important objects themselves within the business of a university, yet found themselves powerless to stop the draining of their best staff to the Project. It was the ACPD's undoubted knowledge—relative to the conduct of the project—that gave the ACPD a clear voice and the ability to influence the establishment and conduct of the project.

7.6.3 The knowledge elements: Concepts and strategies

Concepts and strategies represent the influence of knowledge upon the discursive formation. When considering these elements and their presence and influence amongst the many statements involved in IT governance, the analyst must consider what makes these statements recognisable of IT governance, corporate governance, or some other concept. How do the statements gather around these ideas, and are there points at which the ideas or concepts diverge?

One of the issues in IT governance that has driven this thesis is whether, and how IT governance and corporate governance are related. The analysis of objects showed that different objects were formed by different levels of governance, thereby confirming a strong relationship between the two levels of governance. The analysis of the two knowledge elements shows that statements are recognisable because of the accepted knowledge of both corporate and IT governance. However, when the statements reported in the case study were made, the body of knowledge that explains IT governance was only in its early years of development, and was therefore unlikely to be a direct source of knowledge. This suggests that both corporate and IT governance themes were derived from an overarching sense of *governance*.

Throughout Project Renaissance, no stakeholder made mention of a concept called "IT governance", yet the objects established from the discursive formation are indicative of the IT governance literature: there are steering committees, user groups, systems integrator mechanisms, formal relational mechanisms, and so on. Further, although corporate governance is never specifically mentioned, there is no doubt that it was a closely intertwined concept.

The broad themes of corporate and IT governance consisted of underlying principles each shared with the other: accountability, direction and control. These principles differed between the two levels of governance by scope: corporate governance was concerned with enterprise-wide governance, while IT governance focused—in a step-

wise reduction in scope—on the oversight of information and technology resources. In the immediate instance of this case study, the immediate focus was the oversight of the delivery of technology: the project. Corporate governance knowledge suggests that there is another important principle: transparency. The episode of the 1999 budget process indicates that this was not a dominant principle at CQU at that time, and although Project Renaissance established a network of information distribution mechanisms, these were eventually overtaken by the need to complete the project on time and on budget.

Delivering the project on time and on budget represent another set of principles that proved to be highly influential during Project Renaissance—these can be referred to as project management principles. As Project Renaissance progressed, the project management principles became ascendent over the corporate governance principles, resulting in Council's need for improved processes and better financial reporting unfulfilled.

Concepts

The statements of a discursive formation are not a random collection. There is a logical and recognisable theme or themes, ideas, or theories providing a logical order to the discourse. A reader of the case study would recognise (even if the reader is not directly conscious of this) that unifying themes exist. Indeed, depending on the experience of the reader, different themes might emerge. A reader knowledgeable of project management would recognise themes of project management constraints (on-time, on-budget imperatives) and project oversight (the use of the steering committee). Conversely, a reader familiar with corporate governance would recognise the roles of the Council and VC, and Council's need for better financial reporting. A reader familiar with IT governance would immediately recognise many of the mechanisms set up by the ACPD, as well as their purpose. This indicates that there are two important aspects of concepts within a discursive framework for IT governance: concepts are knowledge-based, and themes from many knowledge disciplines can flow through the discursive formation that is IT governance.

As with all elements of the discursive framework, the analyst begins with the statements of the discursive formation. To begin seeking out the themes, theories and ideas flowing through the discursive formation, the analyst develops a personal knowledge of the possible themes themselves (from the knowledge disciplines) and knowledge of the organisation being analysed. An underlying assumption to this approach is that the discursive formation is not being randomly chosen as an area of analysis by someone with no knowledge of either the appropriate disciplines, or the organisation.

An investigation of the concepts in a discursive formation is more fundamentally important than conducting a literature review based on what is found within the statements. Concepts are more than an informative element of the discursive formation: they are an active and vital source of authority. Concepts are needed to build an organisational, or social truth. This truth gives the statement a level of authority and a reason—a context—within which it is able to exist. Table 7.5 provides a brief summary of some of the key objects within the Project Renaissance discourse, with an explanation of their underlying concepts or contexts. This approach extends the discussion of objects earlier in this chapter (see section 7.6.2 The power elements: Objects and the enunciative modalities, starting on page 276) and Foucault's explanation of power relations from section 3.5.1 Foucault's approach to power, (starting on page 73).

In the discussion on objects, Figure 7.2 on page 280 showed that some objects were created from a corporate governance discourse, some from an IT governance discourse, and some were created out of both. Each of these discourses have their own concepts, either locally developed or from the associated knowledge disciplines, that are bestowed upon the objects to give them meaning and a reason for existing: a *raison d'être*. The case study showed that the concepts tended to group around the basic principles of corporate governance (direction, control, accountability and transparency) and the required outcomes (deliverables) expected of the project.

As Foucault found, power is co-dependent on knowledge, and exists only so far as others recognise it. In this case study, the VC was a constant presence, as were the VP (A) and the DVC. These objects in the discourse clearly spoke with authority, as their communications were listened to. The study of concepts in IT governance is therefore the study of the sources of the objects' power and the contexts in which this knowledge is relevant. There fore, an analysis of concepts should find that objects' power is not only reflective of the authority that created the object, but also of the context and concepts associated with the objects and their source of authority. The following discussion indicates that this is indeed the case.

Although academic research into IT governance was in its early years during this case study, and no stakeholder in Project Renaissance made any claim to undertake IT governance, there are many recognisable themes and concepts occurring before and during the project. This indicates that IT governance needs no formal declaration to exist. Moreover, the experience of Project Renaissance suggests that *governance* was the dominant theme, with corporate or IT governance being represented through a focussing of scope. Table 7.6 provides a summary of the themes associated with Project Renaissance, with the contexts these themes gave to objects.

Table 7.5: Objects of IT governance and their underlying concepts (contexts)

Objects created in a corporate governance discourse	
Council	Unlike public and private companies and their boards, Australian universities are established by an Act of parliament, and their councils are empowered by that Act. CQU's Council had devolved most of its decision-making responsibility to senior executives, but kept its authority to approve major expenditures and budgets.
VC	The roles of VC and other senior executives are created by Council and draw their authority from there. Statements from the VC are therefore supported by that authority, which would be recognised by others within the university.
DVC & VP (A)	These two senior executives were highly involved in the conduct of the Project, where other executives were not. Their involvement, and the recognition of their special role in the governance of the Project, was supported by the authority of the VC.
Directors of Finance and IT	These roles were created, and occupants appointed, through the delegated authority of Council. Their role and authority within this IT governance discourse was due to their recognition as stakeholders in the new system. The IT Director had the additional role as being the senior IT professional at the University, and was therefore a key object in the IT governance discourse.
Objects created by both corporate and IT governance discourse	
Project	There was a direct link between Council's need for better technology to support their corporate governance objectives and the establishment of the project. However, the project also developed out of a management review of integrated systems, and was therefore also a creation of the IT governance discourse.
Steering committee	As a key oversight group, the steering committee represents the direction and control themes.
Project directors	These directors represent the direction and control themes, and also the accountability theme.
ACPD	In addition to the the direction, control and accountability themes identified above, the ACPD also existed because of a perceived lack of competencies in project management within the University.
Objects created in the IT governance discourse	
Project champions	The project champions and the system integrators existed because of the themes of aligning the new system with University strategy and objectives (efficient processes, better reporting).
User groups	See above.

Table 7.6: Themes in Project Renaissance

Theme	Context for objects
Direction and control	The need for Council to direct and control the University through strategy and resource allocations was the catalyst for the events in the case study. It drove other themes shown here, especially the themes so clearly enunciated by the VC: that the University needed better systems, better processes, and better financial information. Indirectly, through these last two themes (which were actually deliverables from the Project), this drove the need to better align information and technology with corporate governance requirements.
Accountability	The theme of accountability drove the creation of many objects, such as all of the senior executives of the University. Together with the theme of control, this was also the context in which the Project was headed by **two** directors.
Transparency	Transparency was lacking at CQU during this Project. The 1999 budget process did not feature a transparent process, which contributed to Council being placed in a situation of approving a purchase of software (which lead to the approval of the Project) without adequate preparation. It is possible that this lack of transparency lead to Council's continuing scepticism of the Project and its repeated questioning of costs—particularly the costs of retaining the implementation partner. There was also a certain lack of transparency in the VC's messages in support of the Project. He had already advised Council that he expected the software to be implemented "vanilla", or free of modifications. This meant that instead of improved business processes being the focus of the implementation, business processes would be forced to be modelled around what the software could do—whether these represented improved processes or not.
Improved processes and financial reporting	These themes were presented as strategic and operational imperatives behind the need for the new PeopleSoft system. They were the focus of the VC's messages in support of the Project.
Alignment of information and technology resources	The alignment of information technology with corporate strategy and objectives is a stated desired outcome of IT governance within the literature (see, for example, Sambamurthy and Zmud 1999).
Project delivered on time and on budget	The on-time, on-budget imperative are common themes within project management. Normally this theme would be constrained by other objectives, such as the need for improved reporting. In this case, this theme was not constrained and gained primacy over corporate governance objectives.

Finally, the discursive framework offers a set of analytical questions for the discovery of concepts contained within the discourse. Table 7.7 provides a summary of the analytical questions and their application to the case study.

Table 7.7: The analytics of concepts

Issue	Relevance
Is there a logical ordering to the enunciative series? Can a grouping be implied?	Yes, the statements, and the ordering in which they appear, are recognisable as representing principles of corporate governance: direction, control and accountability. There are also principles of project management: conclude the project on time and within budget.
Where is the inter-dependence between concepts?	There is a strong inter-dependence between these themes. The focus is not only on the delivery of an information system: there are fundamental corporate governance outcomes desired from this project.
How are concepts grouped into greater concepts?	Corporate governance and IT governance appear to exist as part of a broader governance discourse. It is this overarching idea of governance that gives a cohesion to the different concepts in this discursive formation.
In what field are these concepts considered truthful and reasonable? Can statements that comprise alternative concepts or objects legitimately exist in the same field of presence?	As well as the discourses of corporate and IT governance, there seems to be indications of similar discourses on financial and human resources governance, but the investigation of these alternative governance discourses is beyond the scope of this thesis.
How are these concepts applied, or made different?	Concepts are applied via the authorities derived from the corporate governance discourse, and via the themes that are unique to IT governance. The following section on strategies will provide more insight into how themes were able to differ.

Strategies

Within the discursive framework, concepts indicate the knowledge-based themes that place statements within a context. The themes contained in the case study came from both corporate governance and IT governance, with the themes of project management overlaying both. In contrast to concepts, but complementary to them, strategies

are the techniques used to give cohesion to these different concepts. Strategies allow seemingly different concepts to co-exist, and also set the conditions under which the concepts split away and leave the discursive formation. The task of the analyst is to determine what enables a collection of concepts to come together in a cohesive formation, at what points these concepts become cohesive, and at what points they become diffuse.

At the broadest level, the knowledge disciplines provide a level of cohesion. Corporate governance knowledge provided the background of corporate governance principles that allowed the reader of the case study make sense of certain statements and the events they described or created. Statements that established the project so that Council's need for better reporting and better administrative processes could be seen to be part of the corporate governance discourse on direction and control. However, while corporate governance themes flow through this case study, it is not entirely about corporate governance, nor is it entirely about project management. Strategies must exist to limit the influence of these other discourses.

One limiting strategy within this particular discursive framework seems to be the focus on asset, or resource management. The corporate governance themes flowed through this case study and this discursive framework only to the extent that it was concerned with the acquisition, management and use of information and technology assets for the benefit of corporate governance objectives. The discourse of IT governance inherited this corporate governance discourse, but changed the focus (in this specific case study) to the acquisition of technology through a project. Other studies of instances of IT governance would most likely find a broader focus on the acquisition, management and use of information and technology for the benefit of the organisation, but it would still inherit—to some extent—a corporate governance discourse.

Different foci at each level of governance is one strategy that both allows a co-existence of themes in the one discursive formation, while also providing the point of diffusion: the point at which the discourse is no longer relevant to that discursive formation. There are also strategies for individualising one instance of IT governance from another. The example of IT governance in the case study is clearly not a "textbook" example of either corporate governance or IT governance. What strategies individualised this instance of IT governance from others?

Strategies allow the IT governance analyst to discern and delineate the wholeness of IT governance in the organisation under investigation, and to investigate its deviation from a normative prescription of IT governance.

As with the other elements of the discursive framework, the analyst starts with the statements. With the important concepts identified, the analyst now looks at how these concepts could co-exist, and to what extent this co-existence occurred. While there are concepts of corporate governance involved in this case study, this was not a case study of corporate governance. It is a similar situation with project management. What enabled these concepts to overlap in a coherent way? Where did the commonality cease?

The final task of the strategies in the discursive framework is to uncover how a local instance of IT governance differentiated itself from other instances and became unique, yet remained recognisable as IT governance. The case study described an instance of IT governance that contained recognisable IT governance elements (steering committee, various mechanisms etc.), yet was entirely a unique IT governance experience, unlikely to be replicated elsewhere, or indeed at other times in the same organisation. The case study suggests that in the case of CQU, the differentiators appeared to be local cultural idiosyncrasies, and a perception of a shortfall in critical management skills and competencies in large-scale project management. Whether this last point was accurate or not (considering that the IT Division already had a history of delivering projects), the University's Council believed it as true, thus establishing a "truth" at the highest level that had the consequences of very heavy over-

sight of the project (a steering committee, *two* project directors being appointed, and Council always looking for ways to impose its will), and created an environment where the Andersen Consulting representative—the ACPD—had free reign to impose his own governance mechanisms and protocols in the set-up stage.

This strategy and its accompanying truth also set the conditions of what became possible for this project. Despite the VC's rhetoric about improved processes and financial reporting, the dominant concept in this project became the project management imperative of "on time, on budget". This resulted in the delivery of a system that failed to meet Council's own requirements, as there was no alternative truth to the belief that the University needed Andersen Consulting and the ACPD. Therefore, there was no counter balance to the project [25], and certainly Council's own voice was subjugated as a result.

25. There is nothing sinister about this: effective project managers will certainly drive their projects on an on-time, on-budget imperative. However, in the University, the prevailing truth did not allow for any counter balance of views. This lead to the project management imperatives gaining primacy over corporate governance themes. Trouble ensued as a result project management considerations overriding corporate governance imperatives such as financial reporting.

Table 7.8: The analytics of strategies

Issue	Relevance
What are the different themes or theories involved? At what point are they similar?	The defining themes are recognisable as principles of corporate governance: direction, control, and accountability. There are also the principles of project management: deliver the project on time and within budget. The project management principles are rolled into the IT governance discourse. This is recognisable because the acquisition and delivery of technology is considered to be a domain of IT governance.
Where do they diverge?	The themes, or principles emerge from the overarching governance discipline through the narrowing focus on the governance of resources. There are also local cultural issues and idiosyncrasies that impose points of diffusion from other instances of IT governance.
How do similar-yet-different themes or theories form into cohesive sub-groups/ ideas?	The case study suggests that there is a narrowing of focus with each level of governance represented in the discourse. Each level seeks slightly different outcomes, as bounded by its own range of responsibility.

7.6.4 A deficiency in the framework

The discursive framework, as based on Foucault's concept of the discursive formation, has proven to be a useful framework for analysing the form, nature and scope of IT governance. Questions on the relationship between IT governance and corporate governance are answered, as are questions of form (it is a discursive formation) and scope (it acts upon management actions to create the conditions of possibility and existence). However, it is still unable to adequately answer questions on the nature of IT governance. The following section suggests that there is an additional layer to the framework: a layer that is implied in Foucault's discursive formation and elsewhere in Foucault's works, but actually draws further inspiration from Searle's idea of the constructed social reality (Searle 1995).

7.7 Constructing a social truth

Knowledge is important to this case study because it is needed to build the formal narrative that will be used to justify management activities. Management actions, whether it is hiring a staff member or approving a new information systems project, must occur within a formal, accepted narrative for it to be justified. This narrative must be defended: it is therefore not just a message, but a "regime of truth". Knowledge enacted by power becomes that accepted, "official" truth, and this guides the exercise of power.

Knowledge is used to create institutional facts, which Searle differentiated from "brute facts" (Searle 1995). Examples of brute facts in the case study are that people were employed in the project—this is a fact that is self-evident, observable. That "thing" called a project, with its mission and objectives, is an institutional fact. So were the reasons given for the project coming into existence: the University needs more effective/efficient operations, and better financial reporting; the University lacked expertise in large projects and needed an "implementation partner"; the Project must be completed on time and on budget; and so on. These "facts" were constructed socially by those who had knowledge of the University's strategic and operational condition, and by people who had superior knowledge of IS project s (such as the representatives of the implementation partner). They become perceived as guiding truths only once they are wrapped up within a discipline of knowledge and power.

> We learn to perceive and use cars, bathtubs, houses, money, restaurants, and schools without reflecting on the special features of their ontology and without being aware that they have a special ontology. They seem as natural to us as stones and water and trees. Indeed, if anything, in most cases it is harder to see objects as just natural phenomena, stripped of their functional roles, than it is to see our surroundings in terms of their socially defined functions. So children learn to see moving cars, dollar bills, and full bathtubs; and it is only by force of abstraction that they can see these as masses of metal in linear trajectories, cellulose fibres with green and grey stains, or enamel-covered iron concavities containing water…because social reality is created by us for our purposes and seems as readily intelligible to us as those purposes themselves (with emphasis added, Searle 1995, p.4).

The case study—and the IT governance literature—showed IT governance to be a complex set of relationships, written and unwritten rules, communications, objectives, and aspirations. It sets out to create a social reality, with its own rules, norms, and ways of making sense of a complex social situation where people are brought together to create another reality: in this case, a university with a large-scale information system, and all of the social changes that it represents. This, then, is surely the principle objective of governance (and by extension, IT governance): it must establish a social reality. This social reality is displayed by various authors in the IT governance literature, but as Searle explains, it is so easily accepted that its existence goes unremarked.

7.8 Foucault's regime of truth

As section 3.5.5 Truth and power (starting on page 79) explained, Foucault's view of truth was that it was a 'thing of this world' (Foucault 2010b, pp.72–73), and that it exists within a system of power that sustains and extends it: a *regime of truth* (Foucault 2010b, p.74). The importance of this to the discursive framework is demonstrated by the following summary of events from the case study.

Project Renaissance was accompanied by an emphatic campaign by the Vice Chancellor and other senior executives that was actually a process of establishing the social truth to wrap around the project. Therefore, a project to upgrade the transaction-processing capabilities of the university became transformed: it became something

that was necessary for the economic and strategic survival of the university. The presence of a consulting firm to run the project was not a team of consultants providing a service, but an implementation "partner", necessary because the university lacked the needed project management skills. These situations are represented by concepts within the discursive framework, perhaps made unique by the institutional and cultural strategies of a powerful VC and a perceived weakness in project capabilities within the University. There is nothing presented thus far that cannot be explained by the discursive framework. However, subsequent events suggested that there is more to the existence of a social truth than its establishment. It must be defended.

At certain times during the project, certain senior members of the University overstepped the established protocols of decision-making or communications. The most serious of these usually involved the second Finance Director and the Chancellor. Whenever this happened, it would draw a sharp rebuke from the VP (A). These rebukes did not occur because certain people were not following proper processes, but because what they did was an attack on the *regime of truth*, which in turn had to be defended.

Why is the defence of a socially constructed truth so important? The previous discussion on concepts and strategies show how important they are in placing a statement within a recognisable context and authority, and how this is a precondition for action. Such contexts must be maintained. The case study showed that as long as the authority of the VC was respected and the social truth he put forward was accepted, statements that caused the movement of staff from the University into the Project—without full recompense—were protested by Deans of faculties but not rejected.

However, complications arose for the Project when the “truth” began to wane. The Chancellor and Council became more ambivalent about the agreed project plans, with some ineffective interventions made by Council. The second Director of Finance clearly was not swayed by the “truth” of the project, and consequently he and his Division were uncooperative.

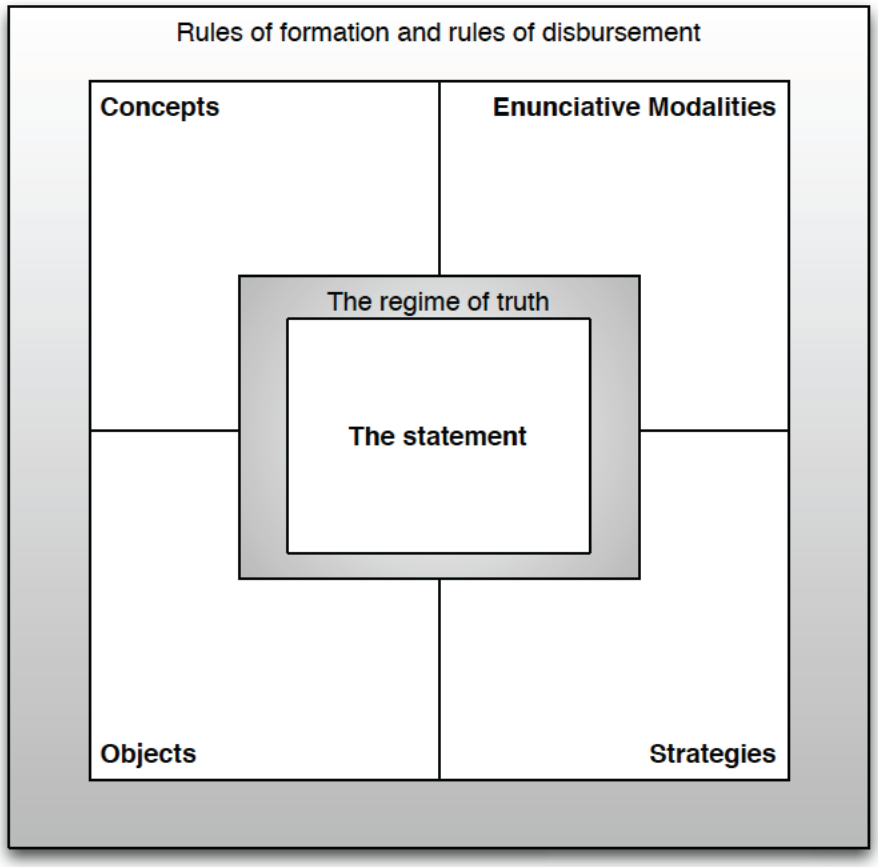
The regime of truth fits within the discursive framework for IT governance, and is represented in the amended framework in Figure 7.3. The rules of formation and disbursement shape what is possible within the discourse of IT governance by shaping the four elements: concepts, strategies, objects, and the enunciative modalities. These in turn, instead of acting directly upon the statements, act to establish and defend the regime of truth, which in turn is necessary to give the statements the contexts and authorities needed to initiate action.

There is a consequence in the recognition of the regime of truth for the conception of IT governance. IT governance does not act directly on the statements concerning information and technology acquisition, management and use. Instead, it creates the regime of truth that establishes the conditions of possibility and existence within the domain of information and technology management. This directly affects the perception of IT governance scope. IT governance does not directly provide oversight or direction for management, but instead establishes the truth, within which management can operate.

Together with the rules of formation and disbursement of the IT governance discourse, the regime of truth sets the condition of existence and the conditions of possibility for the discourse’s statements. Through its budget and the VC pronouncements, the scope of what was desirable and possible was set. The ACPD role was establishment because of the “truth” that the University lacked the necessary capabilities: the regime of truth had set the conditions of the ACPD’s existence as an object in the discourse. Through his pronouncements on the limitations on the customisation of PeopleSoft, the VC had set the conditions of what was possible.

Ultimately, IT governance has been shown to be a motivational force and not executive. It does not directly bring outcomes into being. IT governance did not deliver the PeopleSoft system in Project Renaissance—management did that. The governance of that project set the conditions of what was possible, and what could exist, and it did this by establishing the regime of truth to guide the project.

Figure 7.3: The amended discursive framework



7.9 The discursive framework in plain language

The preceding sections of this chapter constructed and explained the discursive framework for IT governance, largely using the language of its origins: social theory and Foucault. It is important, however, that it be presented in the language of its intended audience: academics, managers and analysts. Table 7.9 provides a summary of the alternative nomenclature for the discursive framework that will help the reader map the elements to common terms within IT governance and management.

Because this is a *discursive* framework, an analyst using it must begin and remain at the discursive level. This is an important distinction between this theoretical framework and the IT governance literature. Where an analyst knowledgeable of the IT governance literature might look for evidence of IT governance plans (such as that provided by COBIT (as in IT Governance Institute 2000b)), formally declared arrangements or mechanisms to evaluate whether or not IT governance exists or is effective, the discursive framework makes no such assumptions. At the discursive level, IT governance exists, whether it is formally declared or not, and independent of how it is described in that declaration. It is the role of the analyst using the discursive framework to identify the *actuality* of IT governance, as distinct from its declaration (or lack of one).

Table 7.9: Alternative nomenclature in the discursive framework

Element	Alternative terms
Rules of formation and disbursement	Feasibilities: legal, economic, technical and capability. Just as the discursive framework seeks to limit and enable what is possible with managerial statements, so too the feasibilities limit and enable the governing discourses.
Statements	Managerial statements or conversations
The elements of the discursive formation	Governing conversations.
Objects	"Objects" represent a collection of phenomena: arrangements and mechanisms, formal roles, structures, projects etc.
Enunciative modalities	Voices and media: who speaks and how.
Concepts	Themes, governing conversations, contexts and authorities.
Strategies	Points of difference and separation, commonalities. Strategies are how statements gather together, and what allows them to separate.
Regime of truth	Contexts and authorities imposed upon managerial statements. The "truth" surrounding a statement is what makes it a serious managerial statement. A successful truth is one that is accepted, a challenged truth is challenged by alternative truths, and must be defended or modified.

Using the discursive framework for IT governance is to engage in a project to uncover the ontology of IT governance, but it is an *ontology of the present*, the discovery of the existence, form and nature of IT governance at a particular point in time. Once that is accomplished, then a further project may be to declare what it should be in the future. At that point, the extant literature has a positive role to play. This framework is the precursor to using that literature: it is a process of discovering *what is*, before determining what *should be*.

7.9.1 A definition of IT governance

At this point, a definition of IT governance based on the discursive framework is needed.

> IT governance is that which sets the conditions of possibility, and the conditions of existence of information and technology assets. That is, it simultaneously enables and inhibits the acquisition, management and use of information and technology assets.

This is a very broad definition indeed, but it summarises the very nature of IT governance: it is an enabler and inhibiter, a motivating force surrounding the management of information and technology. The definition removes any assumptions about the form of IT governance and about who undertakes it. There is no specification of role or responsibilities, or of structure. IT governance at an organisation may, or may not involve people who are involved in corporate governance, and it may also involve people who are external to the organisation. For example, the case study showed that in Project Renaissance, the Andersen Consulting Project Director played a very influential role in shaping the outcomes of the project. That person played a role in setting out what was possible and what was to exist—not only by directing the project but also by being involved in the acquisition decision and establishing the mechanisms and protocols for the project.

To begin to discover the actuality of IT governance at an organisation, the analyst must begin with the statements concerning the acquisition, management and use of information and technology.

7.9.2 Statements: governing conversations and managerial statements

Evidence of IT governance is to be found in the managerial statements: communications, conversations, documents and decisions concerning the acquisition, management and use of information and technology assets. These make up the statements within the discursive formation of IT governance. It should be noted that Foucault (1971) expressly excluded all of these mediums as being definitive of "statements". However, Foucault was rejecting the linguistic analysis of these communications and this is consistent with the approach of this discursive framework. These managerial statements and their messages are significant to us because they can be placed within (and altogether constitute) the discursive formation, yet their value is not within the contained messages. The analyst does not seek out truth or meaning within the message. It is what allowed that message to exist, at that time, that is of interest.

7.9.3 The governing conversations

The discursive framework shows that governance and management exist simultaneously, and are not separate processes. Around every managerial statement is a layer of governance, which will be referred to here as the governing conversation. To discover and analyses these governing conversations, the analyst takes a managerial statement and asks the following questions:

- Why is this managerial statement considered important, and not a mere conversation? With this question, the analyst is beginning to discover the regime of truth that surrounds every serious managerial statement. The regime of truth is what gives the statement its authority and legitimacy—it is what demands that this statement be heard or read.

- Who speaks in this statement, and by what means (the enunciative modalities)? Useful subsequent questions might be “is this person or institution being listened to?”, and “who isn’t speaking but should be?”.

- What are the institutions, roles or relationships that this statement establishes, modifies, references or terminates (the objects)? The objects of the discursive framework provide the most direct link to the extant IT governance literature. They represent the roles and mechanisms of IT governance. Objects are only relevant to the analyst to the extent that they are active participants in the governing conversations, and their identification is not based on a preconception of their formal role or importance in IT governance.Two further insights arise from the constitution of objects in the governing conversation:
  - Managerial statements and the managerial conversations can create objects within the governing discourse. The governing discourse is not a separate concept to the managerial discourse: it surrounds the managerial discourse and sets its conditions of possibility and existence. Managerial discourse is not the preserve of “managers”. Instructions flowing from the University’s Council are managerial statements because they are capable of creating, changing or ending objects within the discourse.
  - The governing discourse, however, cannot of itself create things. It can only motivate and influence.

- What are the concepts, themes and theories that make these managerial statements recognisable and relevant to the acquisition, management and use of information and technology assets (the concepts)? Within the case study, concepts of good project management, together with corporate governance principles, flowed throughout the management communications. These were not static concepts, and project management considerations eventually become pre-eminent over corporate governance considerations.

- How do these managerial statements form recognisable groupings or topics (strategies)? In the case study, the statements were recognisable according to project management knowledge disciplines, as well as knowledge of corporate and IT governance. It is possible for several governance themes to pass through the managerial conversations about information and technology, because they share the same parent theme of governance. What separates them is the focus: corporate governance focuses on the corporate level, while IT governance focuses on information and technology assets.

7.9.4 Objects of the governing discourse

The objects of the governing conversation are simultaneously the easiest to identify, and the most controversial aspect of the discursive framework. The term "objects" is a useful descriptor for the collection of roles, responsibilities, institutions, rules and other artefacts of governance. Clearly, however, "objects" refers to many different types of artefacts, and the IT governance literature provides many useful classifications within the term "mechanisms". Trying to map these objects to the literature is not useful at this level of analysis, however, because the purpose here is to identify those "things" or objects that are capable of influencing the managerial conversations. Further classification may be of use for an analyst wishing to provide a description of what "should be" in the future.

The controversy provided by objects is in their close proximity to the managerial conversation. Statements within the managerial conversation can effect many things and deliver many outcomes, *one* such effect is the creation of objects within the governing discourse. These objects, once constitutes, are capable of influencing the managerial conversation. Some, however—such as the steering committee, or project directors—can issue their own statements in the managerial conversation. However, their role within the governing conversation is to influence and motivate, to establish the conditions of possibility and existence for the managerial conversation.

The distinction is most clearly seen in the following scenario: In Project Renaissance, the governing conversation did not deliver project outcomes: the managerial conversation did that. Yet the governing conversation established the conditions for that project to exist, and established the conditions that made those outcomes possible.

7.9.5 Feasibilities

Just as managerial conversations and statements are simultaneously enabled and limited by their surrounding governing conversations, so too IT governance is bounded by its own rules of formation and disbursement: the rules that determine what is possible within the IT governance discourse. In practice, these rules are known as feasibilities. IT governance is only possible to the extent that economics, knowledge, skills and the law allow it to be.

Within Project Renaissance, the governance of that project was limited by the available skills and knowledge within the university, and the project itself was limited by economic feasibilities. Feasibilities are discovered by asking the question “why this, and not some other?”.

Just like the other elements of the governing conversations, the limits imposed by the feasibilities flow through to the regime of truth, which in turn influences the managerial conversations. For example, the perceived lack of project management capabilities limited the governance of the project and made the appointment of two project directors possible. It influenced the concepts of the governing conversations, and was central within the regime of truth: not only did the University need a large ERP system, but it needed to have an implementation partner to help implement it.

7.9.6 What the case study showed

Using the discursive framework provided a number of important insights into the case study and the governance of information and technology. At the discursive level, the question is not who or what governed the project, or how it was done. Instead, the focus in on what enabled it, limited it, and set out the conditions under which it was possible and could exist. Using this approach, a number of familiar answers appeared, such as senior managers, the University's Council (as the equivalent to a board of directors), a steering committee and a number of project managers. However, the discursive analysis—not being tied to preconceptions of structures—also showed that outsiders also played a major role in shaping the reality of the project. Table 7.10 provides a summary of the key insights into IT governance gained in this case study, and the analytical questions that led to them.

Governance, and in this case IT governance has been shown to be tightly integrated with management. When analysing it at the discursive level, they are simultaneous. Management "gets things done", while governance sets the conditions of what is possible, and what can exist. The clearest example of this is the outcome of Project Renaissance. Management—or more specifically the managerial conversations—effected the outcomes of the project, not governance. Conversely, IT governance—acting through the governing conversations, set the conditions for what could be achieved.

There is another paradox evident here that should be addressed in closing. It has been stated already that this research project, and the resulting discursive framework, is an investigation of the "ontology of the present" of IT governance. That is, it seeks to explain the form and nature of IT governance as it exists at a point in time, at a particular place. It is interpretive and cannot be used as a normative or deterministic framework. Yet the research shows a deterministic result: the outcomes of Project Renaissance are exactly as they were allowed to be by the governance of the project. IT governance, according to this discursive framework, established the conditions for

what was possible, and the result followed the conditions. However, using this framework, the result cannot be determined in advance. The result of Project Renaissance can be explained by this theoretical framework, but not predicted. However, it does allow for the possibility for an analyst familiar with this framework to be aware that the conditions of possibility can also include sub-optimal or undesirable possibilities.

Table 7.10: Summary of case study insights

Questions	Insights
Why is this managerial statement considered important, and not a mere conversation?	Statements only assume an executive nature when supported by an accepted and enforceable truth. The case study showed that the University's senior executive group had constructed a truth that the University needed an ERP system, and that an implementation partner was also necessary. When this truth began to be challenged by Council, interruptions to the project occurred.
Who speaks in this statement, and by what means?	Answering this question soon revealed that people external to the organisation can be very influential, while those who might be expected to be influential can underperform, or be sidelined from managerial conversations. Those who are influential may not be those who are identified by formal arrangements. Of equal importance is the consideration of who (or what institution) speaks but is *not* listened to. The case study showed that at any point in time during the project, there were individuals (such as the Director for IT) or institutions (such as the Finance Division) who—as recognised stakeholders in the project were entitled influence the outcomes of the project—were not listened to by other influential agents. The important insight gained from this is that the declaration of roles and responsibilities is not, of itself, governance.
What are the institutions, roles or relationships that this statement establishes, modifies, references or terminates?	The answer to this question reveals the active mechanisms within the governing discourse. While they may provide a close match to the concept of mechanisms in the IT governance literature, their identification is based on their relationship to the governing and managerial conversations, and not to preconceived ideals of the IT governance literature.

What are the concepts, themes and theories that make these managerial statements recognisable and relevant?	A number of themes ran through the Project Renaissance case. Project Renaissance itself was created because of Council concerns over the quality of financial reporting (or more importantly, how it impacted on decision-making) and the capacity of existing information technology to support University strategies. These concerns could be related to the corporate governance principles of *direction* and *control*. There were also IT governance themes present, although IT governance was not a recognised concept at the University at that time. The mechanisms implemented by the ACPD, for example, can now be seen as examples of relational IT governance mechanisms. However, by the end of the project, various governance themes had become subjugated by the intense focus on project management themes of "on time, on budget".
How do these managerial statements form recognisable groupings or topics?	The various governance themes can exist within the same conversation, but can be recognised by the scope of their focus.

7.10 Conclusion

This chapter began by identifying the domains of complexity within the case study that represented areas of dynamism and complexity not readily addressed by the extant literature. These domains indicated that IT governance involved issues of power, knowledge and discourse within its ontology, a conclusion that was confirmed when the case study was analysed using those aspects of social theory.

Having found that social theory was capable of providing further insights into the form, nature and scope of IT governance, this chapter then moved into the development of a discursive framework for IT governance, based on the work of Foucault (1971) and the commentary of Dreyfus and Rabinow (1983).

The entry into this analysis is provided by Foucault's double phenomenological reduction, in which he stripped both meaning and medium from discourse. In other words, both truth and communications channels are removed from consideration. They are still important, and both play prominent roles within the discursive frame-

work, but Foucault removed them from as issues within the statement requiring study. Truth is not looked for in the statement (there are other methods of textual analysis for determining truth and understanding within a communication) but in what surrounds the statement. The message within the statement is not as important for this analysis as what allowed that statement to exist in the first place, and not some other. Foucault had actually provided a model for examining the *governance of discourse*.

When analysed at the discursive level, IT governance is revealed as both familiar and yet different. The concepts and elements discussed in the IT governance literature are still there, but the discursive framework opens up IT governance to further insights beyond a restating of the familiar. The starting point for the analyst is quite different to that suggested by the literature. Assumptions of formal frameworks, formal arrangements and a normative approach are put to the side. Instead, the analyst begins with the statements—explicit or implicit communications—and seeks out the elements that make the statements possible.

At the discursive level, statements represent action and performance, the enactment of decisions. This is the level of management, not governance. The search for governance moves into the elements of the discursive framework. These elements and the rules that allow them to exist establish the conditions of possibility and existence. They lead the analyst into a discovery of the power relations and knowledge that allowed those statements to exist, and the contexts that give them authority.

Ultimately, however, the first role of governance (as indicated by the discursive formation) is to establish the regime of truth, within which statements derive their context and authority. By seeing IT governance through the discursive framework, it is possible to see that IT governance provides the conditions of possibility and the conditions of existence that both enable and inhibit the management of information and technology.

This chapter concludes the analysis of IT governance and the objective of establishing an ontology through a theoretical framework. The final concluding chapter that follows takes the results of this chapter and answers the research questions that guided this thesis. The benefits of using this theoretical framework will be summarised, and opportunities for using this theoretical framework for further research will be identified.

Chapter 8: Conclusion

8.1 Introduction: The value of this research

Having come this far in this thesis, the reader is entitled to ask whether this research project has contributed anything at all to the body of knowledge on IT governance, or whether it simply responds to straw men, problems that don't exist and therefore don't need this "solution". This is a serious question, and one that this researcher has constantly asked of this project. For this reason, Chapter 6 was included immediately following the case study. A selection of themes and approaches from the IT governance literature was applied to the case study for the purpose of determining the suitability of the literature for that context.

Chapter 6 demonstrated that if CQU had a better understanding of IT governance—before and during Project Renaissance—then it would be likely that different outcomes would have emerged. It should not be assumed that *better* outcomes would have resulted, but different outcomes nevertheless. A more robust set of responsibilities and accountabilities, and better relational mechanisms could have presented the University with a new system that met its strategic and corporate governance needs. Could have, but not necessarily so.

Accountabilities and responsibilities did exist at CQU, and the University incorporated a robust set of mechanisms from its implementation partner. It is likely, though, that these arrangements and mechanisms were not compatible with the structure and culture of the University, which was centralised, bureaucratic and dominated by its CEO: the VC. A steering committee existed, but it's composition could be—and was—changed at the will of the VC. Senior stakeholders in the project, notably the Directors of IT and Finance, began the project as influential people, but soon faded to second-tier roles. Other executives at the University found their authority to direct

their own staff and operations overridden by the VC and key staff disappeared (sometimes literally overnight) into the Project. Perhaps the University could have benefited more from a more robust corporate governance culture—one not dominated by the VC—and greater transparency.

So the IT governance literature had—and has—an important role to play in establishing guidance and research into best-practice, but its normative nature precludes it from explaining the form, nature and scope of IT governance in a specific organisational reality. IT governance has been shown in the case study to be a social construct, where issues of power, knowledge and discourse overlay the more familiar issues of structures, formality and decision-making patterns. This research project has sought to fill the shortcoming in the literature by providing an ontology of IT governance as it exists in local instances: an ontology of the present.

To present such an ontology, a theoretical framework has been developed in Chapter 7, called the discursive framework for IT governance. This framework will now be used to address the research questions posed in Chapter 1.

8.2 Answering the research questions

Following the analysis of the case study provided in Chapter 7, and the subsequent construction of the discursive framework, this thesis is now in a position to answer the research questions from Chapter 1. Much of the detailed explanations have already been provided in the previous chapter, so the following are provided as a short, yet conclusive answers to the research questions.

Research Question 1: What is IT governance?

The case study shows that at the discursive level, IT governance is not defined by structures or formal authority. It is an ever-present force of context and authority that establishes the conditions of possibility and conditions of existence for the acquisition, management and use of information and technology assets. IT governance does not exist separate to management: it is wrapped around all management communications. The prime outcome of IT governance is to create and defend a regime of truth, through which decisions can be made and justified.

A definition of IT governance has been presented in Section 7.9.1 (page 301) and is restated below:

> IT governance is that which sets the conditions of possibility, and the conditions of existence of information and technology assets. That is, it simultaneously enables and inhibits the acquisition, management and use of information and technology assets.

Research Question 2: What is the form and nature of IT governance?

IT governance is not structural, or a set of rules. It is the set of power relations and knowledge that together establish and defend a regime of truth to overlay the managerial discourse, or conversations. Through this regime of truth, the elements of the governing conversation provide the authority and context for management decision-making and action.

IT governance, then, is ever-present, surrounding management conversations and decisions involving the acquisition, management and use of information and technology assets. It is the nature of IT governance to motivate or limit these management decisions. IT governance cannot of itself achieve outcomes. Instead, it sets the conditions of possibility and the conditions of existence for these outcomes.

Research Question 3: What is the scope of IT governance?

IT governance is not bounded by corporate governance or IT/IS management. The discursive framework shows that IT governance and management exist concurrently and are inter-dependent. Corporate governance provides many of the themes and concepts that flow through IT governance, even though it is a discursive formation in its own right.

IT governance is bounded and limited by a number of factors. Just as IT governance sets the conditions of possibility for management conversations, so to it is limited by what is possible given economic, legal and capability restrictions. These restrictions, in turn, move through the governing conversations and into the regime of truth, which then provides the authority and contexts for management decisions.

Research Question 4: Who is responsible for IT governance?

At the discursive level, this question is shown to be less important. Concepts of structures and defined responsibilities fall away and are instead replaced by the answer to the question "who speaks?". The case study showed that those who have authority are not always within the formal leadership group, and may not be within the organisation. Additionally, some organisational leaders may prove to be ineffective, or find that their authority has been reduced.

Research Question 5: Does a theoretical framework for understanding IT governance assist the understanding of the role of IT governance and its relationship with corporate governance?

The theoretical framework provided in this thesis has provided valuable insights into the ontology of IT governance. Key insights are that IT governance is not dependent or defined by rules, roles or structures. Instead, it is a motivational force that enables and limits the possibilities in the managerial conversations. It also settles a question of the relationship between IT governance and corporate governance. IT governance is not a descendent concept from corporate governance, but neither is it divorced from it. Rather, IT governance and corporate governance represent differing foci of the overarching governance of the enterprise. That is, they are both part of the governing conversation, but each has a different focus: corporate governance focuses on the governance of the enterprise as a whole, while IT governance focuses on the governance of information and technology assets.

8.3 Application to the IT governance literature

This research provides a balance and counter point to the extant literature. The elements of the literature are also present here, in the discursive framework. However, this framework shows how those elements:

- are related through power relations and knowledge,
- are part of a concept of IT governance that is motivational in nature and not executive,
- are not defined by formal plans but by their influence on the managerial conversations.

The final point shows that in an "ontology of the present", it is of no interest whether a mechanism is declared in a formal plan of IT governance. The case study showed that some mechanisms (objects) performed beyond expectations, while others disappeared. Some, such as the user groups, were used in ways that exceeded their de-

clared role (the sign-off to proceed with the implementation of finance modules). What is important is the extent that objects in the IT governance discourse are influential in the managerial conversations. The final, and most telling observation, is that some "objects" that are external to the organisation can in fact be very influential (as was the case with the ACPD).

The clear advantages of this discursive framework over the extant literature, therefore, are:

- the clear identification of the form, nature and scope of IT governance,
- the capability to identify clearly important elements in the IT governance discourse, independently of any pre-determined role, and
- a sense of the the relationship of IT governance with corporate governance and IS/IT management, which is lacking in the extant literature.

For these reasons, this discursive framework is provided to support, and not to replace the literature. It is hoped that further research using this framework will enhance this role.

8.4 Limitations of this research

Due to time and budget restrictions, there have been a number of limitations placed on this research. These are identified below:

- The development of the theoretical framework in the previous chapter involved a time-consuming process of critical reflection on the "fit" between theory and data. However, because a formal coding approach was not adopted (see section 4.1.1, starting on page 105 for a discussion of this), a reader might see this a limitation to the validity of the findings. Therefore it is acknowledged here as a limitation.

- No second coder or analyst has been engaged to confirm the results of case study analysis. Validity has been maintained through the explicit referencing of all source material and—where possible or appropriate—direct quotations have been provided to assist the reader follow and assess the validity of conclusions.

- However, a retired academic conducted and independent review of this thesis prior to its submission to the Office of Research.

- No additional expertise in either the methodology, or the use of Foucault was used beyond those acknowledged in section 4.3.2, or by appropriate referencing.

8.5 Applications for further research

This thesis concludes that the discursive framework, developed out of Foucault's ideas on discursive formations (Foucault 1971), has been successful in facilitating a deeper understanding of IT governance and its relationship with corporate governance. Perhaps it has been too successful, and the insights drawn from a single case study are likely to need more analysis than is possible to give in the space of one dissertation. Given Foucault's unwillingness to provide clear directions in the analysis of discursive formations, it is likely that scholars with more knowledge in this area would draw different conclusions, or further conclusions that this researcher did not see. This is to be welcomed, and can only lead to further insights and knowledge of the form, nature and scope of IT governance. There can be no doubt, however, that this limited application of discursive formations, and the resulting discursive framework, has given an interesting perspective of IT governance that is grounded in theory and observations. It has added to the body of knowledge, not only of IT governance, but also of the nature of governance itself.

Although the discursive framework provides the basis of analysis of IT governance as it is, the insights gained of the ontology of IT governance should continue to inform the further development of normative concepts of IT governance. The relationship between IT governance and corporate governance, in particular, is of interest to advocates of more systemic views, such as that proposed by the IT Governance Institute (see especially IT Governance Institute 2003).

Perhaps the most interesting application for further research are indicators that governing conversations (discourses) are also likely to be supporting the managerial conversations in financial management and Human Resource management (HRM). There is currently little research in these areas, and it may be that the discursive framework presented in this thesis could be applied directly into the examination of these concepts.

Soon after the realisation came that Foucault's "double reduction" had unlocked an approach to investigate the ontology of IT governance, it was evident that Foucault's concept of the discursive formation was actually a model for the ontology of governance, not just IT governance. This is why it was able to identify the presence of other governance themes within IT governance. The framework as presented here could therefore be a useful instrument for investigating the presence of governance in organisations, and the concepts and strategies that support it.

Finally, it should be recognised that the application of this framework represents an interesting, and perhaps exciting extension of Foucault's work on discursive formations. It is true that this application was not part of Foucault's concept, being a way of representing the development of knowledge disciplines (Dreyfus and Rabinow 1983; Foucault 1971), yet there is nothing here that contradicts Foucault's vision. At the discursive level, corporate governance and IT governance all represent extensions of a broader knowledge discipline of governance and governing. Although many ap-

plications of Foucault's work in business management have focussed on his work on power and governmentality (very good examples are provided in McKinlay and Starkey 1998b), this research has the potential to re-awaken interest in Foucault's archaeology and genealogy periods for business research.

8.6 Conclusion

We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.
(From Little Gidding, in Four Quartets, Eliot 1963)

> All enterprises have IT governance. (Weill 2004, p.3).

This thesis began as a project to determine the ontology of IT governance; specifically to determine its form, nature and scope. By investigating the criticisms and weaknesses of the IT governance literature. this project found that the literature was strongly normative, and lacking a strong theoretical narrative for describing the ontology of IT governance.

After analysing a single case study of a major ERP implementation, a theoretical framework was developed out of the work of Foucault (1971). The resulting analysis provided an ontological framework for IT governance that can be used for analysing IT governance as it exists at a particular time, and at a particular place. It is therefore useful for academics to understand the form, nature and scope of IT governance, while analysts can use this framework to understand IT governance as it exists, prior to recommending what "should be". In this way, the theoretical developments provided in this thesis should serve to support, complement and extend the extant IT governance literature.

Finally, the theoretical framework presented in this thesis complements the IT governance literature by portraying the elements of IT governance (as described with the literature) within a discursive framework. Although the conceptualisation of IT governance has occurred on a more abstract level, it is nevertheless a re-examination of what is known. As the verse at the beginning of this section stated, the reader of this thesis is taken back to what is known about IT governance, but with a fresh understanding of what it means to exist as IT governance.

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Appendix A

CQUniversity AUSTRALIA

Developing an understanding of IT governance and its relationship with corporate governance.

CQUHREC CLEARANCE NUMBER: H07/03-026

INFORMED CONSENT FORM

I consent for CQUniversity to participate in this research project and agree that:

1. An Information Sheet has been provided to me that I have read and understood;
2. I have had any questions I had about the project answered to my satisfaction by the Information Sheet and any further verbal explanation provided;
3. I understand that CQUniversity has the right to withdraw from the project at any time without penalty;
4. I understand the research findings will be included in the researcher's publication(s) on the project and this may include conferences and articles written for journals and other methods of dissemination stated in the Information Sheet;
5. I understand that to preserve CQUniversity's anonymity and maintain confidentiality, I may elect for CQUniversity not to be named or to have fictitious names used in any publication(s);
6. I am aware that a Plain English report of results will be mailed to me within six months of the completion of the research project, should I elect to receive one;
7. I agree that I am providing informed consent for CQUniversity to participate in this project.

Where relevant to the research project, please check the box below:

	YES	NO
1. I nominate CQUniversity to participate in this research.	✓	
2. I am prepared to have CQUniversity named in any publication(s).	✓	
3. I am prepared to consider having internal documentation such as policy and procedures relating to governance made available for this research, subject to a written request made to me by the principal researcher.	✓	
4. I am prepared to nominate several executive officers and directors who will have agreed to take part in this research.	✓	
5. I wish to have a Plain English statement of results posted to me at the address I provide below.	✓	

Signature Redacted

Signature: Date: 8/12/10

Name (please print): **Mrs Jenny Roberts**

Position within CQUniversity: **Director Governance, Secretary to Council.**

Postal Address: Building 1
CQUniversity Australia
Bruce Highway
NORTH ROCKHAMPTON QLD 4702

E-mail Address: j.roberts@cqu.edu.au

Appendix B

Mrs Jenny Roberts
University Secretary,
CQUniversity,
Rockhampton.

Monday, 8 November, 2010.

Dear Jenny,

I am writing to request the permission of the University to conduct a case study into the governance of information and technology at CQUniversity, as it applied to the Financial Services Division (FSD), over two time periods. This will involve conducting two studies, relating to IT governance at:

1. 1999-2001, covering the initiation of Project Renaissance to the implementation of PeopleSoft Financials, and
2. the present time.

The data I collect from these studies will enable me to complete my PhD studies at CQUniversity, "*Developing an understanding of IT governance and its relationship with corporate governance*" (ethical approval granted and assigned project number **H07/03-026**). I believe that this research is important to CQUniversity, and I have received support from the Director of Finance, Mr David Turner, who has expressed a willingness to take part in these studies. My research involves testing a new theory that helps to explain what information technology (IT) governance is, how it emerges and changes, and how it relates to corporate, or enterprise governance. At the conclusion of this project, I am prepared to write a special report for the University, detailing my findings.

To undertake the two related studies mentioned above, I seek permission to access archived material, subject to detailed written requests, from FSD and Council archives. In addition, I request permission to approach the following current and retired University officers in relation to the two studies. With permission granted, I will write to these current and retired officers, inviting them to take part in these studies. I will also provide them with a comprehensive information sheet.

For Study 1 (1999-2001):

Name	Position in relation to Renaissance
Mr Geoff May (retired)	Deputy Director of FSD, and senior FSD representative on Renaissance.
Mr Ken Window (retired)	Vice-President (Administration)
Mr John Voss	Deputy Director, ITD
Mrs Pauline Harte	Senior Financial Accountant, Acting Deputy Director of FSD.
Mr David Turner	University Internal Auditor
Mr Jay Somasundaram	IT Auditor

For Study 2:

Name	Current position at CQUniversity
Ms Jenny Roberts	University Secretary and Director, Vice-Chancellor and President's Division
Mr David Turner	Director, FSD
Mr Peter Edwards	Director, ITD
Mr John Voss	Deputy Director, ITD
Mrs Pauline Harte	Deputy Director, FSD
Mr Daniel Nolan	University Internal Auditor
Mr Jay Somasundaram	IT Auditor

I would like to explain the focus of my study, particularly in relation to Project Renaissance. This study is not concerned directly with the Project, the decisions it took, or the outcomes. Nor is it an exercise in reviewing the history of the project, or about passing judgement. Rather, using Renaissance, and its relationship to the Financial Services Division, I am seeking to identify those things that allowed it to exist, that shaped it, enabled it and constrained it. In other words, I am seeking to use a new theory to explain how the project was governed. The same applies to the governance and management of information and technology at the present time. I am interested in those things that enable and curtail it.

The outcome of my research, with CQUniversity's help, will be a new theory of the form and nature of IT governance, based on the work of Michel Foucault. Using the experience of CQUniversity, I hope to show that by looking beyond formal plans and frameworks, this theory will allow me to construct a rich picture of IT governance at any organisation.

I have attached a formal information sheet for my proposed studies at CQUniversity, a consent form and my interview protocols. These protocols will allow you to see the focus of my studies. I would be very happy to discuss this with you further and provide additional information if you need this.

Thank you,

Gerard Ilott MACS, CPA
Lecturer in Accounting
School of Commerce & Law
CQUniversity.

Ph 07 4930 6799
Fax 07 4930 9700

email: g.ilott@cqu.edu.au

From: "Gerard Ilott"
Date: Friday, 3 December 2010 3:37:03 PM Australian Eastern Standard Time
To: "Greg Whymark"
Cc: "A C Lynn Zelmer"
Subject: **FW: Follow up on research request**

Now the interesting bit begins…

G.

From: Jenny Roberts
Sent: Friday, 3 December 2010 11:47 AM
To: Gerard Ilott
Subject: RE: Follow up on research request

Dear Gerard,

My apologies for the delay in responding to you. I am very happy to support your request to conduct a case study into the governance of IT at CQUniversity and in particular your request to access archived material.

Please don't hesitate to contact me for any information you require as part of this research.

Regards,

Jenny

Jenny Roberts

University Secretary and

Director, Vice-Chancellor & President's Division

CQUniversity Australia

Rockhampton Qld 4702

Ph: 07 4930 6903

Fax: 07 4936 1691

E-mail: j.roberts@cqu.edu.au

Website: www.cquni.edu.au <http://www.cquni.edu.au/>

From: Gerard Ilott
Sent: Thursday, 2 December 2010 11:12 AM
To: Jenny Roberts
Subject: Follow up on research request

Hi Jenny. Sorry t

- Attached: @, 0.000 MB

From: "Gerard Ilott"
Date: Tuesday, 21 December 2010 9:37:14 AM Australian Eastern Standard Time
To: "Kylie White"
Cc: "Jenny Roberts"
Subject: **Request to access archives for research purposes**

Hello Kylie.

I have received permission from Jenny Roberts to conduct research into the governance of information and technology at CQUniversity. This will include accessing archival information regarding Council deliberations and committee workings during the Renaissance Project period circa 1999-2001. Could I please make an appointment to see you and discuss what can be accessed and how this can be done in the least disruptive manner?

Thank you,

Gerard.

Gerard Ilott MACS, CPA

Lecturer in Accounting

School of Commerce

Central Queensland University

Ph 07 4930 6799

Fax 07 4930 9700

email: g.ilott@cqu.edu.au

From: "Gerard Ilott"
Date: Thursday, 23 June 2011 2:33:06 PM Australian Eastern Standard Time
To: "Stephanie Crandall"
Cc:
Subject: **RE: Re: Information for thesis topic**

Hi Stephanie. Thanks for the offer. I am attaching an information sheet (the original of which has been signed off by Jenny Roberts) that should give you an idea of what I am doing.

Virtually anything in TRIM between 1999 and 2001 inclusive that refers to “Renaissance”, or “Project Ren” would be useful.

Regards

Gerard.

From: Stephanie Crandall
Sent: Thursday, 23 June 2011 12:17 PM
To: Gerard Ilott
Subject: Re: Information for thesis topic

Hi Gerard

Could you please send me a copy of your research topic and scope? I am happy to provide copies of relevant documents from TRIM, if the originals can’t be located easily.

Cheers
Steph

Steph Crandall
Records and Information Officer
Bld 2, LG.07
Ph: 4923 2683

- Attached: Mrs Jenny Roberts v5.doc, 0.040 MB