A Holistic Framework For Sucessfully Sponsoring IT Projects From An IT Governance Perspective

By

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Abstract

Over the past decade, research conducted for the benefit of IT project management has pointed to numerous factors that contribute to organisational project success. Support from executives and top management is often cited as an imperative factor, whilst having clear business objectives for conducting projects follows closely behind.

The linchpin between the executive leadership team and project managers is the project sponsor, who is in a position to directly contribute to the two aforementioned project success factors.

The precise responsibilities of the sponsor, however, remain relatively poorly defined. As a result, it is important to focus on this very important role and provide those who are in this position with a set of activities that would facilitate greater project success.

Further to this, the corporate governance scandals of the past few years and the consequent publication of relevant acts of legislation and governance standards has forced top management to become more interested in the conduct of their organisation's portfolio of projects.

This research study therefore addresses both the formal and informal aspects of the role of the project sponsor and has provided guidance to organisations and professional associations in defining the role and responsibilities of the project sponsor within a corporate governance framework.

The first goal was therefore to establish a holistic corporate governance framework that encompasses the roles of IT and project management in the organisation. By doing so, executives are given a road map that aligns all IT projects with organisational strategy and a means to facilitate greater internal control over all IT project-related activities.

This was developed by identifying the relevance and implications that recent corporate scandals around the world have had on IT and project management in general. This then led to combining COBIT (which is an IT governance

framework) and a new project governance framework (known as the PG framework) to form a corporate governance framework.

This is followed by the development of a generic project sponsorship competency framework that provides organisations with a benchmark that assesses whether an individual is appropriately suited for the role of sponsoring an IT project.

Both frameworks provide a means to facilitate better strategic alignment and internal control of all IT project-related activities, and thus contribute to the improvement of IT project management capability within the organisation.

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This work is dedicated to my mother and father

I would like to take this opportunity to thank my mother and father for their love and support. They have always been a source of great inspiration to me and taught me the meaning of working hard.

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Chapter 1

Introduction

"Discovery consists in seeing what everyone else has seen and thinking what no one else has thought."

Albert Szent-Gyorgi - 1937 Nobel Prize Winner in Physiology and Medicine (1893 – 1986)

1. Introduction

The recent inundation of corporate scandals around the world has placed pressure on the Boards of Directors and senior executives of commercial organisations to take seriously their responsibilities to shareholders and society to manage the inherent risks in their organisations. This now compels them to align shareholder interests with business strategy.

However, over the past decade, comprehensive studies conducted for the benefit of IT project management continue to point to a lack of support from executives and top management in influencing the processes and progress of their projects. Projects also continue to have a lack of clear business objectives that result in them not being able to deliver true business value.

Focus has therefore turned towards the project sponsor who is seen as the linchpin between the project management level and the executive level and is in a position to facilitate the required support from the executive. Furthermore, the project sponsor is also in a position to ensure that all projects are conducted for the benefit of the organisation.

2. Motivation for this study

The research was instigated as a result of varying concerns that senior executives and top management of organisations currently face and will be facing in the new corporate environment.

2.1 The need to redefine accountabilities

Concepts such as corporate governance, IT (Information Technology) governance and project governance are contentious issues in the business world. Their relevance within the realm of project management should be taken very seriously.

Pressure has always been firmly placed on the project manager to deliver the project within the allocated budget, schedule and scope. It is now those in positions superior to the project manager who are held accountable, should the project fail to deliver its set out objectives.

2.2 The need to align shareholder interests with the strategic direction

The growing need to align shareholder interests with the organisation's strategic objectives has resulted in organisations having to implement frameworks that facilitate greater internal control and strategic alignment.

By doing so, projects can be traced back towards a specific business need and as such have a greater potential to deliver true business value to shareholders.

2.3 The need to embrace new trends in project management

Research into project management continues to link entities such as project management offices to project success. These and other entities need to be examined to determine how they can be effective governance forces that will facilitate in providing those involved in project management with mechanisms that increase project success rates.

2.4 The need to define the role of the project sponsor

The linchpin between the executive leadership team and project managers is the project sponsor, who is in a position to directly facilitate support from the executives for the projects organisations conduct.

The precise job of the sponsor remains relatively poorly defined and as such it is important to focus on this very important role and provide those who are in this position with a set of activities that would facilitate greater project success.

3. The problem statement

As a result of corporate scandals that have left many shareholders bewildered and angered at the corporate world, executives and top management are now forced to take an interest in the conduct of their organisation's portfolio of projects (Cooke-Davis, 2005:2).

This entails pro-active support for the project management method from strategic to project level as well as ensuring that all projects are conducted for the benefit of the organisation.

Focus has therefore turned towards the role project sponsorship plays within project management which Kerzner (1998:471) describes as the "umbilical chord between projects and line/senior management". However, despite this very important concept, the role of the project sponsor remains relatively poorly understood (Crawford & Brett, 2001).

By continuing to allow this role to be poorly understood, organisations are unable to govern their overall project management process successfully and to align all project-related activities with their strategic direction.

4. Research goals and objectives

4.1 Goals
There are two primary goals for this research study:

The first is a holistic corporate governance framework that encompasses IT governance and project governance. This framework integrates these two components and provides a road map for executive management to properly align IT projects with business strategy and facilitate greater internal control.

The second goal of this research study is a project sponsorship competency framework that is based on the aforementioned corporate governance framework. This framework assists in defining the exact role of a project sponsor and facilitates their increasingly important role within IT and project governance.

4.2 Objectives
The objectives of this research study are:

- The provision of essential terms and concepts relevant to project management as well as detailed statistics on the state of IT project

management around the world. These statistics are necessary as they provided a means to identify the problem.

- A high-level corporate governance framework that encompasses the role of information technology and project management in corporate governance.
- A holistic view of IT governance.
- A holistic view of project governance and the development of a generic project governance framework.
- An introductory view and positioning of the project sponsor within a project-oriented organisation from a governance perspective.
- The establishment of a comprehensive set of measures that allows the project sponsor to be compliant with IT and project governance.

To achieve the two goals and objectives, a formal research approach was followed such that the results obtained have value and credibility. The research approach that was followed is discussed in the proceeding section.

5. Research Approach

An exploratory and qualitative approach was utilised and followed the structure as presented by Olivier (2004) in the book titled "Information Technology Research".

The phases for this research approach are as follows:

5.1 Explore

During this phase a literature review was conducted that included journals, books and other relevant literature. Further to this, statistics from three countries that had been previously researched were utilised in the identification and formulation of the research problem.

It was during this phase that general knowledge regarding project management, corporate governance, IT governance, project governance and the project sponsor were gathered. This provided the basis for this research study.

5.2 Propose

During this phase the research proposal was formulated. It included background information, the identified research problem, goals and objectives. The literature review in the previous phase (Explore) identified commonalities in terms of all three research reports.

As such, and in light of the corporate governance events of the past few years, it was proposed that a detailed corporate governance framework first be developed that would incorporate the roles of IT and project management within corporate governance.

Only once this framework was established (the first goal) would it be possible to formally research the role of the project sponsor from a governance perspective. This would ultimately culminate in the project sponsorship competency framework (the second goal).

5.3 Prepare

During this phase, preparation for the execution of the research was made. This involved investigating the implications and relevance that various corporate governance legislation and standards had on IT and project management in general. This led to a need to develop an initial high-level corporate governance framework.

In order to expand on this high-level framework (and thus make it more detailed), two additional frameworks had to be incorporated. The first was an IT governance framework and the second was a project governance framework. An investigation was conducted to determine which IT governance and project governance frameworks existed.

Furthermore, extensive literature was collected regarding the roles of project management offices, the chief information officer, IT governance committees, the chief project officer, project governance committees and other relevant role-players involved in the governance of all IT project-related activities.

5.4 Execute

During this phase, the actual research was conducted. This involved the actual creation of the high-level corporate governance framework incorporating the roles IT and project management had to play in the new corporate environment.

From this, COBIT was embraced as the IT governance framework that could be utilised in the corporate governance framework. The creation of a new project governance framework had to be done as none had previously existed.

It is by combining these two frameworks that the larger and more detailed framework is created. This provides executives and senior management with a road map and control objectives that facilitate in the alignment and control of all IT project-related activities in the organisation.

This then led to defining and elaborating upon the role of the project sponsor, and ultimately the creation of a project sponsorship competency framework.

5.5 Analyse

During this stage of the research study it was required to analyse the corporate governance framework and project sponsorship competency framework to determine if the research problem is adequately addressed by their creation. This involved an objective evaluation of the solution and included advantages and limitations within both frameworks.

However, this research study has provided avenues for further research and it is hoped that academics are able to build upon what has been developed.

5.6 Publish

This was the final phase of the research study, which consisted of the publication of the final dissertation, and an article submitted for the PMI's (Project Management Institute) fourth biennial research conference to be held in Montreal, Canada in 2006.

The article, which was submitted for review, is based on certain aspects of the research study and is included in Appendix C.

6. Research Deliverables
The following deliverables were produced:

6.1 Literature Study
The literature study involved the collection, evaluation, analysis and organisation of relevant information.

6.2 Corporate governance framework
The literature study provided the foundation for the development of the corporate governance framework. This framework provides detailed control objectives and specifies what the project sponsor within the IT project environment is required to do.

6.3 Project Sponsorship Competency framework
From the aforementioned governance framework, the sponsorship competency framework was developed and details the knowledge and personal characteristics required for the project sponsor to successfully perform the activities required.

7. Dissertation Layout
This dissertation is divided into 9 chapters. Figure 1.1 illustrates how the chapters are divided and the order in which they are to be read. Each of the research deliverables defined in the previous section constitute one or more chapters.
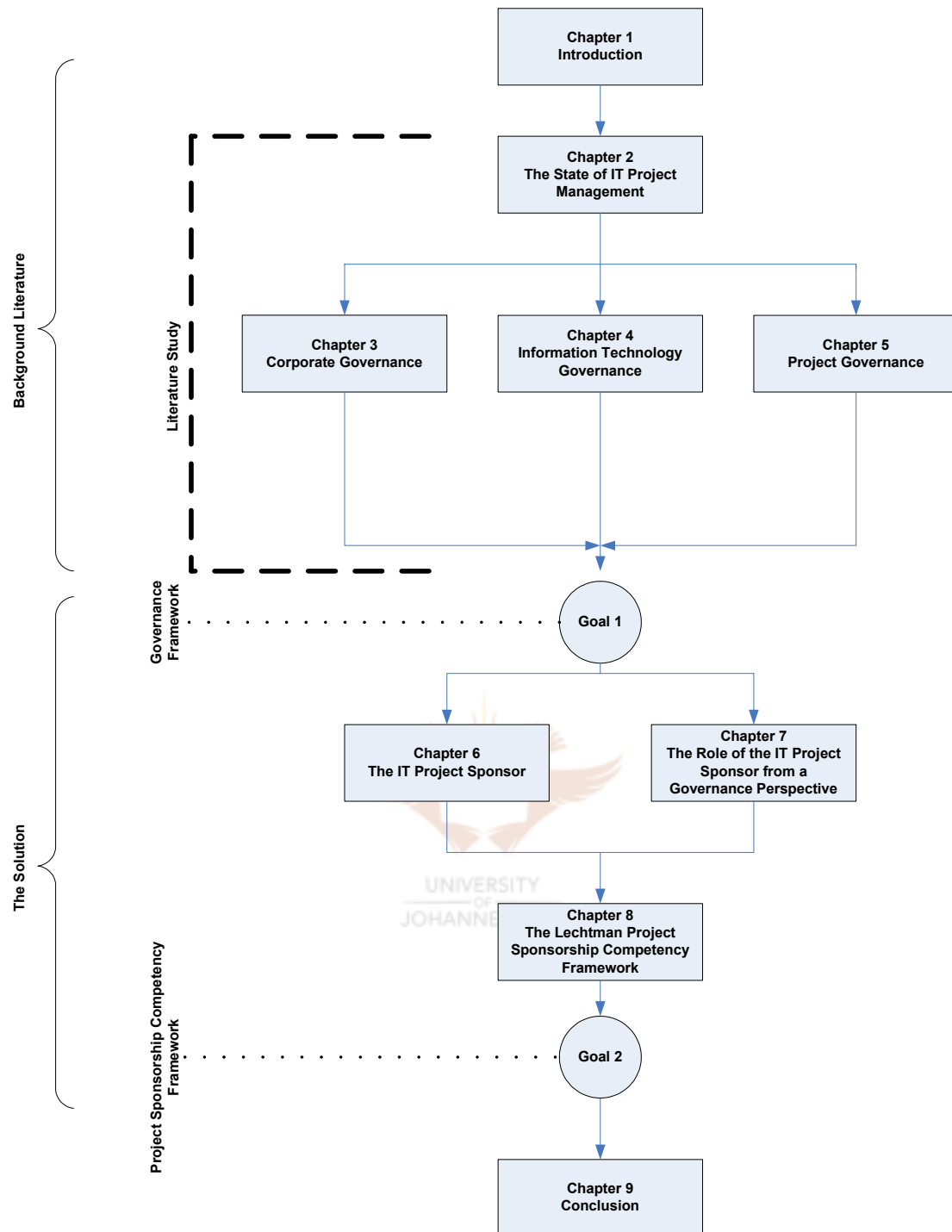
Figure 1.1: Dissertation layout

As per Figure 1.1, Chapter 1 provides background information regarding the research area and approach taken to solve the stated problem.

Chapter 2 seeks to provide essential terms and concepts relevant to project management in general. It also discusses the evolution of project management into a widely-embraced method for conducting business.

Furthermore, detailed statistics are provided regarding the state of IT project management in the United States of America, the United Kingdom and South Africa.

Chapter 3 seeks to provide essential terms and concepts relevant to corporate governance. It provides a discussion on various entities and role-players in the corporate environment as well as detailing the implications that recent legislation and governance standards had on the IT and project management communities. From this a high-level corporate governance framework is developed which incorporates both disciplines (IT and project management).

Chapter 4 seeks to expand on the role of IT governance within the organisation. It provides essential terms and concepts as well as a discussion on the various entities and role players involved in the governance of Information Technology in the organisation. It also seeks to investigate relevant IT governance frameworks that will be placed within the corporate governance framework referred to in the first research goal.

Chapter 5 seeks to expand on the role of project governance within the organisation. It provides essential terms and concepts as well as a discussion on the various entities and role players involved in the governance of all project-related activities in the organisation. It also seeks to investigate relevant project governance frameworks. By combining the two frameworks (IT and project governance) the first goal of the research study is attained.

Chapter 6 seeks to introduce the concept of the IT project sponsor in the organisation. A definition is given for this role-player as well as its positioning within a project-oriented organisation. The detailed activities relevant to sponsoring IT projects derived from the corporate governance framework are briefly introduced.

Chapter 7 seeks to elaborate on the detailed activities derived from the corporate governance framework by demonstrating how they relate to the

project life-cycle. This indicates what is expected from project sponsors at each stage of the project life-cycle.

Chapter 8 seeks to develop the project sponsorship competency framework. An investigation is conducted to determine if any existing project sponsorship competency frameworks exist. The structure of the new competency framework is then developed. The role of the project sponsor from the previous chapter is then applied onto the structure, which then leads to the creation of the competency framework.

Chapter 9 is the concluding chapter of this dissertation. It reviews the research problem and determines if the research goals and objectives were reached. This chapter also evaluates the two frameworks in terms of their advantages and limitations and provides topics for future research.

All the chapters (except Chapter 9) within this dissertation contain a section titled "Research Value". This section is intended to provide the reader with the value that has been achieved through the process of researching that chapter's specific goal and objectives.

The following chapter begins the literature study and provides the reader with essential background information relevant to the research problem.

Chapter 2

The State of IT Project Management

"You can know the name of a bird in all the languages of the world, but when you're finished, you'll know absolutely nothing whatever about the bird... So let's look at the bird and see what its doing -- that's what counts. I learned very early the difference between knowing the name of something and knowing something."

Richard Feynman (1918 - 1988)

1. Introduction

1.1 Background

The field of project management has existed for thousands of years. However, it is only within the last sixty years, since the Second World War, that the discipline has been embraced by organisations around the world as an effective method for conducting business.

Furthermore, the study of project management has taken on new meaning, with many research organisations spending millions of Rand conducting studies and making recommendations on how to improve project management.

1.2 Goal

The goal of this chapter is the provision of essential terms and concepts relevant to project management as well as detailed statistics on the state of IT project management.

1.3 Objectives

In order to reach the goal mentioned above, some objectives must first be met:

- The first objective is the foundations and important terminology related to general project management.
- The second objective is a discussion on the evolution of project management. This seeks to demonstrate how this discipline was

accepted as a method of conducting business and how it was adapted into the field of information technology.

- The third objective is a determination on the current statistics related to IT project management. From these statistics conclusions are drawn.

1.4 Layout

The first section establishes the foundations of project management. This includes definitions of important concepts. The second section discusses the evolution of project management from its early beginnings to its inclusion into the information technology domain.

The third section presents a selection of statistics from three countries (the United States, the United Kingdom and South Africa). This seeks to elaborate on how IT projects are performing in these three countries.

2. Foundations of project management

Project management, in some form, has existed for thousands of years (Taylor, 2004:10). Some notable examples are the great Egyptian pyramids, Moses's strategy in moving the Israelites out of Egypt, the temple and palace built by King Solomon, and the magnificent building programmes of the Greeks and the Romans. How these projects were accomplished at all defies imagination, particularly given the tools of the day.

It is, however, important to first establish the basic terms and concepts before a detailed discussion on the state of IT project management is presented.

2.1 Definition of a project

Definitions of what a project is vary according to the literature referenced, and due to the fact that many books and journal papers have been written on the topic, a few pertinent definitions are given.

Bitz and Knutson (1991) define a project as a "unique effort to introduce or produce a new product or service conforming to certain specifications and applicable standards". This definition implies that two projects, no matter how similar, will each be unique in nature.

They also suggest that a project has to conform to specifications and standards. This introduces the characteristic of standards, which implies that projects have to meet various quality standards or even additional standards applicable to the nature of the project such as road-worthiness standards for an automobile.

According to Lewis (1995:5) a project is only done once, whereas most work is ongoing and therefore managing a one-time job is significantly different to managing something that is ongoing. Ongoing work has a beginning but for the foreseeable future has no desired end. A project however, has a start date and an end date.

A project can also be defined as "a management environment that is created for the purpose of delivering one or more business products according to a specified business case" (CCTA, 1999:22). This adds the characteristic that a project must satisfy a specified business case and that there has to be a clear business objective for conducting any project.

The Guide to the Project Management Body of Knowledge (also known as the PMBoK) states that projects support the strategic plan of an organisation (PMI, 2004:6). This characteristic is added to the others already mentioned; however, the PMBoK's definition, which states, "a project is a temporary endeavour undertaken to create a unique product, service or result", is not broad enough.

This is not to say that the definition is incorrect, but because it does not contain the specific characteristics mentioned in previous definitions, it will not be used.

The following characteristics of a project were mentioned:
- A project is unique
- A project must conform to certain standards
- A project is done once
- A project has limited duration
- A project has to satisfy a business objective

- A project supports the strategic plan of an organisation.

Therefore, considering all these characteristics together, one can plausibly define a project as a unique undertaking that follows a schedule of limited duration and whilst conforming to applicable standards, satisfies clearly defined business objectives that support an organisation's strategic plan.

Further into this research study, the term "programme" and "portfolio" are also used to describe certain projects. A programme is "a group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually" (PMI, 2005a:2).

A portfolio is defined as "a collection of projects or programmes and other work that are grouped together to facilitate effective management of that work to meet strategic business objectives" (PMI, 2004:16).

2.2 Definition of project management

Lewis (1995:6) defines project management as "the planning, scheduling, and controlling of project activities to meet project objectives". This definition makes it clear these are key characteristics of project management.

Bitz and Knutson (1995:5) define project management as "a set of principles, methods, tools, and techniques for the effective management of objective-oriented work in the context of a specific and unique organisational environment". This definition introduces the concepts of tools and techniques, which implies that the person in charge of managing projects is aided by methods that facilitate the way a project is managed.

The British Standard for project management BS6079 defines project management as "the planning, monitoring and control of all aspects of a project and the motivation of all those involved in it to achieve the project objectives on time and to the specified cost, quality and performance" (BSI, 1996).

This definition introduces four constraints, which are the boundaries within which projects are managed.

The "performance" aspect is the degree to which the project satisfies its aim or purpose. The word "scope" is therefore substituted for "performance" as it has a similar meaning.

The PMBoK (PMI, 2004) defines project management as "the application of knowledge, skills, tools and techniques to project activities to meet project requirements".

Although this statement is correct, it will not be used as it does not contain the other elements that have already been mentioned. Therefore, the characteristics of project management are:

- Project management involves planning, scheduling and controlling of activities to meet project objectives
- Project management is aided by means of tools and techniques
- Project management operates within boundaries or constraints (time, cost, quality, scope).

By combining these characteristics, a plausible definition of project management is the application of tools and techniques to plan, schedule and control activities that meet project objectives on time, to the specified cost, quality and scope.

Although the definitions for a project and project management in the PMBoK have not been utilised, the author recognises its importance within project management. This document is developed by the Project Management Institute, which is the most recognised organisation in Project Management with over 200,000 members in 2005 (PMI:2005c). The information technology fraternity contributes the majority to its membership.

The PMBoK has over one million copies in circulation and is used as a guide for many project managers across the world. It is an ANSI (American National Standards Institute) (ANSI/PMI 99-001-2000) standard and is recognised by the Institute of Electrical and Electronics Engineers (IEEE) as an IEEE standard.

In addition, it is used as an underlying reference in an International Organization for Standardization (ISO) Technical Report on managing software projects.

A brief discussion of who the stakeholders are during the life-span of a project now follows.

2.3 Project stakeholders

Schwalbe (2004:5) states that most projects have many stakeholders. These are individuals or organisations that are involved in, or affected by project activities. The person responsible for assuming the primary role of sponsorship is called a project sponsor. The sponsor is responsible for providing direction and for funding the project. Furthermore, sponsors have a very high impact on the extent to which their company can benefit from projects (Koch & Schmid, 2004:1).

Those working with the project sponsor include the project manager, the project team and other people involved in a project to meet its goals.

The PMBoK (PMI, 2004:9) describes a project manager as the individual who manages projects. Furthermore, Schwalbe (2004:5) states that a good project manager is crucial to the success of any project.

The Standish Group's CHAOS Reports from 1994 to 2002 (SGI, 1995; SGI, 1999; SGI, 2001; SGI, 2003) state that an experienced project manager adds to a project's success. Therefore the role of a project manager is very important.

The project manager's ultimate responsibility is to deliver the project on time, within the allocated budget and according to the agreed upon scope and quality, which earlier were termed as the project constraints. A detailed discussion of the project constraints now follows.

2.4 Project constraints

A project is constrained in different ways by its scope, time and cost goals (Lewis, 1995:6; PMI, 2004; Schwalbe, 2004:5). These limitations were

traditionally referred to as the triple constraint and were considered the acid test of whether a project was a success or not.

The scope element asks the question: "What is the project trying to accomplish?" In other words, what product or service does the customer or sponsor expect from the project once it has been completed? The time element asks the question: "How long should it take to complete the project?" In other words, what is the project's schedule? And finally, the cost element asks the question: "What should it cost to complete the project?"

Charvat (2002:19) and Schwalbe (2004:7) also state that quality is a key factor in projects and that this element adds itself to the triple constraint to form the quadruple constraint. The quality element is typically depicted by factors such as customer (or sponsor) satisfaction (or value) (Schwalbe, 2004:7). However, many believe quality to be inherent in setting the scope, time, and cost.

The previous definition for project management included the "quality" constraint and thus the quadruple constraint (Figure 2.1 below) is utilised for the purpose of this research study.
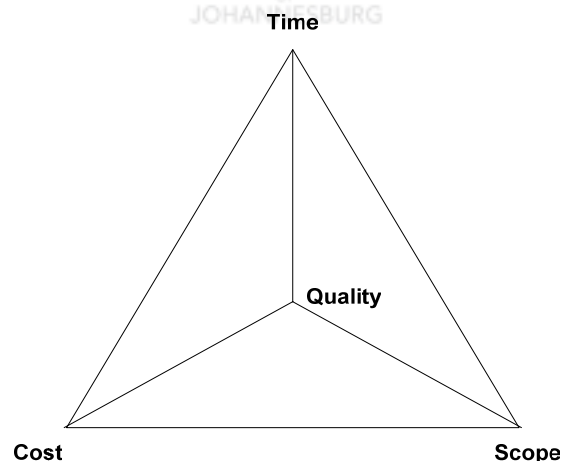
Figure 2.1: The quadruple constraint

As already mentioned in the definition for project management, those in charge of planning, scheduling and controlling project activities (the project manager) make use of specific tools and techniques to manage. These are now discussed.

2.5 Project management tools and techniques

Frederick Taylor (1856 – 1915) was the first person to scientifically study "work" and the first to consider process design (HBS, 1997:3). However, it was not until the 1950s that many project management techniques were assembled into a single, coherent system. The catalyst for these improvements was the Second World War and the resulting "Cold War" between the former Soviet Union and the United States of America.

Therefore it can be stated that new approaches to project management can be attributed to large-scale projects conducted by the United States Department of Defence (HBS, 1997:3; Schwalbe, 2004:15; Taylor, 2004:10).

Tools such as the Gantt chart developed by Henry Gantt in 1917, critical path analysis and network diagrams are still used today as a primary tool to communicate project schedule information (Schwalbe, 2004:15 -19). Computer software is available to fast-track the creation and utilisation of basic project management documents such as the Gantt chart.

Ultimately, it is these tools and techniques that assist project managers and their teams in carrying out scope, time, cost and quality management (Schwalbe, 2004:10). They can also assist project managers in carrying out management of other areas within project management. These areas, collectively termed "knowledge areas", are now discussed.

2.6 Project management knowledge areas

Amongst the areas of expertise required by project managers are the nine knowledge areas which is a collective term for the key competencies that they must develop (PMI, 2004:10; Schwalbe, 2004:9).

The four core knowledge areas include project scope, time, cost and quality management (which un-coincidentally forms the quadruple constraint which was mentioned earlier). Schwalbe (2004:10) states that these are core knowledge areas because they lead to specific project objectives.

In addition to the core knowledge areas, four facilitating knowledge areas are considered namely: human resource, communications, risk and procurement

management (PMI, 2004:11; Schwalbe, 2004:10). These are called facilitating knowledge areas because they are processes through which the project objectives are achieved.

The ninth knowledge area is called integration management, which is an overarching function that affects and is affected by all of the other knowledge areas.

These nine knowledge areas, together with the tools and techniques already mentioned, and with the addition of stakeholders' needs and expectations, form part of a project management framework (Schwalbe, 2004:8). This framework is depicted in Figure 2.2.

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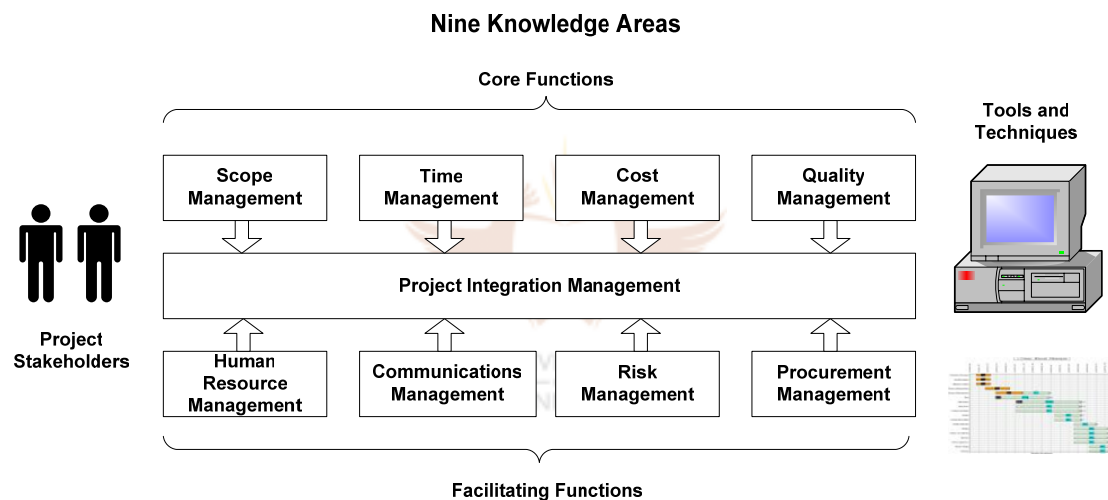
Figure 2.2: The project management framework (Schwalbe, 2004:8)

The framework in Figure 2.2 assists the project manager to meet the needs and expectations of the people involved in, or affected by, project activities.

The total collection of project activities is broken up into phases (PMI, 2004:19; Schwalbe, 2004:43) which the project stakeholders participate in. The collection of these phases is called the project life-cycle which is discussed in the following section.

2.7 Project phases and the project life-cycle

Taylor (2004:40) states that project managers have long known that projects have a life-cycle much like a biological life-cycle. That is, "the project starts

slowly, builds steadily to a peak resource and activity level, and then rapidly decreases in resources and activity to the close-out point".

There is no standard name for the phases; in fact, they vary according to project or industry, but Schwalbe (2004:43) states that some general phases include "concept", "development", "implementation" and "close-out". Taylor (2004:40) suggests that "concept" can be substituted with "initiation", "development" can be replaced with "planning", "implementation" can be replaced with "monitor and control" and, finally, "close-out" can be replaced with "termination".

For the purpose of this research project, Schwalbe's (2004:43) naming scheme is to be used. Concept and development are usually grouped into the "project feasibility" stage as these first two phases focus on planning whilst the last two phases (implementation and close-out) focus on delivering the actual work and are often referred to as "project acquisition".

A project phase must be completed before it is possible to move onto the next phase. At the end of each phase, a product produced as part of the project is presented to a committee. This product is called a "deliverable".

A diagram of the project life-cycle now follows.
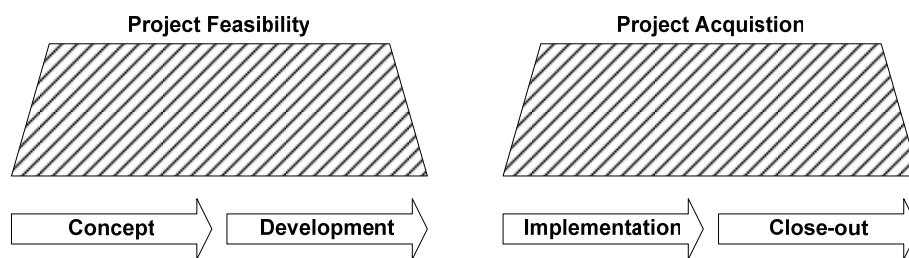
Figure 2.3: The project life-cycle

Referring to Figure 2.3, during the concept phase of a project, sponsors describe a project, that is, they develop a very high-level or summary plan for the project which describes the need for the project and basic underlying concepts (Schwalbe, 2004:43).

A preliminary or rough-cost estimate is developed in this first phase and an overview of the work involved is created. A WBS (Work Breakdown Structure) defines project work and is a "deliverable-oriented" document that defines the total scope of the project (Schwalbe, 2004:43; Taylor, 2004:14).

During the development phase, the project team creates a more detailed project plan, detailed cost estimate and an expanded WBS (PMI, 2004:112; Schwalbe, 2004:43).

During the implementation phase the project team delivers the required work, creates a definitive or very accurate cost estimate and provides performance reports to the stakeholders involved in the project (Schwalbe, 2004:43).

The final phase is close-out which is when all the work is completed (Schwalbe, 2004:43).

This concludes the discussion on the foundations of project management. A discussion on the evolution of project management now follows.

3. The evolution of project management

As already stated, project management had its beginnings with the construction industry many thousand years ago. It evolved into a widely-accepted form of practice and much has been written about the topic. It is important to discuss what project management has evolved into and which similarities and differences there are between IT project management and other forms of project management.

3.1 Project management before the 1980s

Schwalbe (2004:15) states that many people believe that the modern concept of project management began with the Manhattan Project conducted by the United States (U.S.) military to develop the atomic bomb. General Leslie R. Groves supervised the overall management of the project's mission, schedule and budget, while Dr Robert Oppenheimer managed the technical aspects (Groueff, 1967; Schwalbe, 2004:15).

As already stated, the U.S. military was the key industry behind the development of many modern project management techniques. In the 1950s, they made use of project management to fight the "Cold War" against the U.S.S.R (Union of Soviet Socialist Republics) (Lindgren & Packendorff, 2003:5). As time was a factor during this arms race, project management was seen as an effective method in the development of sophisticated weapons.

During the 1970s, the U.S. military began to use software to help manage large projects (Schwalbe, 2004:17) which transcended into other industries such as the construction industry.

However, it was not until the 1980s that organisations fully embraced project management and what it offers.

3.2 Project management after the 1980s

Organisations today have become more integrated through the use of complex systems and processes. As such, the effectiveness of managing change through the traditional functional hierarchy has diminished (Buttrick, 2003a:1 para.1).

Therefore, since the late 1980s, organisations have become more project-oriented in their approach to business (Taylor, 2004:8). This concept was originally developed by Gareis (1989) who coined the concept of the "project-oriented organisation".

The specific feature of such an organisation occurs when the management of single projects, the management of network of internal and external projects, and relationships between the company and single projects are all taken into consideration.

The differences between this type of organisation and the traditional functional organisation can be found in the PMBoK (PMI, 2004: 28 – 32).

Modern organisations today utilise a combination of the traditional functional hierarchy and the project-oriented organisation (PMI, 2004:31). This is known as the "composite organisation" and is depicted in Figure 2.4.

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                          ┌─────────────────┐
                          │ Chief Executive │
                          └─────────────────┘
```
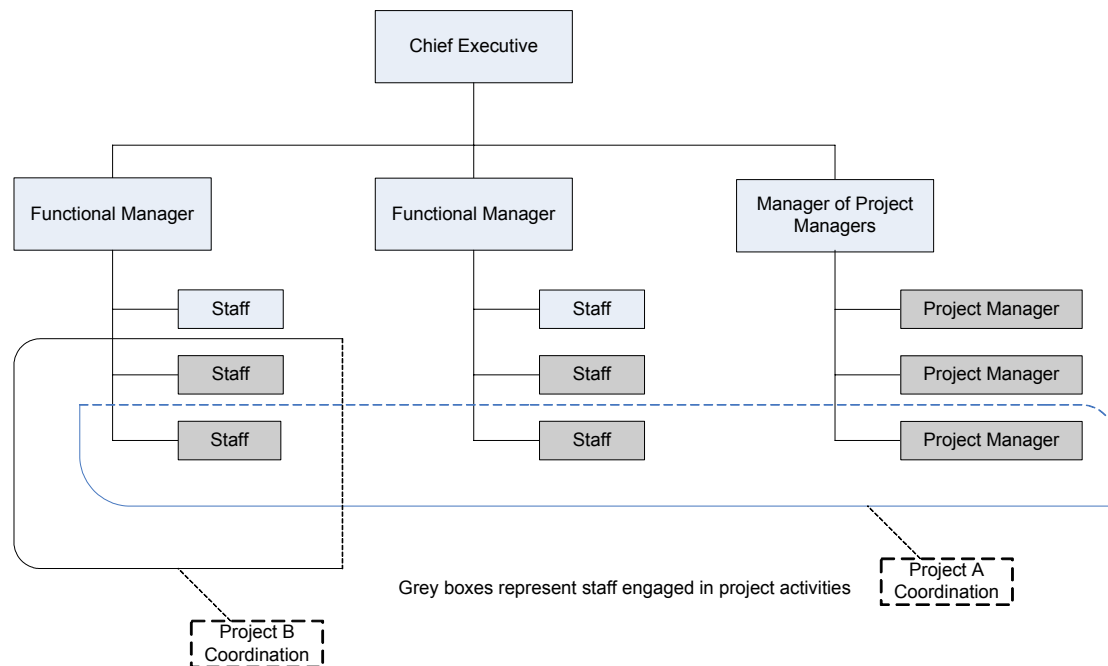

Figure 2.4: The composite organisation

It is this form of organisation (depicted in Figure 2.4) that will be utilised and referred to in the remainder of this research study.

Johns (1995) stated that because companies face increasing competitive pressures in a rapidly changing and technically challenging international environment, there is a need to adopt flexible strategies and structures in order to deliver improved quality products to the market and to provide better customer service.

As a result, the trend was for companies to adopt "The Project Management Method". This view is supported by Anderson and Jessen (2003:457), who state that projects are conducted in such a way in order to allow a company to best achieve its goals.

In addition, project management has provided a sound basis for change management (Clarke, 1999:139), in the integration and re-organisation of major businesses, and the development of new initiatives between a company, its customers, suppliers and partners.

Recent literature provided by the PMBoK (PMI, 2004) further support the notion that projects are a means of organising activities that cannot be addressed within the organisation's normal operational limits.

Furthermore, project management training and certification have also taken on new meaning and importance (Taylor, 2004:8). Many private and public sector organisations now require that their employees be certified before they can fill the role of project manager. The Project Management Institute is the certifying organisation for the Project Management Professional (PMP) (PMI, 2004).

Thus it can be stated that projects have evolved into a discipline that is seen as more than just solving of technical problems but as avenues for mastering business and change and is embraced as an effective means of conducting business.

Project management is now prevalent in many industries, such as the construction industry, electrical engineering industry and, of particular relevance to this research study, the Information Technology (IT) industry.

A discussion on what IT project management entails now follows.

3.3 Information Technology project management

Up until 1965, software companies were relatively small and relied on U.S. government contracts and system development (Steinmueller, 1995:17). Computer producers such as IBM (International Business Machines) dominated software production. In these times, software companies had little direct contact with users other than the U.S. Federal Government and therefore had a difficult time marketing their services.

It was not until the period between 1965 and 1970 that in-house software engineering projects began. By the late 1960s, the growth of independent software vendors made it possible for IBM to consider separate pricing for software and to retreat from its commitment to provide all of the software tools that users might need in order to purchase or lease IBM computers (Steinmueller, 1995:18).

As a result, these independent software vendors started developing their own software using project management methods. Improvements in hardware technology from the early 1960s up until today resulted in an enormous growth in the software industry.

Today, advances in IT have enabled new competitors to enter existing markets more readily. This has stimulated and strengthened the paradigm of global competitiveness (Gunasekaran, Love, Rahimic & Mieled, 2001:349).

Charvat (2002:12) claims that IT is changing at such an amazing rate that companies use more and more solutions that require enhancing existing systems and decommissioning older ones, in order to survive in the competitive marketplace.

Projects labelled as IT projects can be very diverse. They can range from a small number of people installing off-the-shelf hardware and software to hundreds of people analysing business processes and developing new software to meet business needs (Schwalbe, 2004:50).

Furthermore, IT projects support every possible industry, ranging from the film to construction industry (Schwalbe, 2004:51; Taylor, 2004:7). Project management techniques and tools can apply to any project in any industry, regardless of whether it involves software, hardware, construction, engineering, or services. These techniques and tools remain constant throughout the various industries, but the projects themselves are dynamic.

What make IT projects different are their unique risks, the rapid development requirements to meet rush-to-market demands, the short life of technology, and multiple dependencies with other projects. Therefore the tools are the same, but they must be applied differently depending upon the project type and complexity (Taylor, 2004:7).

Taylor (2004:10) states that different projects require different technical and management approaches. However, it is the application of traditional project management tools and techniques within the IT industry that is generally less

successful. This is because unique characteristics of IT projects are not taken into account rather than the techniques being inapplicable.

IT projects have a few subsets, for example, software development, hardware procurement and others. As a result, a subset of life-cycles for the development of information systems is mapped onto the traditional project life-cycle phases already mentioned. This new life-cycle is termed the SDLC or systems development life-cycle. The SDLC only applies to systems being developed as opposed to an IT project that involves hardware procurement for example.

The diagram below describes how the traditional project life-cycle phases (PLC) are mapped onto the systems development life-cycle (SDLC).
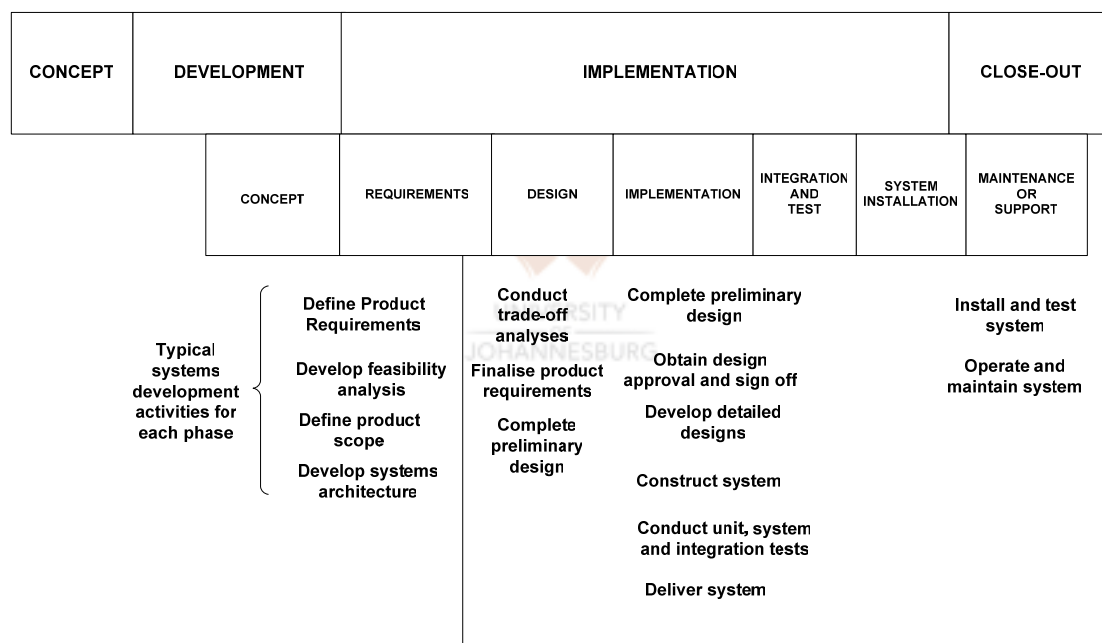
Figure 2.5: The SDLC in relation to the PLC (Taylor, 2004:20)

Figure 2.5 shows the relationship between the project and systems development life-cycles. When comparing it with Figure 2.3, it should be clear that the project life-cycle's (PLC) activities have more to do with planning, administration, and leadership, that is, all those activities necessary to ensure that plans and processes are in place in order to ensure a smoothly-run project.

Although there is a definite overlap and merging of activities between the models, it is important that the project manager and the organisation realise that the PLC encompasses all the activities of the project, whereas the SDLC focuses on the activities of the product that are the technical aspects of producing the project deliverables (Taylor, 2004:10). This is why the SDLC is predominantly mapped onto the "implementation" phase of the PLC.

Therefore, it can be stated that IT projects are crucial to economic growth and that investment in information and communication technologies creates value through the projects, which put the technology to work for practical purposes.

It is now important to look at whether organisations have successfully utilised the "project management method".

A set of statistics provided by reputable institutions brings to the forefront the areas that organisations need to look at to best improve the success rates of their IT projects. These results are presented in the next section.

4. Statistics in Information Technology project management

As already stated in the introduction, the study of project management has taken on new meaning with many organisations spending the equivalent of millions of Rand gathering statistics and making recommendations on how best to improve the state of project management.

Before the statistics can be presented, it is important to devise a set of metrics that allows for the comparison of the performances of projects in various countries.

4.1 Project performance metrics

At any given state during the run and upon completion of a project, it could have one of the following statuses:

- Successfully completed
- Challenged
- Not successfully completed.

By utilising an existing definition for project failure, a successful project is later defined.

Nuss (2004:11) defines an IT project failure as "any project, initiated or implemented in order to enable or support the operations of an organisation by making use of information technology, methods, processes and structures that within reasonable margins, fails to deliver the intended results within the originally allocated financial resource, time schedule or specification".

This definition encompasses all the elements of the triple constraint, which as already mentioned, has been the traditional "acid test" of a project's success. Cost is depicted as "financial resource", time is depicted as "time schedule" and scope is depicted as "specification". It also refers to projects supporting the operations of an organisation that entails supporting business objectives.

Therefore, with this definition in mind, it is possible to define project success. This means that a successful project is any project, initiated or implemented in order to enable or support the operations of an organisation by making use of information technology, methods, processes and structures that within reasonable margins, succeeds in delivering the intended results within the originally allocated financial resource, time schedule or specification.

An IT project will be regarded as challenged if there are any deviations from the originally allocated financial budget, and/or time allocation and/or scope constraints (Labuschagne & Sonnekus, 2004).

An IT project will be regarded as not successfully completed if:
- It could not be completed before a specified critical delivery date and/or fails to deliver according to its specification and/or funding has been withdrawn or cancelled or,
- It is cancelled long before completion as it is seen as no longer being viable to continue.

IT project statistics from three different countries namely, the United States of America, the United Kingdom and South Africa will now be presented. This is

done to show the correlation between IT projects conducted in developed countries (the United States and the United Kingdom) and developing countries (South Africa).

4.2 The CHAOS Report: The United States of America

Since 1994, the Standish Group, which is based in the United States (U.S.A), has produced research results on the state of IT project management in the U.S.A called "The CHAOS report" (SGI, 1995; SGI, 1999; SGI, 2001; SGI, 2003).

The Standish Group surveyed IT executive managers regarding their opinions about why projects succeed. Such was the popularity of their initial report in 1994 that their subsequent reports have become expensive to purchase and thus only snapshots of the results are publicly available.

The reports from 2001 to 2003 are unavailable for public access but nevertheless, their reports from 1994 to 2000 (coupled with various snapshots of their reports from 2001 to 2003) paint an interesting picture on the state of IT project management in the U.S.A.

The first statistic presented originates from 1994 (SGI, 1995) which shows just how many projects were conducted as well as how much was spent on them. This includes the percentage of these projects that were not successfully completed.

Table 2.1: CHAOS Report figures (1994)

Year	Dollar amount spent on IT application development	Amount of projects	Not successfully completed
1994	$US 250 billion	175,000	31.1%

As can be clearly seen from Table 2.1, as far back as 1994 a considerable amount of money went into IT application development and a considerable number of projects were undertaken.

Further results not in Table 2.1 indicate that 52.7% of projects cost 189% of their original estimates. The lost opportunity costs are not measurable, but could easily be in the trillions of U.S. dollars.

The next statistic presented contrasts the total costs incurred on failed projects and the total cost overruns (SGI, 1995; SGI, 1999; SGI, 2003).

Table 2.2: CHAOS Report: Cost figures (1994 – 2002)

Year	Total Cost of Failed Projects	Total Cost Overruns
1994	$US 81 billion	$US 59 billion
1998	$US 75 billion	$US 22 billion
2002	$US 38 billion	$US 17 billion

As can be seen from Table 2.2, the cost of failed projects decreased from $U.S. 81 billion in 1994 to an estimated $U.S. 75 billion in 1998. Even more dramatic was a major shift in cost overruns from $U.S. 59 billion spent in 1994 to an estimated $22 billion in 1998. The Standish Group (SGI, 2003) noted that the lost dollar value for US projects in 2002 is estimated at $U.S. 38 billion with another $U.S. 17 billion in cost overruns.

The average cost and schedule overruns and scope shortfalls are now compared.

Table 2.3: CHAOS Report: Cost overruns, schedule overruns and scope shortfalls (1998- 2002)

Year	Average Cost Overrun	Average Schedule Overrun	Average Scope Shortfall
1998	45%	63%	33%
2002	43%	82%	48%

By 2002 there was still further improvement in cost, but as Table 2.3 clearly shows, significant schedule overruns and scope shortfalls exist in the IT project management community.

Furthermore, the Chronicles III report (SGI, 2003) documented that in 2002 literally two thirds of IT-based software projects were not meeting their managers' expectations.

The statistics with regards to unsuccessful projects, challenged and successfully completed now follow.

Table 2.4: Chaos Report: Comparison on basic performance categories

Year	Not successfully completed	Challenged	Successfully completed
1994	31%	53%	16%
1998	28%	46%	24%
2000	23%	49%	28%
2002	15%	51%	34%

Table 2.4 (which consolidates all the available reports from the Standish Group) clearly shows an increase in successfully completed projects. However, the percentage of those challenged still remains quite high.

An interesting statistic provided by the Standish Group is a list of project success factors. These factors play a critical role in the success of projects. They are listed below in order of rank (SGI, 1995; SGI, 1999; SGI, 2001; SGI, 2003).

Table 2.5: CHAOS Report Results: Project success factors (1994 – 2002)

1994	1998	2000	2002
1. User Involvement	1. User Involvement	**1. Executive Support**	1. User Involvement
2. Executive Support	**2. Executive Support**	2. User Involvement	**2. Executive Support**
3. Clear Statement of Requirements	**3. Clear Business Objectives**	3. Experienced Project Manager	3. Experienced Project Manager
4. Proper Planning	4. Experienced Project Manager	**4. Clear Business Objectives**	**4. Clear Business Objectives**
5. Realistic Expectations	5. Small Milestone	5. Minimised Scope	5. Minimised Scope
6. Smaller Project Milestones	6. Firm Basic Requirements	6. Standard Software Infrastructure	6.Agile requirements process
7. Competent Staff	7. Competent Staff	7. Clear statement of Requirements	7. Standard Software Infrastructure
8. Ownership	8. Proper Planning	8. Formal methodology	8. Formal methodology
9. Clear Business Objectives	9. Ownership	9. Reliable estimates	9. Reliable estimates
10. Other	10. Other	10. Other	10.Other

As can be seen from Table 2.5, executive support is prevalent in all four research reports. In 2000, executive support leaped into first position as the overriding factor that triggers project success. This trend is still evident even up to 2002.

It is also important to note that projects do not require all 10 factors to be successful, but the more factors that are present in the project strategy, the higher the level of confidence (SGI, 1999).

Another factor that ranked in the top four from 1998 to 2002 is clear business objectives. This suggests that the business case for developing the project is a crucial factor in its success, something that is discussed in further detail later in this research study.

Therefore, it is noticeable from the statistics provided by the Standish Group that there is room for improvement in the U.S.A. The prohibitive cost of IT projects in terms of finance, schedule and time overruns clearly indicates that more attention must be paid to the planning of these projects.

Statistics that shed light on the status of projects in the United Kingdom will now be presented.

4.3 The State of IT project management 2002 – 2003: The United Kingdom

Cuthbertson and Sauer (2003) of Templeton College at the University of Oxford published a detailed and publicly accessible report on the state of project management in the United Kingdom.

The research was based on data collected from 1,500 practising IT project managers between October 2002 and January 2003.

The research report set out to discover a number of aspects within the project management field. Of particular relevance to this research study were the following objectives:

- What is project performance like today? Is it improving?
- What drives project performance today?

A select number of results are now presented. Firstly, the schedule performance of the projects as displayed below.

Table 2.6: UK Survey: Schedule results

Year	Completed ahead of schedule	Completed to schedule	Completed behind schedule
2003	3%	55%	35%

It is encouraging to see in Table 2.6, that a significant percentage of projects have been completed to schedule. However, the 35% of those completed behind schedule is quite high and must be addressed.

Results on scope performance are presented below.

Table 2.7: UK Survey: Scope results

Year	More than 100% of scope requirements achieved	100% of scope requirements achieved	Less than 100% of scope requirements achieved
2003	5%	41%	54%

It is discouraging to note from Table 2.7 that more than half of the projects delivered less than their scope requirements.

Results on cost performance are presented below.

Table 2.8: UK Survey: Cost results

Year	Completed ahead of budget	Completed to budget	Completed over budget
2003	15%	26%	59%

Table 2.8 clearly shows that 59% of projects were completed over budget. This is particularly alarming as more than one in three projects (38%) were upwards of £1 million, with 18% exceeding £5 million; of which 32, or nearly 4%, of all reported projects are "mega projects" i.e. those in excess of £50 million.

The statistics with regards to projects not successfully completed, challenged and successfully completed now follow.

Table 2.9: UK Survey: Performance categories for 2003

Year	Not successfully completed	Challenged	Successfully completed
2003	9%	75%	16%

From Table 2.9 it can be seen the United Kingdom has a considerably low percentage of successfully completed projects. With so much being spent on projects, this situation must improve.

The set of recommendations by Cuthbertson and Sauer (2003) are based on the opinions of IT project managers.

They asked project managers what three changes would improve their own performance as project managers, and what three changes would improve their organisation's performance on projects?

These are collectively grouped and presented in Table 2.10.

Table 2.10: UK Survey: Factors that improve project performance

Project Manager Responses (not according to rank)
A. Greater top management support
B. More commitment from users
C. Commitment to a stable project management method
D. Alignment of IT project initiatives to business strategy
E. Greater understanding of project management on the part of top management
F. Desire for less politics and greater skills in dealing with political issues
G. Clear business cases and better processes for building the case
H. Establishment of a supportive project office.
I. Desire for respect, trust, status and credibility in the eyes of business clients.
J. Other

As Table 2.10 clearly indicates, greater top management support is an important factor in helping project managers perform better. Furthermore, the alignment of IT projects with business strategy and the need for clear business cases is essential in project management performance.

The report on the state of IT project management in South Africa is now presented.

4.4 The Prosperus Report: South Africa

Another report worth referring to is the one conducted by Labuschagne and Sonnekus titled "The Prosperus Report 2003" (Labuschagne & Sonnekus, 2003). The intention of this report was to shed light on the performance levels of IT projects in South Africa.

Two objectives of this report were to determine the success rates of IT projects in South Africa and to compare the state of IT project management in South Africa with that of the rest of world.

To date, the report is the most comprehensive (in terms of most respondents) of IT project management in South Africa. Due to the fact that this report is publicly available, detailed statistics are presented and a clearer picture of project performance in South Africa can be established.

The project performance factors mentioned in the Prosperus Report are presented below.

Table 2.11: Prosperus Report: Performance categories

Year	Not successfully completed	Challenged	Successfully completed
2003	22%	35%	43%

As Table 2.11 indicates, for a developing country, South Africa has a comparatively high success rates regarding its IT projects.

The reasons for success, failures and challenges according to rank are given in Table 2.13 (Labuschagne & Sonnekus, 2003).

Table 2.12: Prosperus Report: Reasons that lead to project success, failure and challenges

Rank	Reasons for Success	Reasons for Not Successfully completed	Reasons for Challenges
1	A good Project team	Communication infrastructure	Requirement definition
2	Understanding user needs	Requirement definition	Handling change
3	Communication infrastructure	User involvement infrastructure	Communication infrastructure
4	Requirement definition	**Executive support**	User involvement infrastructure
5	Project manager competency/experience	**Business objectives**	User understanding of technology
6	**Business objectives**	Understanding user needs	Support of innovative / new technology
7	User involvement	User understanding of technology	**Business objectives**
8	**Executive support**	Handling change	Understanding user needs
9	Handling change	Change control processes	Change control processes
10	Change control processes	Support of innovative / new technology	Project team

As per Table 2.12 and of particular relevance to this research study, is that lack of executive support is a crucial factor that leads to projects not being successfully completed.

Despite the rank of fourth in Table 2.12 (under "Reasons for Failure"), the report states that "in combination with other factors", 74% of projects were successful because of executive support, 38% of projects failed because of a lack of executive support, and 31% were challenged for the same reason.

Furthermore, "in combination with other factors", having clear and concise business objectives contributed to 75% of project success, whilst a lack of business objectives contributed to 36% of project failures. Furthermore, 38% of projects were challenged as a result of a lack of business objectives being clear and concise.

A comparison of the three research reports presented is now made.

4.5 Comparison of research reports
From these comparisons, a clear picture will develop as to some of the root causes of why projects succeed and why they fail.

Table 2.13: Performance tables from all three countries.

Year	Not successfully completed	Challenged	Successfully completed
Standish Group 1994	31%	53%	16%
Standish Group 1998	28%	46%	24%
Standish Group 2000	23%	49%	28%
Standish Group 2002	15%	51%	34%
UK Report 2003	9%	75%	16%
Prosperus Report 2003	22%	35%	43%

Table 2.13 clearly shows that IT project performance in South Africa ranks higher than that in the United States and in the United Kingdom. The success rate in the United Kingdom in 2003 compares to that of the United States in 1994 which suggests that there is considerable room for improvement in the United Kingdom.

It is now interesting to see how the success factors provided in the Standish reports (SGI, 1995; SGI, 1999; SGI, 2001; SGI 2003) map alongside the recommendations contained in the UK report (Cuthbertson & Sauer, 2003) as

well as those that lead to project success in South Africa (Labuschagne & Sonnekus, 2003).

Table 2.14: Mapping of success factors and recommendations

CHAOS Success Factors	UK Report Recommendations	SA Reasons for Success
1. Executive Support	**A. Greater top management support**	1. Good Project Team
2. User Involvement	B. More commitment from users	2. Understanding user needs
3. Experienced Project Manager	C. Commitment to a stable project management method	3. Communication infrastructure
4. Clear Business Objectives	**D. Alignment of IT project initiatives to business strategy**	4. Requirement definition
5. Minimised Scope	E. Greater understanding of project management on the part of top management	5. Project Manager competency/experience
6. Standard Software Infrastructure	F. Desire for less politics and greater skills in dealing with political issues	**6. Business objectives**
7. Clear statement of Requirements	**G. Clear business cases and better processes for building the case**	7. User involvement
8. Formal methodology	H. Establishment of a supportive project office.	**8. Executive Support**
9. Reliable estimates	I. Desire for respect, trust, status and credibility in the eyes of business clients.	9. Handling change
10. Other	J. Other	10. Change control processes

Table 2.14 compares the success factors and recommendations from all three research reports. As can be seen from success factors from The Standish Group (SGI, 1995; SGI, 1999; SGI, 2001; SGI, 2003) and from the UK Report of Cuthbertson and Sauer (2003), executive support and greater top management support is an important factor. The same applies to clear business objectives.

As already mentioned, despite the low ranking of executive support and business objectives in the Prosperus Report (Labuschagne & Sonnekus, 2003) a great amount of projects were successful because of executive support and clear business objectives.

From the above statistics, a picture has been presented on the state of IT projects in the United States, the United Kingdom and South Africa. Projects are still failing to perform satisfactorily and the situation must be addressed.

5. Research Value

This chapter has served to form the basis for the research study. Apart from definitions and an introduction of essential terms and concepts, it can be seen that project management is not static, but an evolving discipline whose whole is greater than the sum of its parts.

Furthermore, some statistics have been presented on factors plaguing IT projects. This paints a picture on the state of IT project management and provides a clear image of the necessary requirements for the improvement of IT project management.

6. Conclusion

The goal of this chapter was to provide essential terms and concepts and to present statistics on the state of IT project management around the world.

The first objective in this chapter was to present the basic foundations of project management by introducing terms and concepts that are fundamental to the discipline. The definitions of important concepts such as "a project", "project management", "the quadruple constraint" as well as the introduction of terminology such as "the project management framework" were presented in the first section.

The second objective of this chapter (presented in the second section) was to discuss how project management has evolved from its early beginnings to constitute a widely-accepted discipline in organisations. This was done by discussing the evolution from the Manhattan project (which many see as the first "modern" project) to project-orientated organisations (where organisations completely embrace the project management method).

Furthermore, the transcendence of project management into the Information Technology (IT) field was discussed as well as the differences between generic project management and IT project management.

The third objective of this chapter was to present statistics on the performance of IT projects and IT project managers. These were presented in the last section of this chapter and detailed the areas needing urgent attention from organisations to improve overall IT project performance.

To conclude, it can be said that project management (both generic and IT) is still an evolving discipline with no "golden rule" or "silver bullet" that guarantees instant success. However, with the efforts from the Standish Group in the United States, combined with those from researchers in the United Kingdom and South Africa, it is hoped that those organisations will benefit from utilising the project management method.

It is now important to take cognisance of these statistics and put in action recommendations set out in these research reports.

Of particular relevance to this research study is the role of executive support for the project management method. As the statistics demonstrate, this factor is extremely important as are its subsets, namely: clearly defined business objectives as well as an alignment of IT to business initiatives. With this in mind, senior executives must be more responsible and accountable for the projects managed in their organisation.

The next chapter focuses on the role of corporate governance in an organisation. It serves to highlight recent developments in corporate governance that now force senior executives as well as those directly involved in project management to be more accountable and responsible for how projects are managed and delivered within an organisation.

In addition, a high-level framework encompassing IT and project management's role within an organisation is developed which reveals a first glimpse into what the detailed corporate governance framework referred to in Chapter 1 will look like.

Chapter 3

Corporate Governance

You need three things: weapons, food, and trust. In times of trouble you should give up weapons first, then food. But you should never give up trust. Without trust we cannot stand.

Confucius (551 - 479 BC)

1. Introduction

1.1 Background

In the previous chapter, the evolution of project management into a widely-accepted discipline and its subsequent transcendence into the realm of information technology were discussed.

Various research statistics were presented that highlighted the need for improvement in organisational project management. Furthermore, the factors that played significant roles in project successes were given. Of particular relevance to this research study was the recommendation that executives play a more supportive role with regards to project management in their organisation.

The author hypothesises that executives will play a more supportive role in IT project management if an adequate organisational framework exists that embraces principles of corporate governance in the organisation. Amongst the aspects that should form part of this framework include its ability to support both information technology and overall project management capability.

1.2 Goal

The goal of this chapter is a high-level corporate governance framework that encompasses the role of information technology and project management in corporate governance.

1.3 Objectives

In order to reach the goal mentioned above, some objectives must first be met:

- The first objective is to define corporate governance and to discuss its major role-players.

- The second objective is to determine the state of corporate governance and what legislative interventions were brought in to strengthen investor confidence in corporations.

- The third objective is to determine the implications these legislative interventions have on IT and project-oriented organisations.

1.4 Layout

The first section seeks to establish the foundations of corporate governance. This includes a definition of corporate governance and a break-down of the identity of its role-players. The second section elaborates on the state it is in today, and the interventions that were introduced to strengthen corporate governance around the world.

The third section compares various legislation and standards of corporate governance that exist and what implications they have on IT and project-oriented organisations. This culminates with the development of the high-level corporate governance framework referred to in this chapter's goal.

2. The foundations of corporate governance

This section serves to present a foundation of important terms and concepts in the realm of corporate governance. It is important to discuss these aspects as they are referred to later in this research study.

2.1 Definition of corporate governance

Demb and Neubauer (1992) define corporate governance as "the process by which corporations are made responsive to the rights and wishes of stakeholders". This means that a corporation's stakeholders are the central focus of corporate governance and that those involved corporate operations serve them.

Garratt (2003:12) defines corporate governance as "the appropriate Board structures, processes and values to cope with the rapidly changing demands of both shareholders and stakeholders in and around their enterprises". Firstly, this definition indicates that corporate governance takes place at the

Board level of organisations. Secondly, it indicates that appropriate structure and process should exist within which the Board should operate in order to meet the demands of those who own the organisation; as well as those who are influenced by its decisions.

Newquist and Russell (2003:160) state that principles of good corporate governance must be supported by "mechanisms that stress accountability, disclosure, performance measurement, and checks and balances". This adds the elements of accountability, disclosure, performance measurement and checks and balances.

This means that the Board must be accountable for their actions and be able to disclose all relevant information related to decisions they have made. Furthermore, their performance must be measured in accordance with set out strategies and finally, the concept of checks and balances, that suggests mechanisms of internal control must be in place that facilitate good corporate governance.

Luo (2004:2) defines corporate governance as "the relationship between the corporation and the stakeholders that determines and controls the strategic direction and performance of the corporation". This links the elements of "strategic direction" and "corporation performance" to corporate governance.

Important characteristics presented in the definitions above are:
- corporate governance consists of appropriate Board structures, processes and values
- corporate governance copes with demands of stakeholders and shareholders of the organisation
- corporate governance consists of mechanisms that must include: accountability, disclosure, performance measurement and checks and balances
- corporate governance controls the strategic direction of the corporation.

By grouping these key characteristics together, a more wide-ranging definition of corporate governance can be formulated. Therefore, it is plausible to define corporate governance as appropriate structures and mechanisms that align Board accountability by means of disclosure, checks and balances and performance measurement to the strategic direction of an organisation, such that the demands of stakeholders and shareholders are met.

It is now important to determine the role-players that fit into the structures and mechanisms mentioned in the definition above. These will be collectively grouped as "key corporate role-players".

2.2 Key corporate role-players

The Business Roundtable, an association of chief executive officers of leading corporations that represents itself as an authoritative voice on matters affecting large corporations in the United States, published a white paper titled "Principles of Corporate Governance" in 2002 (BRT, 2002). This document, in conjunction with other literature is used to define the key role-players in corporate governance.

These role-players and their relationships ideally fit into the generic structure featured in Figure 3.1.
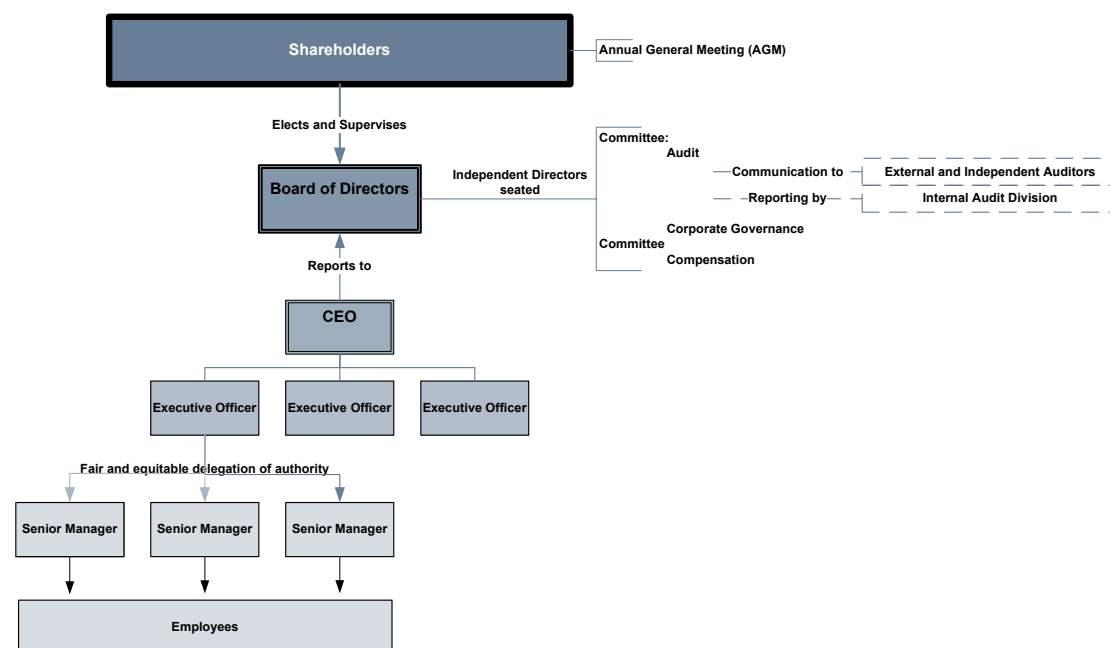
Figure 3.1: Generic top-corporate structure and relationships

The first discussion on the role-players focuses on the Board of Directors and their roles and responsibilities.

2.2.1 The Board of Directors

The Board of Directors has the important role of overseeing management performance on behalf of shareholders (BRT, 2002:8).

Its primary duties are:

- To select and oversee a well-qualified and ethical chief executive officer (CEO).

  The CEO, with executive officers and senior management, run an organisation on a daily basis. The CEO and executive officers sit on the Board whilst the senior managers do not.

- To monitor management's performance and to adhere to corporate standards.

Therefore, effective corporate directors are diligent monitors and not managers of business operations (BRT, 2002:8). This is supported by Newquist and Russell (2004:147) who collectively summarise the role of the Board of Directors into two duties. The first duty, the duty of loyalty, assures that directors want to do what is in the best interest of shareholders. The second duty, the duty of care, requires that they spend the time and resources to do it diligently.

In addition to selecting the CEO, the Board has additional responsibilities in its oversight function (BRT, 2002:11). Some of these include:

- Planning for management succession, which entails planning for the succession for the CEO, the other executive officers and senior management, and when appropriate, replacing them.

- Understanding, reviewing and monitoring the implementation of the corporation's strategic plan, which involves regular monitoring of the implementation of a corporation's strategic plan to see whether it is being implemented effectively and whether changes are required.

- Advising management on significant issues facing the corporation. This occurs when Directors offer the CEO, the executive officers and senior management a wealth of experience and information that serve to better their performance.

- Understanding and reviewing annual operating plans and budgets. This implies that the Board should ensure that the implemented operational plans are within the allocated budget. In addition, the Board must focus on the integrity and clarity of the corporation's financial statements and financial reporting.

Furthermore, the Business Round Table (BRT, 2002:11) states that the Board of publicly owned corporations should have a great degree of independence. This means, that when assessing independence, a director should be "free of any relationship with the corporation or its management that may impair, or appear to impair, the director's ability to make independent judgments".

Garratt (2004:126) states that laws in most countries demand that the Board of Directors elect a chairperson. This person oversees fair play in the Board's information-receiving, idea-generation, risk-assessment, and decision-making processes. Chairpersons are neutral and need training for their role, and at least an annual assessment.

A clear understanding of the respective roles of the Board and of senior management and their relationships with others in the corporate structure is required for effective corporate governance (BRT, 2002:8). Therefore, the role of the shareholders and other stakeholders cannot be underestimated in corporate governance.

2.2.2 The shareholders and the organisation's employees
The shareholders are the providers of capital to an organisation. Furthermore, Newquist and Russell (2004:112) claim that as shareholders have become numerous and dispersed, they have increasingly relied on Boards to act as their fiduciaries.

What makes these role-players so powerful is their ability to sell their share (or stock) in the company if they do not agree with the overall strategy, or its execution (Newquist & Russell, 2004:12). It is the shareholders who elect directors (usually at an annual general meeting or AGM) and furthermore, have the power to change the composition of the Board if they feel the directors do not serve their interests.

Therefore, in order for them to hold directors accountable, mechanisms are needed to assess a Board's performance as a group and as individuals. Furthermore, it can be stated that it is ultimately the shareholders who suffer when IT projects have large budget overruns, or even fail outright, as it is their money that was mismanaged.

In addition to the shareholders, the employees of an organisation play an important role in its corporate governance. The Business Roundtable (BRT, 2002:32) state that it is in the corporation's best interest to treat employees fairly and equitably. They require information relating to corporate performance and therefore should not be misled.

2.2.3 The CEO, executive officers and senior management

The ultimate responsibility of a CEO, the other executive officers and senior management is to set firm direction and interpret relevant information which allows them to perceive environmental opportunities and threats (Gadhoum, 1998:1). Furthermore they consider organisational capabilities and constraints and make and implement strategic choices (Mintzberg, 1979; Wieresma & Bantel, 1992).

However, Garratt (2004:15) states that many CEOs believe they own the organisation that employs them, and thus have carte blanche to do whatever they wish; this is not so. "Managing directors and chief executives are not free agents and are directly accountable to the Board of Directors and ultimately, through them, to the shareholders. They have an absolute duty to exercise care in their proposals and actions, and to hold the company in trust for future generations." (Garratt, 2004:15).

The executive officers comprise of a number of individuals with the prefix "C" in front of their respective portfolios. These can include people such as the CIO (chief information officer) and the CFO (chief financial officer) and others. It is now important for the purpose of the framework mentioned in the goal of the chapter to briefly discuss the committees involved in the corporate governance of the organisation.

2.2.4 Committees

In addition to the key corporate role-players are committees that oversee their actions and communicate their intentions to outsiders. These committees are:

- The audit committee, which oversees the corporation's financial reporting process and works with the internal audit division as well as the independent external auditors who both ensure that the organisation's financial controls are in order.

- The corporate governance committee (comprised solely of independent directors) is central to the effective functioning of the Board and typically provides a leadership role in shaping the corporate governance of a corporation.

- The compensation committee has two interrelated responsibilities. Firstly it oversees the corporation's overall compensation programmes and secondly, it sets CEO, executive officer and senior management compensation.

For the purpose of this chapter, an expansion of the role of the internal audit division and external auditors is not given. However, later in this research study, it is shown that the internal audit division serves an important purpose with regards to project management.

This concludes the discussion on the key corporate role-players and the committees within which these role-players operate. A foundation has now been established regarding those who are involved in the corporate governance of corporations.

It is now important to discuss the current state of corporate governance. This serves to paint a picture of what has transpired in recent times with regard to the topic, and subsequent interventions that were brought in as a result of these events. It is shown that as a result of these interventions, organisations must now pay even more attention to the way IT projects are managed.

3. The state of corporate governance

The definition and key role-players of corporate governance have been discussed, it is now important to understand what the current state is.

3.1 The crisis in investor confidence

In recent times, nothing has undermined investor confidence in corporate leaders, governance, and the capital markets more profoundly than the endless stream of corporate failures and misdeeds, disclosure lapses, accounting irregularities, and, in the most disturbing instances, outright fraud and crime (Newquist & Russell, 2004:2).

Subsequently, these revelations have caused not only steep declines in company stock prices, but market valuations as a whole.

The single event attributed to bringing the world's attention to corporate governance was the collapse of America's energy giant Enron – one of the most admired companies in the United States of America (Paulson, 2002:2). The collapse, which was brought about as a result of gross mismanagement and malfeasance on the part of its Board and senior management, became a scandal of enormous magnitude.

South Africa itself has had its own fair share of corporate and organisational downfalls. One of the largest corporate scandals to hit South Africa was the failure of the Masterbond Group of Companies in the early 1990s (Nel, 2001:1). The company, over a number of years, had attracted approximately a billion rand by promising secured and thus seemingly safe investments.

As a result of highly speculative long-term projects, which generated little or no return, the Group collapsed and thousands of investors were left destitute,

many of them pensioners who had been specifically targeted and tempted with the "twin carrots of security and higher than normal interest rates".

As a result of these failures, South Africa and the U.S.A devised acts of legislation and corporate governance standards to restore investor confidence. Organisations that are listed on the Johannesburg Stock Exchange and on the New York Stock Exchange are now required to be compliant with their respective country's approaches (Harris & Kramer, 2003:1).

These acts of legislation and other important documents which are discussed in the section, puts into perspective the stance different countries have taken on the topic of corporate governance.

3.2 The Sarbanes-Oxley Act of 2002 (SOX)

On July 30, 2002, American President George W. Bush signed the Sarbanes-Oxley Act into American public law (SOX, 2002).

This legislation (referred to as SOX for the remainder of this research study) was created to restore investor confidence in American public markets, which were devastated by business scandals such as Enron, and lapses in corporate governance and internal controls (Holmstrom & Kaplan, 2003:1).

SOX is generally applicable to publicly traded companies only, including publicly traded bank holding companies. However, many private American firms are adopting its provisions to ensure their own practices are consistent with what is becoming the new standard for business conduct (RAI, 2003:1).

SOX was enacted to:
- demonstrate to investors a commitment to fairness and integrity in corporate America,
- deter corporate misconduct and restore investor confidence primarily by increasing the accountability of corporate executives, strengthening corporate governance and improving the transparency and reliability of audited financials,

- clarify and assign responsibility for corporate executives to ensure accountable company operations,

- increase the accountability of corporate executives for their decisions and advice and,

- restore confidence in the accounting profession.

SOX seeks to strengthen, and where necessary change the "tone at the top." It recognises that the Board of Directors, which is held accountable by a company's shareholders, is the focal point of the governance system. It is important to note that SOX not only affects American organisations, but also foreign companies that trade and operate in the United States.

As will be seen later, the inception of this document has had large ramifications for IT and project-oriented organisations.

South Africa also has its own overarching document on corporate governance. This document is now briefly discussed.

3.3 The King Report of 2002 on corporate governance (King II)

One of the earliest efforts of an emerging economy (such as in the case of South Africa) to establish a publicly defined standard of corporate governance was the King Code of Corporate governance (referred to as the King report) in 1994. The difference between this standard and SOX is that it is voluntary, (Malherbe & Segal, 2001:49; PWC, 2003:5).

The Code, released in November 1994, was the product of a committee convened by the Institute of Directors in South Africa following the publication of the Cadbury Report in the United Kingdom (Malherbe & Segal, 2001:49). The document has gained the support of a number of business associations as well as the Johannesburg Stock Exchange (JSE).

In 2002, the Institute of Directors instigated an update to the King Report of 1994. This new document, the King Report 2002 (King II, 2002), referred to for the remainder of this research study as King II, represents a revision and update of the 1994 report in an attempt to keep standards of corporate

governance in South Africa on par with those in the rest of the world (PWC, 2003:5).

By embracing the social, environmental and economic aspects of a company's activities, King II (2002) expands the scope of good governance further by advocating an integrated approach to corporate governance in the interest of a wide range of stakeholders. In this regard, King II (2002) encourages greater activism by shareholders, business and the financial press and relies heavily on disclosure as a regulatory mechanism (PWC, 2003:5).

The next section aims to shed further light on these documents by focusing only on aspects relevant to this research study.

4. SOX and King II implications on IT and project-oriented organisations

The previous section highlighted important events that led to acts of legislation and to reports endorsed by the JSE in South Africa (King II, 2002) and the U.S. government.

Both SOX (2002) and King II (2002) have numerous recommendations on how corporate Boards, senior executives and senior management should best serve and align business interests with their shareholders' investments.

It is now important, for the purpose of this research study, to focus on what implications these documents have on IT and project-oriented organisations.

The first discussion in this section focuses on internal control, and additional recommendations for organisations to comply with their respective country's reports and legislation.

4.1 SOX and Internal Controls

The Sarbanes-Oxley Act (SOX, 2002) stresses the importance of management's responsibility "for establishing and maintaining an adequate internal control structure and procedures for financial reporting". This is geared towards the improvement of transparency and accountability of public

company governance, accounting and reporting activities (Kahn & Blair, 2004:1).

The concept of an internal control is derived primarily from the accounting profession, and is generally understood within that context (Kahn & Blair, 2003:2). For example, the requirement that any company cheque over $US 5000 must be signed by two senior executives is a simple accounting internal control.

The advantage of such a control is that in the case of an audit, it relieves the auditor of having to review manually each cheque to see if it was properly approved. Instead, the auditor can review the company's documentation regarding this control, and by testing the control, the audit can proceed more quickly (Kahn & Blair, 2004:2).

In the IT profession, a basic example of an internal control would be a policy and procedure that requires every user to have a unique username and password in order to log on to the company's network.

According to PriceWaterhouseCoopers (PWC, 2003:18) the American Securities Exchange Commission (SEC) has, for a number of years, assigned responsibility for a company's financial reports and internal controls to management. SOX (2002) however, holds the chief executive officer (CEO) and chief financial officer (CFO) to a higher level of accountability.

SOX (2002) states that the CEO and CFO must certify that a company's quarterly (for domestic U.S. companies) and annual SEC filings fully comply with the Exchange Act and that the information contained in the reports fairly present, in all material respects, the company's financial condition and results of operations (PWC, 2003:18).

Should the CEO and CFO fail in these duties, direct criminal penalties of up to 20 years imprisonment and fines of up to $US 5 million can be faced. Therefore, SOX's intention is to prevent officers from pleading ignorance of a company's financial reporting misconduct.

The sections of SOX that hold relevance to this research study (ITGI, 2004:14 – 15; Lassiter, 2005:5) are summarised in Table 3.1

Table 3.1: Sarbanes-Oxley Requirements – Section 302 and Section 404

Section	Sarbanes-Oxley Internal Control Mandates	Relevance
Section 302: Corporate Responsibility for Financial Reports	- CEOs and CFOs certify financial statements. - Improve the transparency and reliability of audited financials. - Disclose any internal fraud. - Disclose deficiencies and corrective actions.	Financial statements relevant to IT investments and project management must be certified.
Section 404: Management Assessment of Internal Controls	- Internal control report stating that management is responsible for an adequate internal control structure. - A statement identifying the framework used by management to conduct the required assessment of the effectiveness of the company's internal control over financial reporting. - Assessment by management on the effectiveness of the controls. - External auditor attestation to the accuracy of management's assertion that internal controls are in place and are effective.	Requires an unprecedented level of alignment between IT practices and business practices and between technology management and financial management.

In Table 3.1, and with regards to Section 404, as part of their internal control activities, management (senior executives) is required to select a framework against which to evaluate their internal controls regarding financial reporting, and is then required to develop and execute a plan for evaluating, testing, and reporting on the effectiveness of those controls.

Once management has completed the assessment of the company's internal controls regarding financial reporting, the SEC requires management to

engage their independent and external auditors (depicted in Figure 3.1) to conduct an audit of that assessment. This attestation must also be included in the company's annual report.

Simultaneously, the King II report, whilst not making direct reference to internal control, introduces the concept of risk management. This is discussed in the section below.

4.2 King II and Internal Controls

King II regards internal control as part of the risk management process and assigns the responsibility for the entire process to the Board of Directors. Risk management represents the "process of identification and evaluation of actual and potential risks as they pertain to a company, followed by a procedure of termination, transfer, acceptance (tolerance) or mitigation of each risk" (PWC, 2003:18).

The South African Institute of Chartered Accountants has issued SAAS 400 (South African Account Standards) "Risk Assessments and Internal Control" (PWC, 2003:18).

SAAS 400 describes a system of internal control as consisting of "all the policies and procedures (internal controls) adopted by the management of an entity to assist in achieving management's objective of ensuring, as far as practicable, the orderly and efficient conduct of its business, including adherence to management policies, the safeguarding of assets, the prevention and detection of fraud and error, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information." (PWC, 2003:18)

Therefore, the sections of King II (2002) that hold relevance to this research study (King II, 2002:81) are summarised in Table 3.2.

Table 3.2: King II Requirements – Section 2 Chapters 1 - 4

Section	King II Risk Management Recommendations	Relevance
Section 2, Chapters 1 - 4	• A comprehensive system of control (by means of recognised frameworks) should be established by the Board to ensure that risks are mitigated and that the company's objectives are attained. • Disclosures should also be made about the risk management process.	A generally accepted framework for internal project controls must be implemented by the organisation. This framework must ensure that effective control of projects from conception to delivery is in place. Requires an unprecedented level of alignment between project management and business practices and between technology management and financial management.
	• Risks should be assessed on an ongoing basis, and control activities should be designed to respond to risks throughout the company. • These controls should be monitored by both line management and assurance providers.	Requires information pertaining to projects to be escalated to senior management and executives for them to communicate to the Board on the progress of projects underway.
	• Reports from management to the Board should provide a balanced assessment of the significant risks and the effectiveness of the system of internal control in managing those risks.	Project risk assessments should be communicated to the project authorising body before the project is implemented.

As per Table 3.2, King II also requires management (senior executives) to select a framework against which to evaluate their internal controls regarding financial reporting.

Therefore, by placing Tables 3.1 and 3.2 together a comparison of the internal controls in SOX and King II can be best summarised in Table 3.3.

Table 3.3: A comparison between SOX and King II's approach towards internal controls.

Section 404 - SOX	Section 2 Chapters 1 - 4 - King II
• Requirement for quarterly certifications by the CEO and CFO with respect to their responsibility regarding the disclosure controls and procedures. • An annual internal control report prepared by management to be included in annual filings with the SEC.	• Internal control is considered part of the risk management process. • The Board must implement generally recognised risk management and internal control frameworks. • Disclosures must be made regarding the risk management process.

King II (which adopts SAAS 400) differs slightly from SOX (as depicted in Table 3.3). King II requires that the Board of Directors implement and maintain generally recognised risk management and internal control frameworks to provide reasonable assurance regarding the achievement of the organisational objectives described above (DLT, 2001:5; PWC, 2003:6).

It also recommends that risks should be assessed on an on-going basis and that control activities should be designed to respond to risks throughout the company.

It requires the Board to make use of generally recognised risk management and internal control frameworks in order to maintain a sound system of risk management and internal control; in order to safeguard shareholders' investments; support business objectives and sustainability; and behave responsibly towards all stakeholders having a legitimate interest in the company.

Although King II (2002) places the accountability for the total process of risk management on the Board, it states that management (senior executives and senior management) is responsible to the Board for designing, implementing

and monitoring the process and integrating it into the day-to-day activities of the company.

It also suggests that a Board committee should be appointed to assist the Board in reviewing the process and the significant risks facing the company (DLT, 2001:5; PWC, 2003:6). With this in mind, the corporate governance committee in Figure 3.1 would serve to facilitate these recommended functions.

With the relevant sections in SOX and King II identified, it is now important to highlight aspects that are relevant to this research study.

4.3 King II and SOX implications on IT organisations

Executive officers in charge of IT in an organisation, predominantly termed chief information officers (CIOs), must now ensure that their organisation has the necessary systems, controls and procedures in place to ensure the accuracy of financial reporting performed in conjunction with an audit of financial statements (Lassiter, 2005:5).

Therefore, it is plausible to state that IT must play an active and central role in each of the internal control and risk management activities highlighted in the King II and SOX documents. Kahn and Blair (2003:5) further state that IT executives (CIOs and others) must endeavour to understand the connection between the internal controls regarding financial reporting required by, in particular, Section 404 of SOX and the types of controls that IT uses in the management of information and systems.

By understanding this connection, IT can efficiently perform its responsibilities and play a leadership role in the SOX compliance process. As already stated, King II requires the implementation and maintenance of a "generally recognised risk management and internal control framework", whilst SOX also stresses the need for a framework of internal controls.

Therefore, CIOs need a recognised and generally-accepted IT framework that is adaptable to ongoing changes in the regulatory and business environment.

For the purpose of this chapter, Figure 3.2 (below) only illustrates where the internal control structure for IT will fit into the generic corporate governance structure illustrated in Figure 3.1. Furthermore, the internal control role of IT within an organisation will be termed IT governance (an expanded definition is given in the next chapter).

Corporate Governance

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┌─────────────────────────────────┐
│          Shareholders            │
└─────────────────────────────────┘
                │
┌──────────────────────┐          ┌──────────────────────────────┐
│  Board of Directors   │──────────│ Corporate Governance Committee│
└──────────────────────┘          └──────────────────────────────┘
                │                                │ Monitors
        ┌──────────────┐         ┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
        │     CEO       │            King II and SOX Implementations
        └──────────────┘         └ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
                │                  │ Apply selection of internal control evaluation framework
        ┌──────────┐              ┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
        │   CIO     │◄──────────►│         IT Governance          │
        └──────────┘              ├ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┤
                                   │        Internal Control        │
                                  └ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
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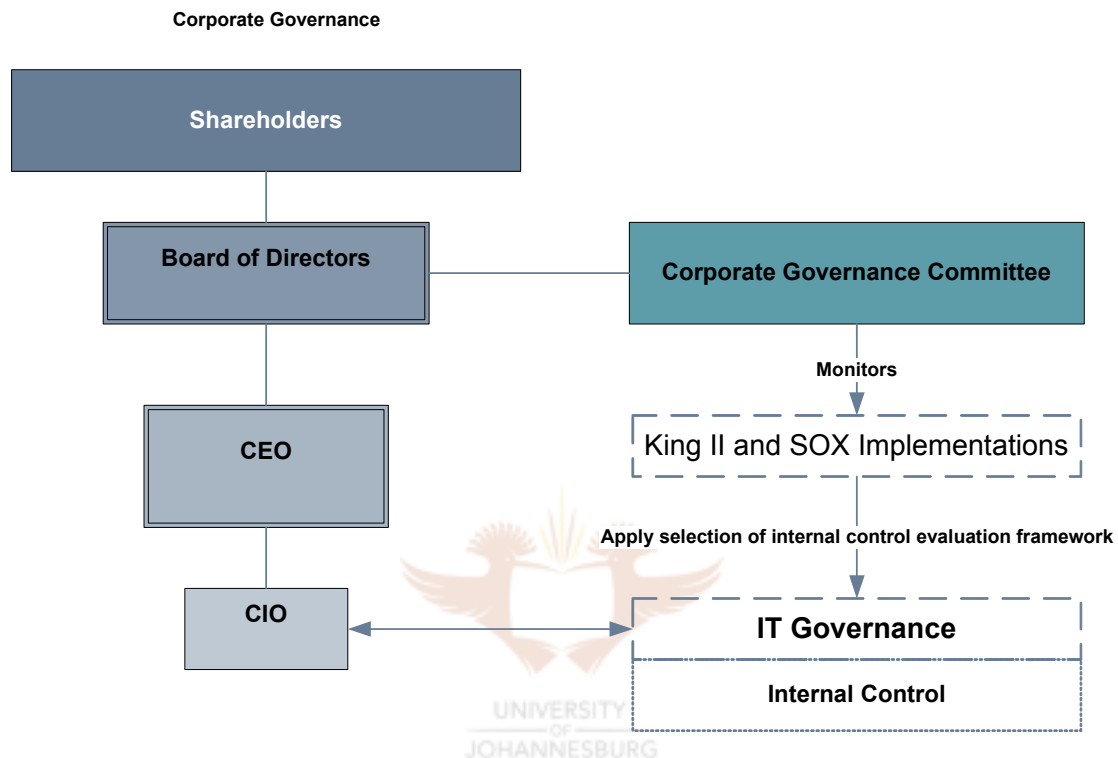
Figure 3.2: A high-level framework that encompasses IT governance

As depicted in Figure 3.2, the corporate governance committee (introduced earlier in this chapter) should implement SOX and King II compliance measures by selecting an internal control evaluation framework. The committee directs executive and senior management to appoint an individual (usually the CIO) to monitor IT's compliance with overall corporate governance.

Subsequently, the CIO will then be required to make use of an IT governance framework (based on best practice) that maps onto this internal control evaluation framework.

This framework must be devised in such a way that it serves to enhance the CIO's knowledge of internal control, assist in understanding the implications of

a compliance plan, develop a compliance plan to address information technology controls and be able to integrate this into the overall corporate governance compliance plan (Kahn & Blair, 2003:5; Lassiter, 2005:5).

However, and as will be shown in the next chapter, compliance is not the only function of IT governance. IT governance also serves to align all IT investments with corporate strategy.

As has been shown, the governance of IT is crucial for SOX and King II compliance. It is now important to understand what role project management has to play with regards to internal control. The next section aims to shed light on this aspect.

4.4 King II and SOX implications on project-oriented organisations

As already mentioned in Chapter 2, globally organisations are becoming more and more project-oriented in the way they conduct business. Therefore, it is important to understand what implications the internal control mandates stated in King II and SOX have on these organisations.

In Table 3.1, it was shown that Section 302 of SOX requires CEOs and CFOs to sign off on all financial statements. Weaver (2005:2) gives an example on how this relates to project management.

A projected future cash flow (income, expenses and profits) can be considered a financial statement and therefore the introduction of a new product on the market that has been developed by means of a project significantly affects this cash flow.

This is because changes in the product's release date affect the cash flow which has a direct bearing on the time the project is completed. In addition, this project could have very high cost overruns and might not be completed 100% according to scope, a factor that affects the marketability and ultimately, the sales value of this product.

From this example, it can be seen that project management has an influence on internal controls in the organisation.

Consequently, companies that conduct large projects need a process that details cost and schedule metrics for the projects with time-phased cost reporting and continually updated completion estimates (Schulte, 2004:1).

Therefore it can be stated that senior management require access to project performance data at all times in order for them to remain confident that this underlying framework and process is successful.

Therefore, the implications from the implementation of SOX and King II mandates on project-oriented organisations are the following (Weaver, 2005:5 – 6):

- The delivery time for projects needs to be accurately predicted.
- The cost of projects needs to be accurately estimated.
- Proper risk assessments (tying in with King II) are required to manage normal fluctuations in project performance.
- Effective monitoring and control systems need to be established in order to identify and predict trends and variances that assist in implementing corrective actions as and when required.
- Honest and transparency are vital aspects at all levels of project planning and control systems. Estimates of cost and time need to be at the forefront of all negotiation in order that management may acknowledge and act upon them.
- Organisations need to recognise unforeseen deviations to plans and to accept performance that does not conform to the original blueprint.
- Internal systems, including effective Project Offices, supported by effective tools need to be developed with a high degree of sophistication. Project data is the foundation of much of the corporate reporting now mandated by SOX and King II.

With these implications it can be stated that organisations need to develop a highly-sophisticated framework based on best practices that facilitates effective project management throughout the organisation.

By implementing such a framework, together with other tools and procedures, organisations not only serve to comply with SOX, King II (and other legislation

for that matter), but be able to properly align projects with corporate strategy. This also serves in fostering greater support from executives in the projects they approved of during inception. Figure 3.3 illustrates how project governance will fit under corporate governance.

Corporate Governance

- Shareholders
- Board of Directors
- Corporate Governance Committee
- CEO
- Monitors
- King II and SOX Implementations
- Apply selection of internal control evaluation framework
- CPO?
- Project Governance
- Internal Control
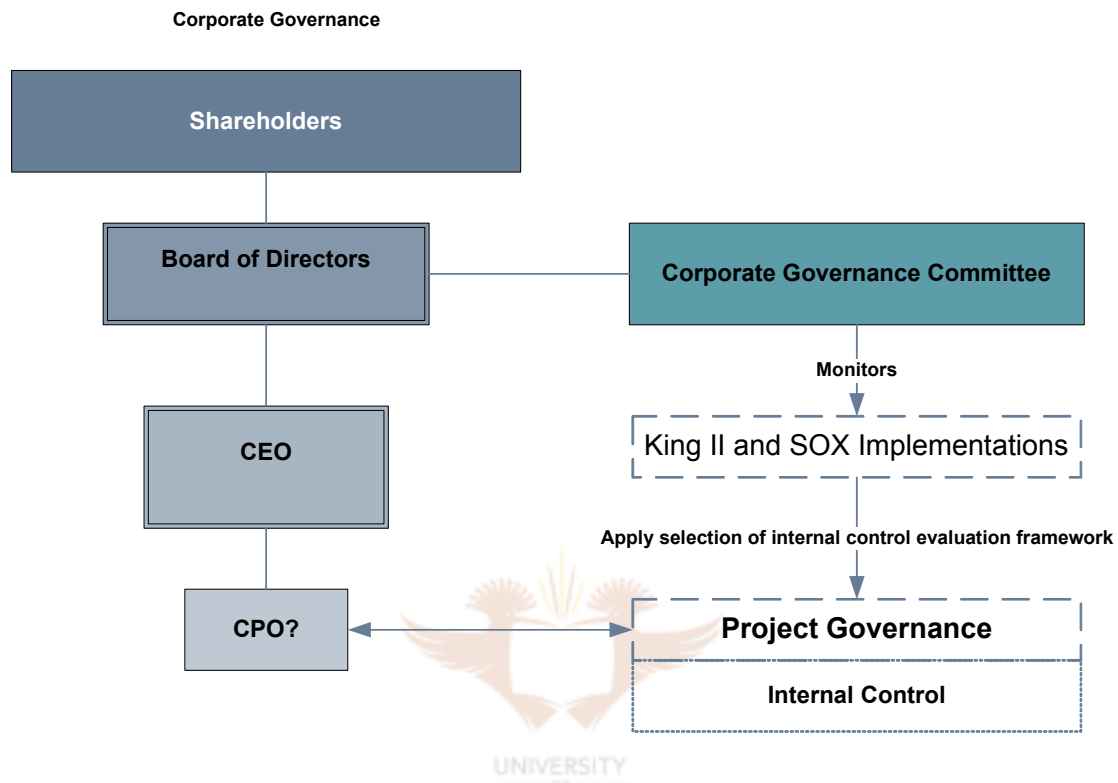
Figure 3.3: A high-level framework that encompasses project governance

Figure 3.3 indicates that just as in the case with IT governance, the corporate governance committee must be able to supervise the role of project management's affect on internal control. Subsequently, the committee must be able to understand relevant project data and then communicate this to the external auditors.

However, what is not so certain is whether there is a need for a dedicated individual who should supervise the project governance structure within the organisation. The need for such an individual, perhaps a "chief project officer" or CPO is determined further in this research study.

With the introduction of IT governance and project governance, it is now important to place these concepts into a generic corporate governance

structure, which serves to be the framework for the remainder of this research study.

4.5 A framework that aligns IT governance and project governance with corporate governance

Figure 3.2 and Figure 3.3 depict two high-level frameworks that align IT and project governance respectively with overall corporate governance. It is now necessary to place them within a corporate governance framework that addresses the needs of the organisation.

As already mentioned, SOX dictates that the Board of Directors must have an internal control evaluation framework by which they can monitor the internal controls of the organisation regarding financial reporting.

The SEC (Securities Exchange Commission) in the United States has suggested that frameworks such as COSO's (The Committee of Sponsoring Organisations of the Treadway Commission) be implemented by the Board (Kahn & Blair, 2004:6).

This framework is limited in terms of relevance to IT-controls and project management controls, and thus its focus is not IT or project management specific. The SEC does however indicate that other public frameworks meeting their requirements may be acceptable.

Therefore, the Board must delegate to senior management in their relevant positions, the implementation of their own respective frameworks for IT-controls and project management. An example of a high-level corporate governance framework embracing both IT and Project Governance is depicted in Figure 3.4.

Corporate Governance

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                    ┌──────────────────────┐
                    │     Shareholders     │
                    └──────────┬───────────┘
                               │
        ┌──────────────────────┴──┐              ┌─────────────────────────────────┐
        │   Board of Directors     │──────────────│  Corporate Governance Committee │
        └──────────┬───────────────┘              └─────────────────┬───────────────┘
                   │                                          Monitors │
            ┌──────┴──────┐                          ┌─────────────────┴───────────────┐
            │     CEO     │                          │   King II and SOX Implementations │
            └──────┬──────┘                          └─────────────────┬───────────────┘
         ┌─────────┴────────┐            Apply selection of internal control evaluation framework
    ┌────┴────┐      ┌───────┴───┐                              │
    │  CPO?   │      │    CIO    │                              │
    └─────────┘      └───────────┘                              │
                 ┌──────────────────────┐      ┌───────────────────────────┐
                 │    IT Governance     │      │     Project Governance     │
                 └──────────────────────┘      └───────────────────────────┘
                 ┌────────────────────────────────────────────────────────┐
                 │                    Internal Control                     │
                 └────────────────────────────────────────────────────────┘
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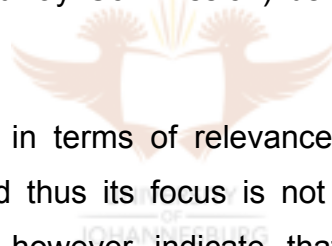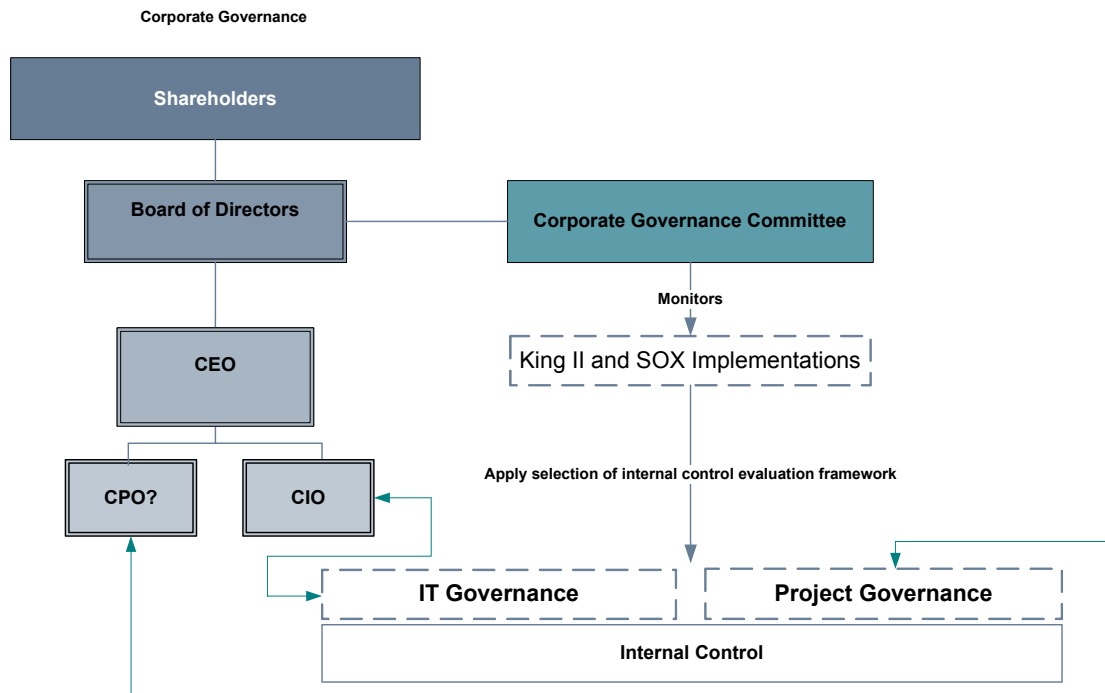
Figure 3.4: A high-level framework that encompasses both sets of governance

Figure 3.4 depicts a high-level framework that serves to align the IT and project management frameworks with corporate governance. The structure aims to satisfy all SOX and King II requirements, as well align IT projects with overall corporate strategy.

Furthermore, it is within this structure that the IT project sponsor has an important role to play. The structure is expanded upon further in this research study.

5. Research Value

This chapter has served to introduce the concept of corporate governance and its relevance with respect to IT and the project management profession. The framework developed as a result of legislation enacted in the United States of America and South Africa depicts the relationship between corporate governance and IT, and project management.

A few questions have arisen from this framework. Firstly, is there a need for a dedicated individual to oversee the project governance framework? Who has ultimate authority over the corporation's projects, and specifically, IT projects?

Of further relevance to this research study is to whom should the IT project sponsor report when seeking approval for a business case or seeking additional funds for a project?

Furthermore, what mechanisms should exist within this framework to facilitate greater internal control as well as align projects with overall corporate strategy? The proceeding chapters serve to elaborate on all these questions.

6. Conclusion

The goal of this chapter was to develop a high-level corporate governance framework that encompasses the role of information technology and project management in corporate governance.

The first objective of this chapter was to define what corporate governance was, as well as to describe who its role-players are. This was done in section 2 and a generic high-level governance framework was developed according to principles of corporate governance adopted by many organisations in the U.S.

The second objective (found in section 3) was to determine the current state corporate governance, by highlighting the crisis in investor confidence brought about by the downfall of large corporations. This resulted in legislation by the United States, and a report commissioned by the South African Institute of Directors. Both these documents (SOX and King II) were enacted to restore investor confidence.

The third objective (section 4) was to determine the implications these two documents had on IT and project-oriented organisations. This was done by highlighting the need for frameworks in order to monitor internal controls of an organisation. By doing so, the Board of Directors are able to monitor compliance with regulations and be able to serve their shareholders with confidence and integrity.

Therefore, the goal of this chapter was met by bringing together the two frameworks achieved in the third objective and devising a high-level corporate governance framework that encompasses IT and project governance.

This chapter therefore served to highlight the role and implications corporate governance has on professionals working in IT and in project management. As was mentioned in Chapter 1, executives must play a more active role in project management of their organisations.

As a result of SOX and King II, the Board of Directors and senior management can no longer afford to be ignorant about the day-to-day operations and projects in their organisations. It is required of them to develop frameworks, and processes in order that all members of the organisation may conduct their work diligently and with care such that the interest of all stakeholders and shareholders are taken into account.

Such a framework will serve to garner greater executive support for operations within the organisation, and specifically, support for IT projects. Furthermore (linking back to the previous chapter), it can also be stated that the Board of Directors are now accountable for failed IT projects as well as the large overruns in their budgets, which is ultimately money that they have been appointed to safeguard.

The next chapter serves to expand on the concept of IT governance, as well as recommend a framework that will not only serve to comply with corporate governance regulations, but also align IT investments with corporate strategy.

Chapter 4

Information Technology Governance

The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn't think they could learn before, and so in a sense it is all about potential.

Steve Balmer – Chief Executive Officer of Microsoft Corporation (1956 -)

1. Introduction

1.1 Background

In the previous chapter, a high-level corporate governance framework encompassing the role of information technology and project management was developed. This was done as a result of legislation and regulation enacted to restore investor confidence after the downfall of corporations in the United States of America and in South Africa.

This chapter serves as the first part in the expansion of the framework as it focuses further on the role of IT governance in an organisation.

1.2 Goal

The goal of this chapter is to present a holistic view of IT governance.

1.3 Objectives

In order to reach the goal mentioned above, some objectives must first be met:

- The first objective is an expansion of the definition of IT governance given in Chapter 3 as well as an elaboration on its benefits and relation to IT project management.
- The second objective is a determination of the role played by the CIO and IT governance committees within IT governance.
- The third objective is an investigation into existing IT governance frameworks.

1.4 Layout

The first section expands on the brief definition of IT governance given in the previous chapter. This includes additional aspects not mentioned before.

The second section elaborates on the role a CIO should play in IT governance. This section also introduces the concept of IT governance committees and highlights their key functions.

The third section investigates the IT governance frameworks that have been embraced by industry. It is shown where and how these frameworks are placed within the corporate governance framework.

2. IT governance and it's importance

The previous chapter highlighted the need for IT to play an active and central role in each of the internal control and risk management activities highlighted in the King II and SOX documents. This was collectively termed "IT governance". It is now important, for the purpose of this research study, to expand on this definition to encompass the role IT plays with regards to overall corporate strategy.

It will be shown that IT projects form part of IT governance (as well as project governance in the following chapter), thus it is important to have a definition of IT governance that includes an aspect such as the alignment of IT investments (projects and otherwise) with strategy.

2.1 Definition of IT governance

Information technology's use in the business environment has experienced a fundamental transformation in the past decades (Van Grembergen, 2004:4). Subsequently, academics and practitioners who conducted research in this emerging knowledge domain formulated a variety of definitions for IT governance.

The first definition, from the Ministry of International Trade and Industry in Japan (MITI, 1999) defines IT governance as "the organisational capacity to control the formulation and implementation of IT strategy and guide to proper direction for the purpose of achieving competitive advantages for the corporation".

This definition is expanded by Van Grembergen (2002), who defines IT governance as "the organisational capacity exercised by the Board, executive

management and IT management to control the formulation and implementation of IT strategy and in this way ensure the fusion of business and IT".

This definition places further emphasis on the fact that IT governance is an entity implemented at every level of an organisation, from the Board through to the project level.

The IT governance Institute's definition (ITGI, 2001) is that "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 strategy and objectives".

Despite the fact that these definitions differ in some aspects, they do focus on the same issues, such as the link between business and IT. However, the definition from the IT Governance Institute (ITGI, 2001) also explicitly states that IT governance is an integral part of enterprise governance, which the ITGI has interchangeably used, with corporate governance, which was defined, in the previous chapter.

The link with corporate governance is a very important premise as it re-introduces the element of internal control, and focuses on safeguarding shareholder investment and maximising shareholder value.

Therefore, the ITGI's definition will be used as the reference in this chapter, even though it should be recognised that the link with corporate governance is implicitly present in Van Grembergen's (2002) definition as well.

2.2 The difference between IT governance and IT management
Despite the existence of a common element regarding the link of IT with the present and future business objectives of an organisation, there is a clear and distinct difference between IT governance and IT management, which is illustrated in Figure 4.1.
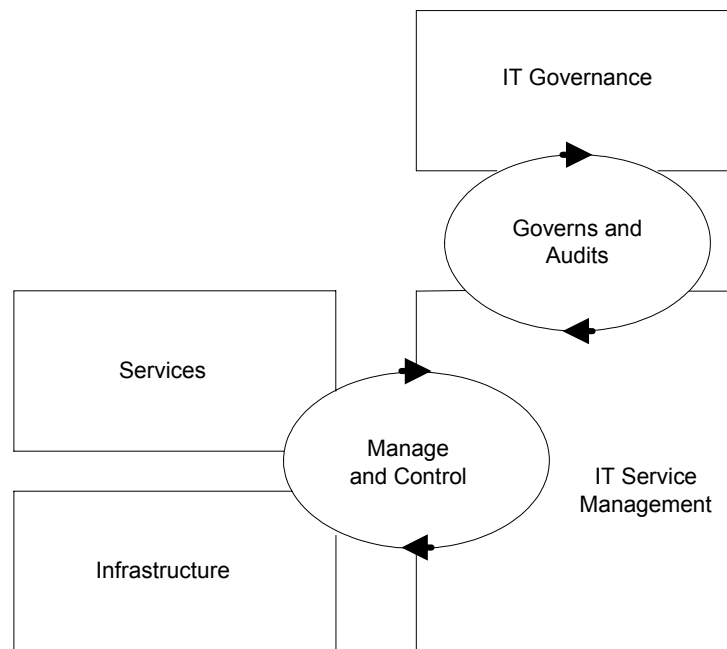
Figure 4.1: The difference between IT governance and IT management (Sallé, 2004:3)

As can be seen from Figure 4.1, IT management (also termed IT service management) is focused on:

- managing and controlling the efficient and effective supply of IT services and products
- managing and controlling the IT operations within the IT infrastructure.

The essential difference between the two concepts is that IT management encompasses the decisions an individual makes, whilst IT governance is the according to which decisions are made (Drew, 2002:2; PA, 2005:2). Governance ensures that good decisions are constantly made and that someone is held accountable for those decisions.

The importance and complexity of IT management should not be underestimated, but whereas elements of IT management and the supply of IT services and products can be outsourced to an external provider, IT governance is organisation specific, and direction and control over IT cannot be delegated to the market (Peterson, 2003).

McLane (2003:14) suggests that IT performance is beyond the scope of IT management itself. However, Van Grembergen (2004:272) states that the top

governance layer must be extensively supported by the lower layers in the enterprise who should provide the information needed in its decision-making and evaluation activities.

Subsequently, the lower layers need to apply the same principles of setting objectives, providing and getting direction, and providing and evaluating performance measures. As a result, good practices in IT governance need to be applied throughout the enterprise.

With the definition of IT governance and the differences between it and IT management established, it is worthwhile placing into perspective the importance of IT governance's role within the enterprise.

2.2 The importance and benefits of IT governance

Society had high expectations for the role of IT and the positive impact it could make, tending to see IT as a "silver bullet" (Daly, 2002; McLane, 2003:13). However, it can also be stated that corporate IT has not come close to delivering the benefits companies were expecting.

This argument is supported by the statistics on IT project success rates given in Chapter 2 and with the Gartner group claiming that world-wide business spending on IT in 2005 will exceed $2US Trillion (Zimmerman, 2005:1); there is therefore increasing pressure for IT to deliver results.

IT has become a critical driver of business success but Boards of Directors have not recognised the importance of these developments and tend to leave IT operations to management (Van Grembergen, 2004:271). Lack of interest or expertise in technological issues are significant factors which contribute to their neglect.

Guldentops (2004a:271) claims that Boards have always scrutinised business strategy and strategic risks and consequent to this, IT has tended to be overlooked even despite the fact that it involves large investments and huge risks. Reasons for this include:

- The technical insight required to understand how IT enables the enterprise — which creates risks and opportunities

- The tradition of treating IT as an entity separate to the business
- The complexity of IT, even more apparent in the extended enterprise operating in a networked economy.

Therefore closing the IT governance gap has become imperative as it becomes more difficult to separate an organisation's overall strategic mission from the underlying IT strategy that enables that mission to be fulfilled (Van Grembergen, 2004:271).

IT governance is ultimately important because of a disparity between expectations and realisations. Furthermore, IT governance extends the executive team's mission of defining strategic direction and ensuring that corporate objectives (broken down from the strategic direction) are met, risks are managed and resources are used responsibly.

In addition, a survey conducted by the Centre for Information Systems Research at the Massachusetts Institute of Technology's Sloan School of Management (Hoffman,2004a:para.1) claimed that business with superior governance practices generate 20% greater profits on average than other companies that share similar goals of making IT spending more effective and better aligning technology resources with business needs. Therefore, there are incentives for creating IT governance structures within an enterprise.

To summarise, effective IT governance ensures the following (Duffy, 2003:2):
- It protects shareholder value which means investors' money is properly utilised (Accountability).
- Makes clear that IT risks are quantified and understood – which is essential for King II and SOX compliance (Measurement).
- Directs and controls IT investment, opportunity, benefits and risks (Controls).
- Aligns IT with the business while accepting IT as a critical input to and component of the strategic plan, influencing strategic opportunities (Alignment).
- Sustains current operations and prepares for the future (Adaptability).
- Is an integral part of a global governance structure (Organisation).

For the purpose of this research study, it is now important to place into perspective how IT governance and IT project management relate and how governance provides mechanisms that facilitate better enterprise project management.

2.3 The relation between IT governance and IT project management

Schoeniger (2003:2) states that despite most organisations having processes for making decisions about IT spending and projects, it does not necessarily constitute governance.

Beran (2003:1) states that the implementation of an effective IT governance framework helps to manage proposed IT initiatives and that such a framework provides a structure for ensuring that decisions regarding IT, support business strategy. It ensures that feasible projects obtain the necessary funding and in a short timeframe addresses competitive threats or pursues new opportunities (Schoeniger, 2003:2).

Furthermore, and with particular relevance to the previous chapter, Schoeniger (2003:2) believes that IT governance helps avoid rogue spending and avoids competing projects that waste capital. It ensures that the IT organisation and the lines of business share accountability for IT projects and provides a framework for measuring their effectiveness.

Therefore the additional facet of IT governance, apart from ensuring the effective supervision of internal control over financial reporting which was introduced in the previous chapter; is the alignment of IT projects with corporate strategy such that they are seen as deliverers of value to the business and ultimately to the shareholders who own the business.

This is depicted in Figure 4.2, which is a modified version of the role IT governance plays in corporate governance.
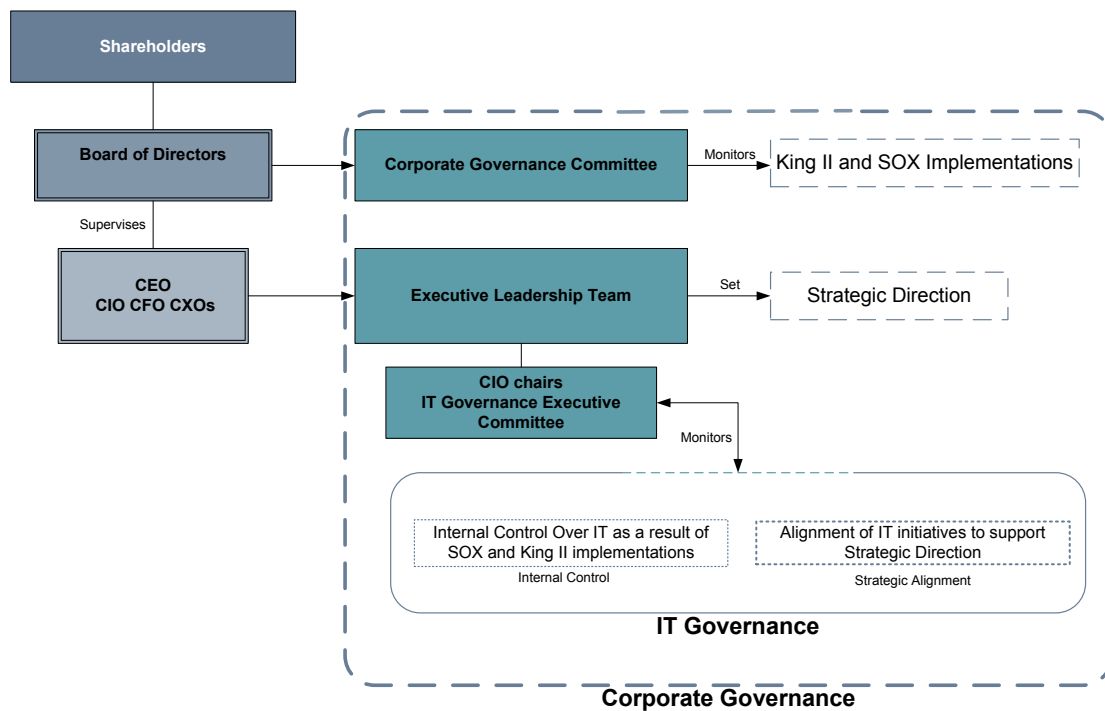
Figure 4.2: Internal control and strategic alignment of IT investments.

Duffy (2003:2) adds that IT governance demonstrates essential guidelines, which are invaluable for the Board of Directors in that it allows them to validate all decisions for which they will be held accountable.

It is therefore important for the Board to have adequate information provided to them via mechanisms and sub-committees dedicated to IT governance in order to make the right decisions.

The next section aims to elaborate on the roles of the chief information officer (CIO) and the IT governance committees with regards to the IT governance's dual role, which, as already stated is the internal control of IT and the alignment of IT initiatives with corporate strategy.

3. The roles of the CIO and IT governance committees

3.1 The role of the CIO

Different organisations have varying titles for their IT executives. Some titles include CIO and Executive Vice President, CIO and Senior Vice President and CIO and Vice President whilst some even use the term chief technology officer or CTO. For the purpose of this research study however, only the term CIO (chief information officer) will be used.

The CIO can be best described as the highest-ranking IT executive who typically exhibits managerial roles requiring effective communication with top management; a broad corporate perspective in managing information resources; influence on organisational strategy; and responsibility for the planning of IT to cope with a firm's competitive environment (Gottschalk, 2004:255).

Furthermore, the CIO has to coordinate sources of information services spread throughout and beyond the boundaries of the firm. The CIO thus has a wider set of responsibilities that must constantly evolve with the corporate information needs and with information technology itself. It has also been suggested that the CIO's ability to add value is the biggest single factor in determining whether the organisation views information technology as an asset or a liability.

The CIO is in a position to exert influence on the decisions made and provide effective leadership (McLane, 2003:23). The role of the CIO is also becoming far more (in the case of larger organisations) business oriented than technology oriented (Duffy, 2002). This view is supported by Bushell (2003a) who states that the CIO has become a "true business manager" who understands what needs to be done with technology, and how it can drive the results of an organisation.

Furthermore IT now has to think of the Board of directors as being a stakeholder. Directors are now effectively accountable for what happens in IT and hold the CIO's more responsible for their actions (Bushell, 2003a).

The "State of the CIO" survey (CIO, 2004a) conducted by the CIO Magazine in 2004 showed that a new mandate has emerged for CIOs – that of reducing costs whilst simultaneously using IT to drive competitive advantage. Varon (2005:2) claims that CIOs have learned that IT-enabled innovation is an effective method of solving this apparent paradox.

Therefore, the challenge is for CIOs to ensure that IT projects in the organisation are innovative enough to drive the business strategy and to deliver value to the enterprise.

Varon's (2005:2) argument is supported by Gissler (2004:1) who adds additional tasks to the CIO's agenda. These include:

- Controlling and reducing corporate operating costs
- Maximising the return on past investments by "revitalising" IT infrastructures
- Investing in innovative technologies that deliver business value in short time scales
- Managing corporate risks better.

In addition to these tasks, it is worthwhile summarising key findings from the "State of the CIO" report from 2004 (CIO, 2004a). This will serve to paint a more accurate picture of what exactly is expected of CIOs, as well as additional aspects that will give the reader a better understanding of their roles in the organisation.

This is depicted in Table 4.1.

Table 4.1: The State of the Chief Information Officer in 2004: Survey conducted by CIO Magazine (CIO, 2004a)

The State of the CIO - 2004	
Tenure	The average CIO remains in their existing job for 4 years and 7 months.
Background and previous experience	Most CIOs are from an IT background. The majority (70%) listed IT as their primary area of experience, followed by business operations (7%) and consulting (7%). In addition to IT, the most common areas of previous experience included consulting (62%), business operations (45%) and administration (34%).
Critical skills	The top skills needed for the job of CIO include the ability to communicate (86%), strategic thinking and planning (72%) and understanding business processes and operations (71%).
Time management	Strategy and vendor management took up most of the CIO's time in 2004. CIO's spend most of their time interacting with the rest of the

	company's senior executives (71%), strategic planning (58%), interacting with vendors/outsourcers/service providers (54%) and learning about technologies/making strategic systems decisions (53%).
Challenges	CIOs indicated that greater communication between IT and the business units was needed. Unrealistic or unknown expectations from the business, inadequate budgets, and shortage of time for strategic thinking and planning are the greatest hurdles to CIO's effectiveness.
Priorities	Streamlining business processes and alignment. The top five management priorities included increasing business efficiency through IT-enabled processes improvement, aligning IT and business goals, improving internal customer satisfaction and creating competitive advantage through IT and controlling IT costs. Alignment is a top priority for CIOs as well as controlling or lowering IT spending.

As can be seen from Table 4.1, the CIO's tenure within the enterprise is of long duration and therefore serves a crucial role within the enterprise. It is worthwhile noting that the aligning of IT and business goals is a priority. This links back to Chapter 2 and the statistics presented on IT project success rates, which had "a lack of clear business objectives" as a reason for the failure of projects.

It is the responsibility of the CIO and senior management to ensure that IT investments, and in particular IT projects have clear business objectives before they are implemented. CIOs should justify and scrutinise all IT projects to ensure that they demonstrate competitiveness.

Therefore to summarise, the CIO is the Figure-head of IT governance in an organisation. It is the CIO who is responsible for IT's compliance with corporate governance and also responsible for IT's role in delivering value to the business and ultimately, its shareholders.

It is now important to understand the functionality of the IT governance committees as they will make use of the IT governance framework which was referred to in the previous chapter.

3.2 The role of the IT governance committees

As already mentioned, IT governance not only concerns itself with the internal control aspects of information technology within an enterprise, but also the alignment of all IT investments with corporate strategy.

It is now an increasing practice to place IT governance committees (sometimes termed IT steering committees) at various levels within an organisation in order to ensure that well-designed, well-understood and transparent mechanisms which promote desirable IT behaviours and individual accountability exist in an organisation (Hoffman, 2004a:1).

At the top of the hierarchy is the IT governance executive committee that is primarily responsible for setting IT direction and priorities consistent with strategic business direction as well as approving the strategic IT plan.

With particular relevance to this research study, it ensures that IT projects achieve desired business results and provides the appropriate process to ensure efficient governance bodies (Callahan, Bastos & Keyes, 2004:348).

Furthermore, the CIO is an integral member of the IT governance executive committee, and as such participates in all committee tasks and responsibilities. The governance committee should ideally consist of all executive officers and senior management who represent each business unit within the organisation (Hoffman 2004: 1 para 4).

Moreover, the committee reports to the Board of Directors on critical issues relating to competitive advantage, operational risk, security and regulatory compliance (CIO, 2004b: para.6; Hurwitz, 2005: para.10)

The IT governance sub-committees throughout the organisation (made up of senior managers and other senior employees within each business unit) set about their business with the strategic IT plan in hand. The plan seeks to guide the business which depends on a predictable and reliable IT infrastructure (Callahan, et al. 2004:348).

The committees receive direction and guidance from the top committees and set out various objectives based on the strategic IT plan.

These committees utilise budget and available human resources, and ensure that proposals for IT-related work follow defined business case criteria, monitor project implementation and results, and communicate and support the IT direction of the organisation.

This theory is supported by a practical example at Old Mutual, a leading South African financial services business (Havenga, 2003:3). The corporation ensures a close link between the executive team that drives strategic decisions and the IT governance committee that makes IT investment decisions. In 2003, the IT governance executive committee met every six weeks to evaluate large projects.

Any IT investment that exceeded R24 million (using the exchange rate of eight rand to one dollar) could be approved by the committee. For projects below this threshold, the business units (who have their own IT governance committees or sub-committees) could approve it.

This is depicted in Figure 4.3.
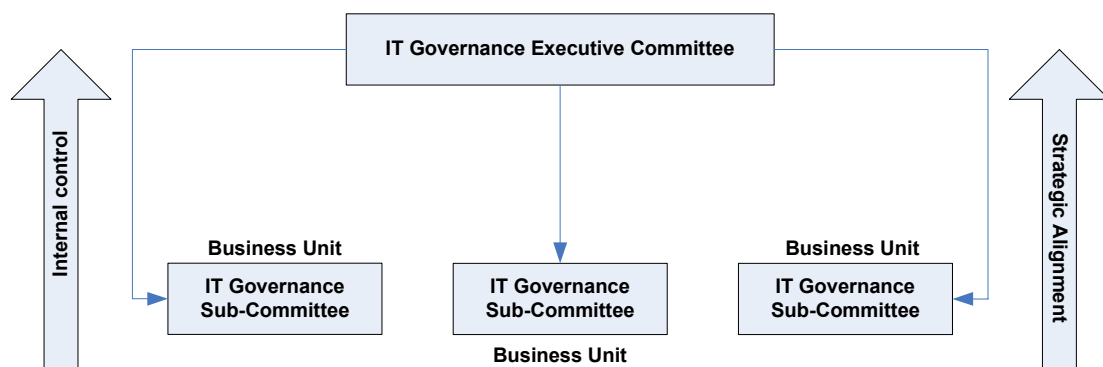
Figure 4.3: IT governance committees.

Figure 4.3 shows that each IT governance sub-committee receives direction from the executive committee. Therefore, as is with the case at Old Mutual, individual business units make a business case for a project and specify the benefits that are to be delivered. The IT governance committee for that

business unit tracks project results to ensure that benefits realised are in line with the original business case.

This structure achieves the goal of IT governance, which is to provide structures for IT decision making, assigning authority and roles, prioritising projects and allocating resources. It furthermore assists with the management of risk, a key aspect of IT governance and once again, something that is essential in corporate governance.

With the roles of the CIO and IT governance committees now clarified, it is important to determine the existence of frameworks that would improve an organisation's governance of their IT. The following section elaborates on this aspect.

4. Existing IT governance frameworks

The importance and relevance of IT governance within an organisation has been established. It is now important to determine whether any IT frameworks governance exist.

One of these frameworks will then be utilised within the corporate governance framework mentioned in the goal of the research study.

4.1 Control Objectives for Information and related Technology (COBIT)

COBIT (Control Objectives for Information and related Technology) presents an international and generally accepted IT control framework enabling organisations to implement an IT governance structure throughout the enterprise (Guldentops, 2004a:270; ITGI, 2000).

Since its first release by the IT Governance Institute, COBIT has been adopted in corporations and by governmental entities throughout the world (McLane, 2003:7). All portions of COBIT, except the Audit Guidelines, are considered an open standard (Guldentops, 2004a:277).

COBIT, which is now in its third edition, delivers a framework responding to management's need for control and measurability of IT by providing tools to

assess and measure the organisation's IT environment against 34 IT processes (ITGI, 2000).

The main theme of this framework centres around business orientation that starts from the assumption that IT needs to deliver the information required by the enterprise to achieve its objectives, which in turn, need to be managed by a system of naturally grouped processes (Guldentops, 2004b:21).

By promoting process focus and process ownership, COBIT is designed to be employed as a comprehensive guidance for management and business process owners.

COBIT is best understood by viewing it as a three-dimensional framework, depicted in Figure 4.4.
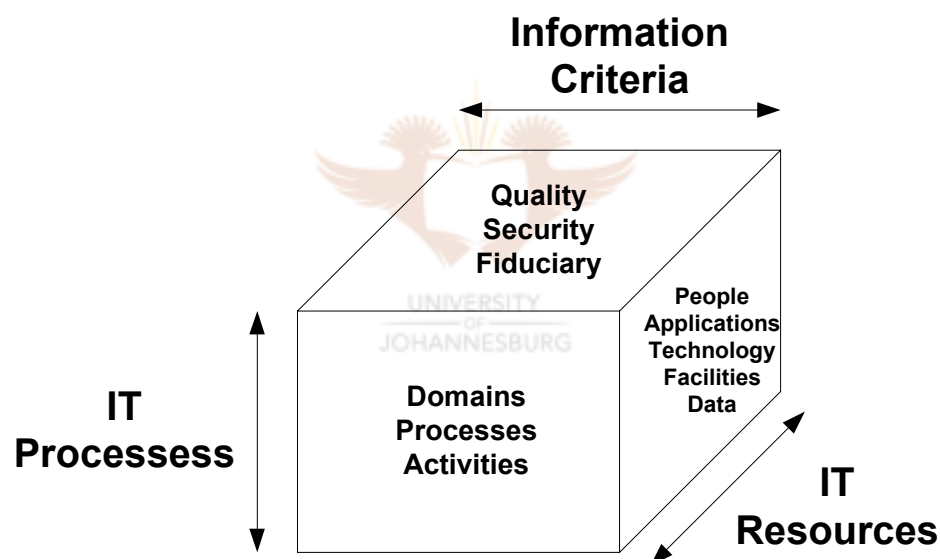
Figure 4.4: The COBIT "Cube"

As per Figure 4.4, the three dimensions are Information Criteria, IT Processes, and IT Resources (ITGI, 2000:16). The interactions among these three dimensions help to achieve the business objective. The Information Criteria are minimum standards that information is required to meet in order to fulfil business goals such as:

- Quality, Cost and Delivery - Quality requirements
- Confidentiality, Integrity and Availability - Security requirements

- Compliance, Reliability, Effectiveness and Efficiency - Fiduciary requirements.

These criteria can be either primary or secondary in nature. The IT Resources required to obtain said information are people, applications, technology, facilities, and data.

The IT Processes are present to ensure that information is gathered properly and meets the Information Criteria.

The processes (which total 34) are categorised within four domains, which contain activities (detailed control objectives) that can be executed, depicted in Table 4.2.

Table 4.2: COBIT's four domains (ITGI, 2000)

COBIT's IT Process Domains	
Planning and Organisation	This domain covers strategy and tactics, and concerns the identification of the way IT can best contribute to the achievement of the business objectives. Furthermore, the realisation of the strategic vision needs to be planned, communicated and managed for different perspectives. Finally, a proper organisation as well as technological infrastructure must be put in place.
Acquisition and Implementation	To realise the IT strategy, IT solutions need to be identified, developed or acquired, as well as implemented and integrated into the business process. In addition, changes in and maintenance of existing systems are covered by this domain to make sure that the lifecycle is continued for these systems.
Delivery and Support	This domain is concerned with the actual delivery of required services, which range from traditional operations over security and continuity aspects to training. In order to deliver services, the necessary support processes must be set up. This domain includes the actual processing of data by application systems, often classified under application controls.
Monitoring	All IT processes need to be regularly assessed over time for their quality and compliance with control requirements. This domain thus addresses management's oversight of the organisation's control process and independent assurance provided by internal and external audit or obtained from alternative sources.

Each of the 34 high-level objectives identifies which information criteria are most important in that IT process. They also state which resources will usually be leveraged and by doing so, provide considerations on what is important for controlling that IT process (ITGI, 2000; Guldentops, 2004a:281).

In addition to the 34 high-level objectives are 318 detailed objectives. For example a detailed objective under the "Planning and Organisation Domain", namely PO10 (Planning and Organisation objective 10) applies to the manner in which an organisation should manage its projects (ITGI, 2000).

COBIT is essentially a tool that allows managers to bridge the gap with respect to control requirements, technical issues and business risks and communicate that level of control to stakeholders (Guldentops, 2004a:279). This is an important criterion for SOX and King II compliance (referred to in the previous chapter).

COBIT is complementary to the COSO framework (also mentioned in the previous chapter) (Kahn and Blair, 2004:10). Furthermore, ITIL (Information Technology Infrastructure Library), that is a set of best practices and standards for IT service management complements COBIT, (Langley, 2003: para.3; Spafford, 2003:3). This implies that COBIT provides the IT governance framework that governs and audits the IT service management component catered for by ITIL.

A detailed discussion of ITIL is not within the scope of this research; however, the author recognises its importance with regards to IT service management and its ability to complement COBIT.

COBIT is a generally accepted standard that is designed to be the break-through IT governance tool that helps in understanding and managing the risks and benefits associated with information and related IT (Newcombe, 2005: para.12; Van Grembergen, 2004:279).

In addition, the Information Systems Audit and Control Association has formulated a "Quick-start" version of the framework for small and medium-sized businesses, which contains a subset of the standard, and focuses on

elements that are viewed as most critical for organisations that lack the resources to pursue the complete standard (Spafford, 2003:3).

4.2 The S.P.O.R.T framework

An additional attempt to model elements of IT governance by means of a framework was carried out by the Robert Frances Group (RFG) (McLane, 2003:9; RFG, 2003:4). RFG views IT governance as a model that consists of five categories of activity within which IT should operate.

These five categories include:

- Strategy (S) – This encompasses the alignment of IT with business. Measurement metrics are included for IT projects and for planning.

- Policies, processes and procedures (P) – This entails the reliance of IT governance on clearly articulated business policies. These are then translated into solid procedures, which in turn apply the appropriate check and balances. IT processes then map onto the business processes.

- Operations and Organisation (O) – This involves the establishment and maintenance of the infrastructure for efficient and effective delivery of IT applications and services. The organisation component involves the roles and responsibilities of IT staff and how they map onto the remainder of the organisation.

- Regulations (R) – This entails regulation imposed by industry as well as aspects such as data protection and records retention.

- Technology (T) – Technology involves evaluation, selection, purchase, and management of the business applications, tools and their providers.

These categories are illustrated in Figure 4.5.
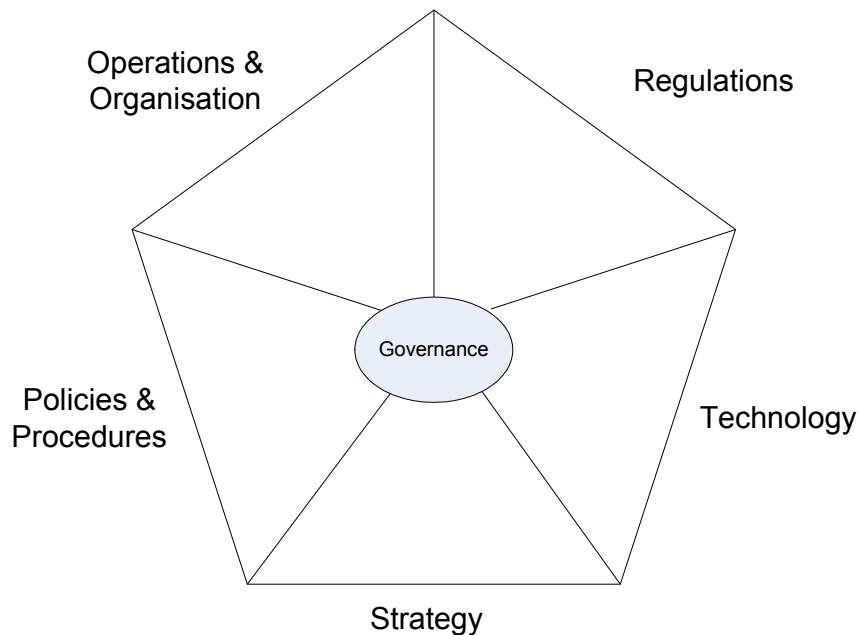
Figure 4.5: The S.P.O.R.T framework

The S.P.O.R.T framework is not as comprehensive as COBIT and does not contain detailed control objectives. Therefore, and because COBIT is a widely-accepted framework that is used extensively throughout IT organisations (Newcombe, 2005: para.12; Van Grembergen, 2004:279), it will be utilised for the remainder of this research study.

COBIT will now be included as an effective IT governance framework within the corporate governance framework that facilitates strategic alignment and ensures effective internal control of IT projects. This is discussed in the next section.

4.3. IT governance within a corporate governance framework
Compliance and strategic alignment of IT is crucial to any organisation implementing IT governance. Therefore, any framework that is implemented by an organisation, should ideally serve both these roles, which COBIT does.

Just as COBIT functions hand-in-hand with ITIL regarding IT service management, it should function hand in hand with a project governance framework for IT projects. This is supported by Hoffman (2004b:4) who suggests that such a relationship would serve the following purposes:

- Provide insight and advice to the Board of Directors on IT topics (portfolio visibility).

- Provide direction on IT strategy to senior management.

- Include Board members, key executives and to some degree, external IT experts.

- Facilitate decision making regarding IT spending levels, project plans and other operational issues.

- Provide oversight on day-to-day management of projects and the delivery of IT services to end users.

- Include senior executives, business unit leaders and IT managers (who sit on the various IT governance committees and sub-committees).

This relationship is depicted in Figure 4.6 below:
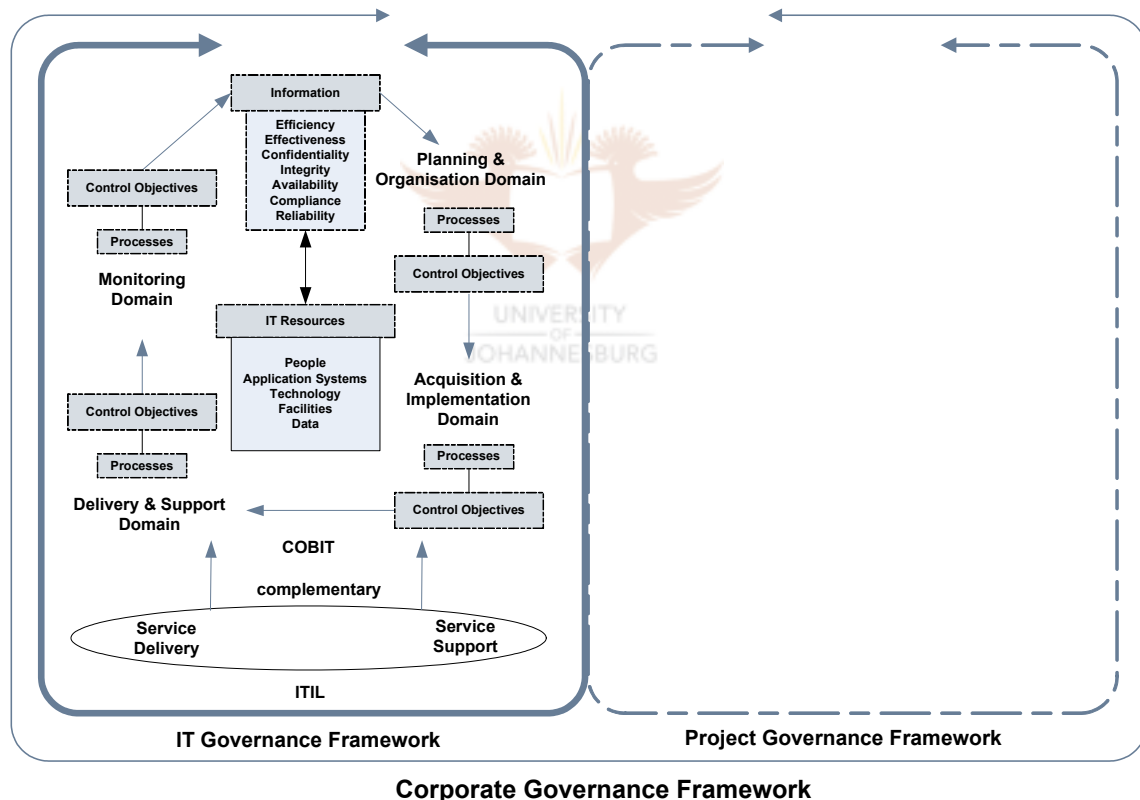
Figure 4.6: COBIT placed within a corporate governance framework

As can be seen in Figure 4.6, COBIT is controlled by the various IT governance committees, and is supported by its four domains, processes and their respective control objectives. It in turn, is complemented by ITIL, which focuses IT service management

This IT governance framework could ideally be applied together with a project governance framework that provides components (also supported by domains, processes and control objectives) which organisations can effectively implement in order to govern their IT projects.

The combination of using these frameworks is discussed further in this research study once the project governance framework, intentionally left blank in Figure 4.6, has been developed.

5. Research Value

This chapter has served to present a holistic view on IT governance. The role and purpose of a CIO was presented supported by a comprehensive research study. The introduction of the term "IT governance committees" and the roles they play in an organisation were given. Furthermore, COBIT was presented as the over-arching IT governance framework that facilitates alignment and internal control of IT functions in an organisation.

COBIT was then placed into the high-level corporate governance framework, together with a project governance framework, which begins to present a clearer picture of what the detailed corporate governance framework mentioned in the goal of the study, will encompass.

6. Conclusion

This chapter sought out to present a holistic view on IT governance.

The previous chapter introduced IT governance as a mechanism that ensured proper internal control over IT. This chapter expanded on this initial idea by including the role IT governance plays in facilitating the strategic alignment of all IT investments in the organisation.

The first objective was therefore to expand on the definition of IT governance from the previous chapter. This was done in the first section and included various definitions of IT governance. The definition from the IT governance Institute was selected as it contained references to corporate governance, which is a crucial aspect.

An additional aspect in the expansion of the definition for IT governance was to put into context its importance within an organisation. This was done by highlighting differences between IT governance and IT management, as well as determining the benefits achieved by implementing effective IT governance structures.

The second objective was to determine the role the CIO and IT governance committees played within IT governance. The first aspect, the role of the CIO, was determined by presenting a survey conducted by the CIO online website, titled "The state of the CIO". This presented various aspects required of CIOs to effectively fulfil their requirements.

The role of the IT governance committees in an organisation was also discussed and it was determined that they are crucial with regards to the IT governance of organisations by implementing IT strategy derived from the CIO and the IT governance executive committee. This means that they not only ensure that proper IT controls are in place, but also ensure the alignment of IT investments with corporate strategy.

The third objective was to determine existing IT governance frameworks. COBIT was presented as an overwhelmingly embraced framework and its ability to map onto best practice standards such as ITIL as well as onto COSO; this allows the author to conclude that it should form part of the corporate governance framework.

Therefore, IT governance is a very important subset of corporate governance that organisations are increasingly utilising it to safeguard and maximise their shareholders' investments. The utilisation of COBIT as an IT governance framework by organisations is indicated.

The following chapter serves to expand on the concept of project governance. It provides essential terms and concepts, as well as mechanisms that complement COBIT in the corporate governance framework.

Chapter 5

Project Governance

"You will launch many projects, but have time to finish only a few. So think, plan, develop, launch and tap good people to be responsible. Give them authority and hold them accountable. Trying to do too much yourself creates a bottleneck."

Donald Rumsfeld – United States Secretary of Defence (1932 -)

1. Introduction

1.1 Background
In the previous chapter, a holistic presentation of IT governance was given. This included the acceptance of COBIT as an overwhelmingly embraced IT governance framework and its placement alongside project governance in a corporate governance framework.

This chapter serves to expand on the subject of project governance which was introduced in Chapter 3.

1.2 Goal
The goal of this chapter is to present a holistic view of project governance and to develop a generic project governance framework.

1.3 Objectives
In order to reach the goal mentioned above, some objectives must first be met:

- The first objective is an expansion of the definition of project governance given in Chapter 3. This seeks to differentiate project governance from project management as well as put into context its importance within an organisation.

- The second objective is to identify the role of a project management office within project governance.

- The third objective is a definition of the roles of a chief project officer and project governance committees. This will determine the need for these specific positions within a project-oriented organisation.

- The fourth objective is an investigation into existing project governance frameworks.

- The fifth objective is to identify the components that should form part of a project governance framework.
- The final objective is to adapt the aforementioned framework into one that complements COBIT.

1.4 Layout

The first section serves to expand on the brief definition of project governance that was given in Chapter 3. This includes additional aspects not mentioned before. The second section introduces the concept of a project management office and its role within project governance.

This initiates a discussion contained within the third section that determines whether there is a need for a chief project officer and project governance committee within an organisation.

The fourth section seeks to determine whether there are any existing project governance frameworks that facilitate the dual role of internal control and strategic alignment of projects.

Once this is determined, the fifth section suggests which components should form part of a project governance framework.

The final section will adapt the initial project governance framework into the same structures provided in COBIT thus allowing them both to be complementary.

2. The important of project governance

Chapter 3 highlighted the implications SOX and King II had on project-oriented organisations. Their respective implications were collectively termed project governance. It is now important to expand on this definition as well as highlight the importance of project governance within an organisation.

Furthermore, it will be shown (just as with IT governance) that IT project-governance forms part of project governance.

2.1 Definition of project governance

Academics and practitioners who conduct research into project management only recently began to understand the implications laid out in SOX and King II (Weaver, 2005).

Furthermore, with substantial much focus over the years being placed on project management, organisations have only now started realising the importance of governing their overall project management activities. As a result very few precise definitions for project governance exist. However, by analysing some definitions, it is possible to formulate a wide-ranging definition.

An explicit definition for project governance is given by Lambert (2003:1) who states that project governance is "the set of structures, systems and processes around the project that assure the effective delivery of the project through to full utilisation and benefits realisation by the business."

This definition is supported by Raterman (2003: para.1) who states that project governance is "the management process that ensures a project is completed according to the plan and that its ultimate business objectives or benefits are delivered".

It is important to note that both these definitions contain no IT connotations. Project governance should apply to all types of projects within an organisation.

However, what these definitions do not contain are references to corporate governance. The view that project governance is related to corporate governance is supported by Weaver (2005:7) and the Association for Project Managers in the UK (APM, 2004:4) who collectively state that project governance is a sub-set of corporate governance.

This, in turn, supports the framework that was developed in Chapter 3. Therefore it can be stated that just like IT governance, project governance is the responsibility of the Board of Directors and executive management.

The author therefore defines project governance as the responsibility of the Board of Directors and executive management. It is an integral part of corporate governance and consists of leadership and organisational structures, systems and processes that ensure that a project, from conception to completion, is effectively delivered and its business benefits realised.

With a definition for project governance now in place, it is important to differentiate project governance from project management.

2.2 The difference between project governance and project management

Project management was defined earlier as the application of tools and techniques to plan, schedule and control activities that meet project objectives on time, to the specified cost, quality and scope.

Project governance however, provides effective structures, systems and processes that ensure that the correct projects are undertaken (according to strategic objectives) and that the projects' business benefits are realised.

Furthermore, with the definition of project governance explicitly stating that it is the responsibility of the Board of Directors and executive management, there is a definite governance and audit aspect. This is depicted in Figure 5.1 below.
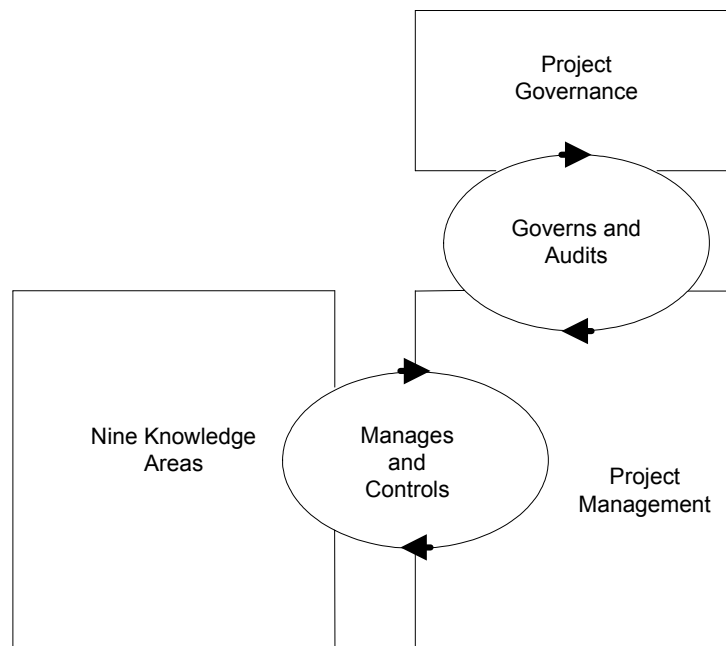
Figure 5.1: The difference between project governance and project management

Therefore, and as depicted in Figure 5.1, as is the case in the previous chapter where IT governance provided decision making structures for IT service management (or IT management) project governance provides similar structures for project management throughout the organisation.

In addition, it can be stated that overall project performance (the alignment of projects with business objectives) is beyond the scope of project management itself, and just as IT management is driven from the top IT governance layer, so should project management be driven by the top project governance layer.

The top project governance layer should therefore be extensively supported by the lower layers in the organisation that should provide the information required in its decision-making and evaluation activities. Subsequently, the lower layers need to apply the same principles of setting objectives, providing and obtaining direction, and providing and evaluating performance measures.

As a result, it is essential that good practices in project governance be applied throughout the enterprise.

Project governance therefore aims to provide proper structures and processes that facilitate more efficient project management and communication of essential project data to executives.

With the difference between project governance and project management established, it is now relevant to place in context project governance's importance within an organisation.

2.3 The importance and benefits of project governance

The detailed statistics presented in Chapter 2 described IT projects that experienced a great deal of time, cost and schedule overruns. In addition, it was explicitly stated that for IT projects to be successful, executive support and clear business objectives were crucial.

Therefore, with an increasing global trend for organisations adopting the project management method of conducting business, it is in their best interest

to adopt methods to improve overall organisational project management capability.

Furthermore, and as discussed in Chapter 3, implications from legislation such as SOX and King II put additional pressure on project-oriented organisations to adopt measures that govern the entire project management process. With this in mind, project governance forces executives to play a more active role and ensures sound decision making that allows a project to run as smoothly as possible (ITWorld, 2005:para.2).

By implementing project governance organisations may reap the following benefits (Leganza, 2003:2; OBU, 2004: para.1):

- Ensuring alignment and business value.

  One of the key functions of project governance is the alignment of projects with the strategic objectives and the enterprise goal. Once again, this is a crucial aspect as it provides assurances to the Board of Directors and executive officers that the chosen strategic direction is being successfully undertaken (Alignment).

- Controlling and in some cases decreasing combined enterprise project costs (within portfolios).

  With spending on IT projects set to increase dramatically (Zimmerman, 2005:1) and with IT projects still exceeding their allocated budgets, the implementation of effective governance structures in an organisation is significantly beneficial.

  Furthermore, by controlling or decreasing costs, shareholder value is safe-guarded and in some cases increased, which links back to an aspect deeply rooted within overall corporate governance (Controls).

  It clarifies key project roles by providing clear indicators of who is responsible and accountable for the delivery of a project. As was discussed in Chapter 2, there are various stakeholders and role-players that ensure the successful delivery of a project (Accountability).

- Providing a balanced project investment portfolio.

   The implementation of project governance feeds naturally into project portfolio management. Cooper and Edgett (1997:16) state that this provides an organisation with a dynamic decision process whereby they can list all active projects and constantly update and revise them.

   Furthermore, new projects are capable of being evaluated, selected and prioritised according to strategic objectives. This also means that existing projects can be accelerated, ended or de-prioritised and thus allows resources to be shifted and re-allocated to more "important" projects (Measurement and Predictability).

As can be seen, the scope of project governance is far-reaching and caters for every important aspect that concerns project-oriented organisations. Legislative requirements mentioned in Chapter 3, as well as additional aspects such as strategic alignment and performance measurement are all crucial in today's business environment.

Therefore it is essential that the implementation of project governance structures within an organisation becomes the norm for corporate compliance and for improved return on project investments.

It is prudent to now discuss an important mechanism that facilitates the governance of projects throughout the organisation, namely the Project Management Office (PMO). Weaver (2005:10) states that an effective PMO is a critical component of project governance. As such, it is important to elaborate on this concept.

It will be demonstrated that the PMO provides the link from the bottom line (projects) to the strategic level of an organisation.

3. The PMO's role within project governance

3.1 The PMO
A project management office, (also called a programme management office, portfolio management office, centre of excellence and many other synonyms)

is an organisational entity comprising of specialist individuals and is established to assist project managers, teams, project sponsors and various management levels on strategic matters.

It also assists other functional entities throughout the organisation in implementing project management principles, practices, methodologies, tools and techniques (Dai and Wells, 2004:524; Heard, 2004:4; Leganza, 2003:6). For the purpose of this research study, the term Project Management Office (PMO) will be used.

A report commissioned by KPMG in 2002 suggested that organisations with mature PMOs had project success rates of 98% (KPMG, 2002; Weaver, 2005:10). Thus it can be stated that PMOs should play a major role in how organisations manage and govern their projects.

The implications on project-oriented organisations brought about by legislation such as SOX and King II demand that senior management and executives require instant visibility into project performance data at all times in order for them to remain confident that projects are realising their intended business benefits.

Therefore, mechanisms supported by effective tools and techniques need to be developed that would communicate project data to those in decision-making positions; these are seen as the foundation of much of the corporate reporting mandated in SOX and King II. The establishment of a project management office is just such a mechanism.

3.2 The types of PMOs

Just as there are various synonyms for project management offices, organisations have adapted them according to their own requirements.

Essentially there are three types of PMOs, the supportive, the supervisory and the facilitating PMO (Dai and Wells, 2004: 524 – 525; Stephens, 2004; Weaver, 2005:10). This is depicted in Figure 5.2.
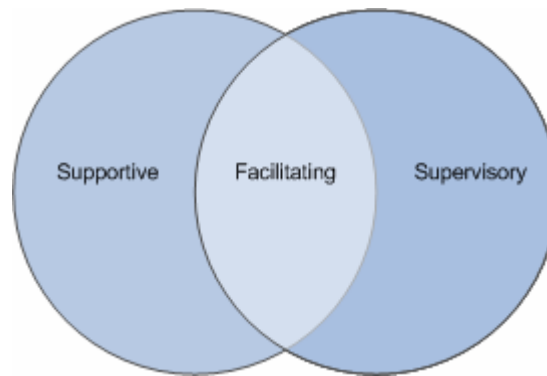
Figure 5.2: The three types of PMOs

3.2.1 The Supervisory PMO

A PMO that has a supervisory role is ideal within a highly-structured, centralised environment (Stephens, 2004:1 para.2). It imposes decision making authority on project managers.

Supervisory functions include:

- Ensuring projects are tied to business objectives.
- Control funding for projects.
- Impose greater discipline on the choice of projects and decide when to terminate a project that is not delivering.
- Control over all other PMOs ensuring performance of its functions.

This model of a PMO works in the same way as an IT governance committee and effectively controls the portfolio of projects and programmes within an organisation. Therefore, such a PMO would effectively become an executive project governance committee.

3.2.2 The Supportive PMO

The Supportive PMO plays a distributive role in an organisation. It is not a governance force, since it has no control over which projects are funded and no authority to ensure projects align with business needs (Dai & Wells, 2004:524; Stephens, 2004:1 para.6; Weaver, 2005:10).

Support functions include:

- Development and maintenance of project management standards.
- Training and mentoring project staff.

- Consolidating and managing data flows from projects into the corporate compliance systems (for internal control purposes).

- Providing tools and templates to those involved in the project (such as project charters, plans and others).

- Providing input to estimating and pre-project planning as well as to time and cost risk assessments.

- Development and maintenance of project historical archives.

A discussion on the Facilitating PMO now follows.

3.2.3 The Facilitating PMO

Another form of a PMO is a facilitating one, which is an overlap or a balance between the aforementioned PMOs. This form of PMO according to Stephens (2004:2 para.3) has a consulting role within an organisation.

Facilitating functions include:

- A trusted advisor, whom the organisation can call on it to serve as an interface between its business units.

- Defining objectives and affecting change (Heard, 2004: 5; Stephens, 2004:2 para.5). The PMO puts controls in place and monitors them in a consultative fashion, an essential factor, particularly as it is mandated in SOX and King II.

Essentially, the facilitating PMO is ideal because complex projects require a wealth of resource participation from all over the organisation (Heard, 2004: 5). Furthermore, the PMO fills gaps between execution and strategy by communicating the business benefits and value of each project, a task which is difficult for a project manager to perform on his own.

With particular relevance to this research study, all three types of PMOs provide information that is essential to a project sponsor and other management stakeholders who need to understand how a project is being currently implemented and whether it is successful (Mochal, 2002:2 para.4).

This provides the organisation with an effective mechanism that facilitates better executive support and sponsorship for all on-going projects.

The different types of PMOs would serve different purposes on each level of an organisation (Strategic, Tactical and Operational/Project). It is therefore relevant to discuss what impact a PMO has on these three organisational levels.

3.3. The PMO's impact on each level of the organisation

Depending on the level within the organisation, the PMO would have different (and in some cases overlapping) functions that serve to better enhance project governance. This is depicted in Figure 5.3.
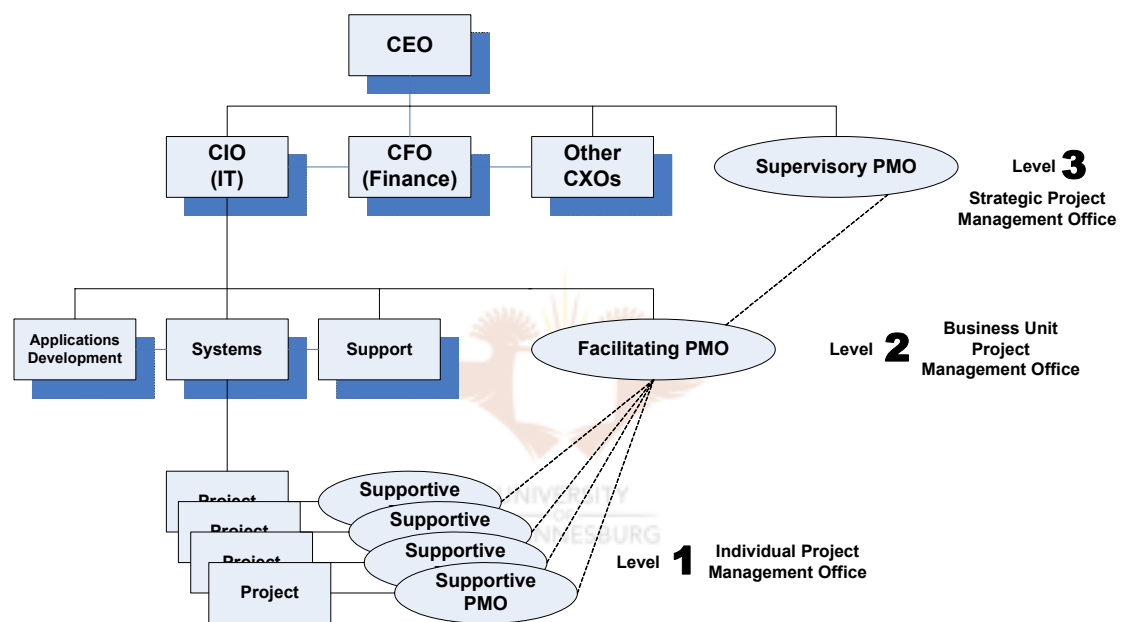
Figure 5.3: The PMO on the three different organisational levels

As can be seen in Figure 5.3 each level of an organisation, viz Strategic, Business Unit (or Tactical) and Project, has a PMO that serves its own individual purposes. An individual project would have its own PMO (Level 1) that would gather data and assist in the project management of that specific project (training and mentoring as well as other activities). This would be the supportive PMO.

Level 2 PMOs would then gather the data from all the individual PMOs and communicate this information to those directly affected by the individual projects across the various business units. It acts as an interface between the

business units and facilitates in breaking down barriers that may hamper project success. This would be the facilitating PMO.

Level 3 PMOs communicate data to executive management to assure them that all projects within a portfolio are on course. Executives would then be able to communicate, via the strategic PMO, matters, which in their opinion, cause concern. This would be the supervisory PMO.

Therefore, as can be seen, the PMO can be implemented on each level of an organisation and can serve as both an effective governance force or just as a supportive mechanism that aides project managers and teams to effectively deliver projects that meet strategic needs.

With the PMO now established as a formidable governance force, it is worthwhile determining whether there is a need for a dedicated individual that ensures the effective utilisation of PMOs in the organisation and to govern the entire project management process.

The next discussion focuses on the role of a chief project officer (CPO).

4. The CPO and project governance committees

Chapter 3 introduced the concepts of project and IT governance. The previous chapter indicated that a CIO would oversee the governance of IT.

However, what was not clear was whether there was a need for a dedicated individual that would supervise the governance of projects within the organisation. Such an individual, the chief projects officer or CPO would serve just such a purpose and the PMO and project governance committees would be critical supportive mechanisms for this position.

4.1 The CPO

The title of "CPO" was recently implemented by organisations. In the past, people with different titles and/or backgrounds were given full authority to perform the duties of a CPO (Burns, 2004:1 para.7). The CPO ensures that all project management activities are consistently aligned with corporate-level strategic objectives (Bigelow, 2005:1 para.5; Burns, 2004:1 para.7).

Bigelow (2005:2 para.9) claims that to aid good practices in project governance, CPOs ensure that good project management processes are in place throughout the organisation. Furthermore, the CPO ensures that project resources are appropriately utilised and that project managers and other project personnel are properly trained.

The following table expands on the precise role of a CPO within an organisation's project governance activities.

Table 5.1: The role of a chief project officer within an organisation (Burns, 2004:2)

The Role of a Chief Project Officer
1. Promoting the development and diffusion of a project management culture throughout the enterprise.
2. Maintaining effective communication with senior management to make and keep them aware of critical issues confronting corporate projects/programmes and of the action plans for addressing those issues.
3. In conjunction with corporate leadership (especially the CIO with regards to IT), developing and managing the enterprise project portfolio management process, integrating corporate project decision-making with the corporate strategy and facilitating ongoing enterprise project/programme portfolio decision making.
4. Identifying required improvements in corporate processes and working with business partners to effectively drive change throughout the organisation.
5. Facilitating project/program reviews of critical/key enterprise programmes and projects.
6. Directing, on an oversight basis, all corporate systems for project planning, implementation and monitoring. Ensuring that all projects have clear goals, objectives and timelines with measurable milestones that are consistent with the corporate strategy and goal.
7. Overseeing the integration of project processes with other functional areas such as manufacturing, marketing and finance, to ensure the success of corporate strategies, products and initiatives.
8. Maintaining and understanding of contemporary project management techniques and industry practices, as they impact corporate objectives.
9. Assuming the ultimate responsibility for enterprise project problem/issue identification and resolution.
10. Establish internal project management structures to pursue specific project management-related objectives.

As can be seen from Table 5.1, the CPO has a wide-ranging responsibility to ensure that the organisation is in complete control of its projects and that in conjunction with other corporate executives such as the CIO, ensures that proper project governance structures and mechanisms are in place.

4.2 The project governance committees

Another question worth answering is whether there is a need for project governance committees in the organisation. Many literature studies and articles use the term project governance committee interchangeably with that of the IT governance committee which was introduced in the previous chapter.

For example, Kohut (2000:1 para.5) refers to a project governance committee as "a group of representatives from every business unit that the project even remotely impacts. The purpose for this group is to provide input and approval regarding various project items. Note that the people on this committee are not the resources that will actually be performing the project tasks. Rather, they are the ones who aid in identifying requirements, prioritise tasks and garner support from the rest of the organisation".

This particular point of view conflicts with that of the IT governance committee from the previous chapter that functions in a similar manner.

As already stated, project governance is not a subset of IT governance but of overall corporate governance. As such, there is a potential clash of terminology with respect to the functionality of the two committees.

Therefore it is argued that the project governance committee, which oversees both IT and non-IT project implementations and results, assumes this role and that both committees work together to convert the IT strategy into potential IT projects.

Their relationship is depicted in Figure 5.4.
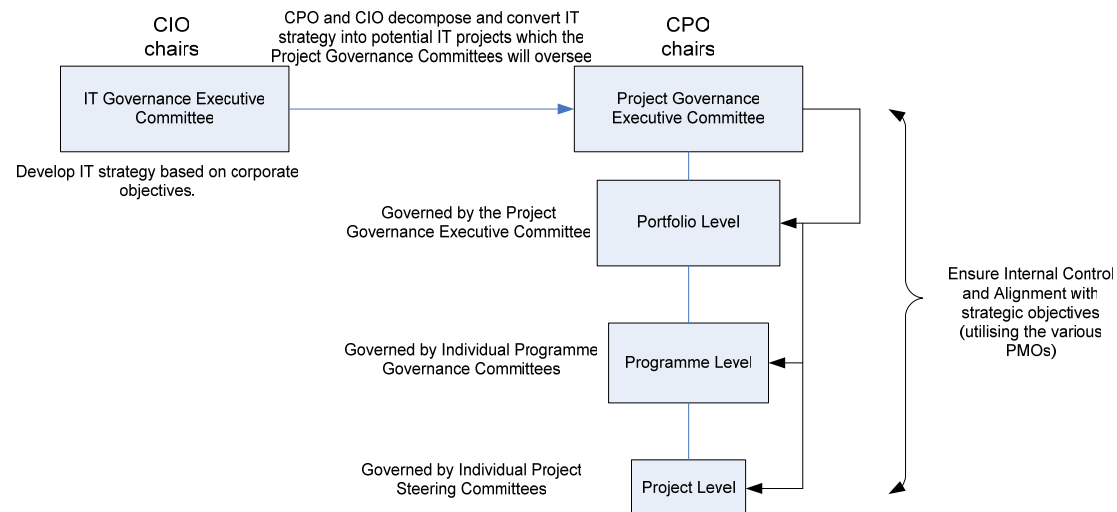
Figure 5.4: IT and project governance committees

This working-relationship (Figure 5.4) is supported by Bushell (2003b:1 para.4) who states that CIOs may conflict with the executive team when they launch ambitious initiatives while making common but mistaken assumptions about their organisation's unique reality (circumstances, capabilities, culture and relationships). As such, and to avoid this "strategic gridlock" (Bushell, 2003b:1 para4.), the CPO can assist the CIO in converting the IT strategy into meaningful IT projects.

An explanation of Figure 5.4 now follows.

4.2.1 The project governance executive committee
The project governance executive committee (also known as a portfolio governance committee or portfolio Board) is chaired by the CPO. It will govern activities on the portfolio level of the organisation thereby ensuring the portfolio's objectives are in line with organisational strategy (PMI, 2005b).

The CPO will confer with other executives, such as the CIO (chief information officer) and CFO (chief financial officer) and oversee the portfolio of projects.

4.2.2 The programme governance committee
The programme level is governed by the programme governance committee (or programme governance Board) (PMI, 2005a:11). The project management institute's (PMI) draft standard for programme management specifies that this committee is chaired by an executive programme sponsor (PMI, 2005a:13).

In their model, this sponsor (not to be confused with the project sponsor) chairs this committee and sits alongside the portfolio manager. As already stated the CPO along with other senior management develops and manages the enterprise project portfolio management process (Burns, 2004:2 para.11).

Therefore it is the CPO who chairs the programme governance committee as it is this person that ensures that all programmes within the portfolio are properly aligned with corporate strategy.

4.2.3 The project steering committee

An individual committee for projects must also be created in order to oversee project level activities which are otherwise too detailed for the programme and project executive governance committee to oversee.

Therefore, once a project has been designated for implementation, a project steering committee will be created to oversee it during its life-cycle. There are a few synonyms for a steering committee, such as a project Board or project oversight committee. For the purpose of this research study the term project steering committee will be used.

The Prince2 project management methodology (CCTA, 1999:36) states that such a committee is appointed by corporate or programme management (in this case the programme governance committee) to provide overall direction and management of an individual project.

The Tasmanian State Government in Australia state that a steering committee is "the key body within the governance structure which is responsible for the business issues associated with the project that are essential to the ensure the delivery of the project outputs and the attainment of project outcomes" (TSG, 2001a:1 para.3).

Therefore, the steering committee is accountable for the success of the project, and has responsibility and authority for the project mandated by the executive project governance committee.

The steering committee comprises a variety of representatives or stakeholders who have a direct bearing on the project's success. These can include any of the following:

- The project sponsor, who chairs the meetings;
- Representatives from selected key stakeholders;
- Internal auditors.

It is important to note that a project manager is not a member of the steering committee. Instead, the project manager sits in on committee meetings and reports on the project's progress.

Essentially, the project manager is contracted by the steering committee to ensure that the work of the project is undertaken as agreed, whereas the steering committee provides support, guidance and the executive oversight of progress.

The relationship therefore between the steering committee and the programme governance committee (above it) and the project team (below it) is depicted in Figure 5.5:
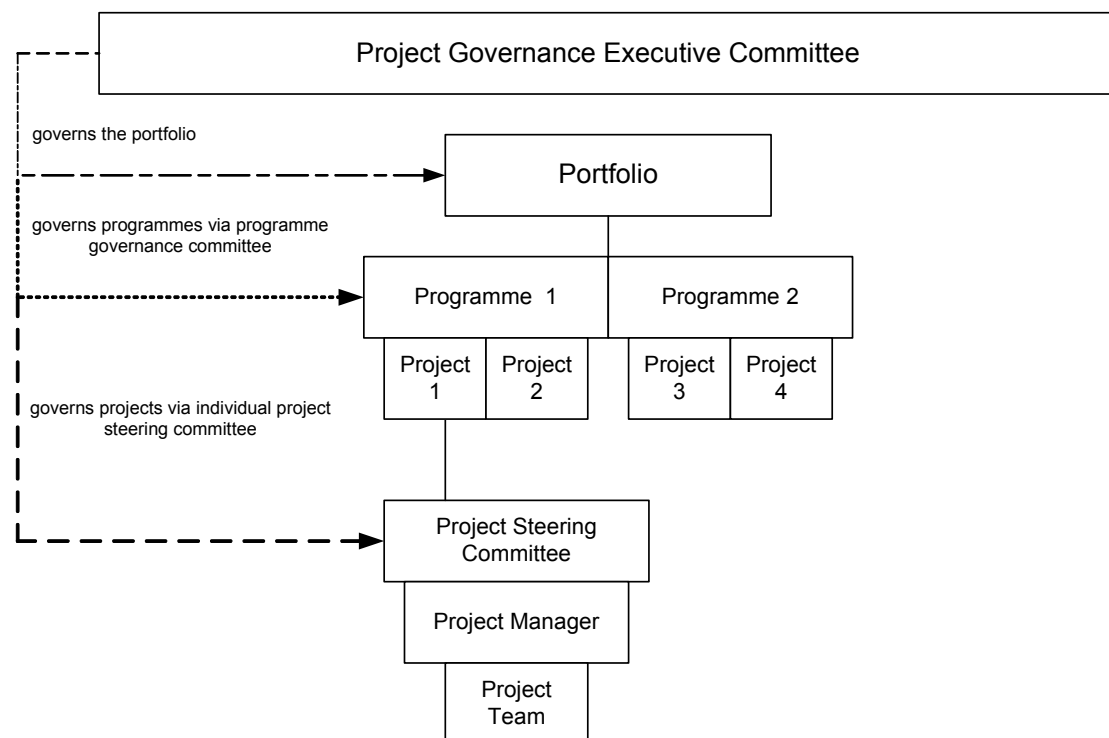
Figure 5.5: The project steering committee within a project governance structure

As Figure 5.5 depicts, each project fits into a programme which in turn fits into the portfolio of projects. Each project has its own steering committee which performs low-level governance functions.

The steering committee (CCTA, 1999:37; TSG, 2001b:1 para.2) approves all major plans and authorises any major deviation from agreed stage plans. It is the authority that signs off the completion of each stage as well as authorising the start of the next stage.

It ensures that required resources are committed and it arbitrates on any conflicts within the project or it negotiates a solution to any problems between the project and external bodies.

Furthermore, it approves the appointment and responsibilities of the project manager. The steering committee is responsible for assuring that the project remains on course to deliver products of the required quality to meet the business case.

Should any problems arise regarding the specific project; the steering committee will endeavour to resolve it. However, if there are problems and issues that a steering committee is unable to resolve on its own, it would escalate them to the programme governance committee.

With the exact roles of the PMO, CPO and project governance committees discussed, it is now important to determine whether any project governance frameworks exist with which organisations can effectively align projects with strategy as well as maintain effective internal control.

This follows in the next section.

5. Existing project governance frameworks

The previous chapter introduced two existing IT governance frameworks, namely COBIT and the S.P.O.R.T framework. It was shown that COBIT has been overwhelmingly embraced by industry and thus it was incorporated into the proposed corporate governance framework referred to in the goal of this research study.

By combining COBIT with the project governance framework, organisations would be able to govern IT projects effectively as they were addressing the two main issues of corporate governance, namely internal control and strategic alignment.

Therefore, the focus of this particular section was to determine whether there were any overwhelmingly embraced project governance frameworks, not necessarily on the scale of COBIT, but that addressed similar issues.

As already stated, industry is only now beginning to comprehend the implications set out by SOX and King II on how projects should be governed (Weaver, 2005). As a result, organisations around the world implement custom-made project governance frameworks that serve their own individual purposes.

Two such frameworks respectively developed by the Tasmanian State Government in Australia (TSG, 2001c) and by Lambert (2003:8) illustrate how various role-players are involved in the governance of projects in an organisation. Both of them specify that these are governance frameworks.

However, these frameworks lack control objectives similar to those specified in COBIT. It is the author's opinion that a framework with control objectives needs to function in conjunction with COBIT in order for organisations to govern their IT projects.

Therefore, as there is no project governance framework that has been overwhelmingly embraced by practitioners in industry; nor one that matches the comprehensive IT governance framework provided in COBIT, it is plausible to conclude that a new framework must be developed.

The next section aims to develop such a framework based on individual components that address the benefits and goals of project governance mentioned earlier in this chapter.

6. A project governance framework

It has now been established that project governance is a crucial instrument for corporate compliance in project-oriented organisations and that the PMO and CPO can effectively facilitate it.

It is therefore important to devise a generic project governance framework that would work hand-in-hand with the COBIT IT governance framework in order for organisations to properly govern their IT projects.

The Association for Project Management in the United Kingdom (APM) published "a guide to governance of project management" in 2004 (APM, 2004). The purpose of this guide is to advise directors and others on how to adopt practices regarding the governance of programme and project management activities. Within this guide, the APM refers to the four main components of project governance.

These components are (APM, 2004:5):
- Portfolio direction effectiveness and efficiency
- Project sponsorship effectiveness and efficiency
- Project management effectiveness and efficiency
- Disclosure and reporting.

The author proposes that, as this is the first attempt from a recognised body to publish a guide to effective project governance, that these four components form the foundation for a project governance framework.

The guide further suggests that by implementing these four components, organisations would be able to avoid the common causes of project failures which were presented earlier in this research study (APM, 2004:5).

In addition to these four components, the guide includes key questions for each component, which is similar to the suggested COBIT approach with respect to its own control objectives.

The author proposes that both frameworks' control objectives, which will be discussed in detail in the following chapter, be adopted and utilised by

organisations to effectively govern each of the four components proposed in the framework.

The proposed framework (adapted from APM (2004)) is depicted in Figure 5.6.
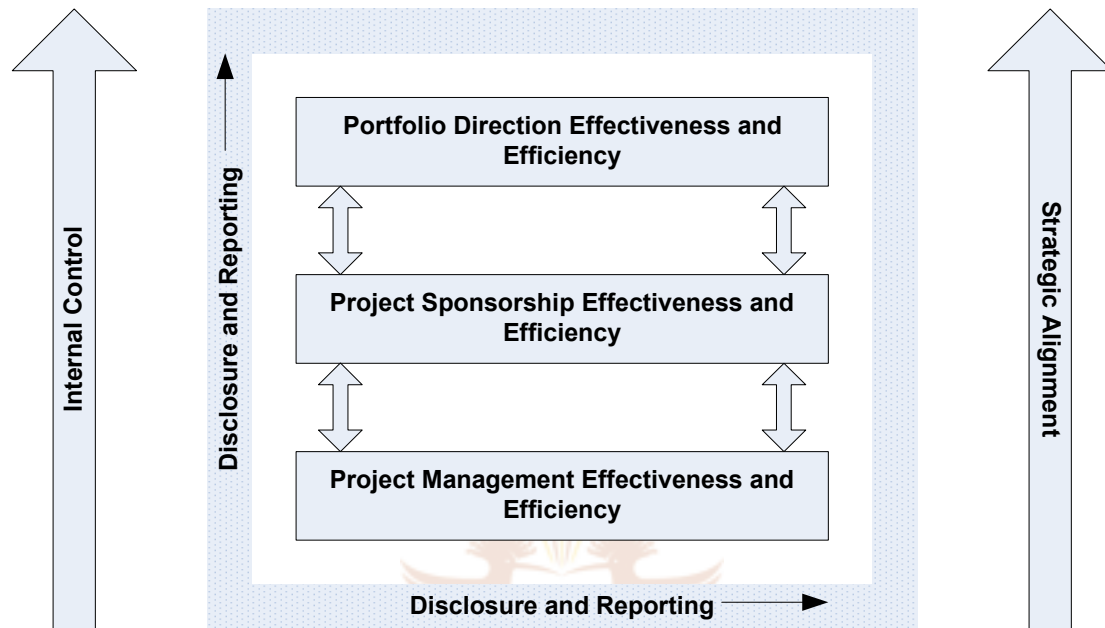
Figure 5.6: The project governance framework

As Figure 5.6 depicts, the project governance framework will serve the same goal that COBIT serves for IT governance, which is strategic alignment and internal control.

It should also be noted that for brevity, the APM grouped projects and programmes together. Therefore control objectives for project management effectiveness and efficiency also apply to programmes, which are a level higher than projects as mentioned in Chapter 2 in the definition for programmes.

It is now relevant to dissect the framework and discuss each of these four components separately, the first of which focuses on portfolio direction effectiveness and efficiency.

6.1 Portfolio Direction Effectiveness and Efficiency

The concept of a portfolio of projects has already been defined earlier in this chapter. It is now important to briefly discuss the importance of project portfolio management within the project governance framework.

Datz (2003:1) claims that 75% of IT organisations have little oversight over their project portfolios. This is significant because organisations, as a result of SOX and King II, are required to have adequate data on their projects (whether in a portfolio or not) in order to assure the Board and ultimately the shareholders that the projects undertaken will be able to yield a satisfactory return on their investments.

All risks associated with the projects within the portfolio also need to be adequately communicated to those in executive level.

The payoff for having portfolio management in an organisation is that executives and senior management can gain visibility and control over all their projects (Peoplesoft, 2004:4). In addition, organisations can eliminate redundant or non-strategic projects. This subsequently free funds and allows them to be redeployed to projects that serve strategic objectives.

Therefore effective monitoring and controlling of the portfolio allows the organisation to ensure a smooth process and a realistic assessment of project metrics such as status, cost and schedule to complete and associated risks (Isfahani, 2005:1). This then allows for actionable decisions based on factual evidence to determine the next steps with regards to whether a particular project or programme should be continued.

6.2 Project Sponsorship Effectiveness and Efficiency

Although a focus of this research study, this component of the framework seeks to ensure that project sponsorship is the link between the organisation's senior executive body and the management of the project or projects.

In addition, the sponsoring role has decision making, directing and representational accountabilities. This indicates that the project sponsor

serves a crucial role and is accountable for a project's success as well as ensuring that the project meets organisational objectives.

6.3 Project Management Effectiveness and Efficiency

This particular component of the framework serves to ensure that the project manager and team responsible for projects are capable of achieving objectives that are defined in the project approval stage (APM, 2004:10). In addition, organisations should strive to develop the skills of project managers and the project teams. This can be done using the supportive PMO which was discussed earlier in the chapter.

Overall project management maturity should also be assessed and improved with the use of maturity models. This will serve to link projects with strategic objectives and further streamline the project processes and increase the probability of project success rates.

As already stated, for the sake of brevity, the APM uses the term project management as inclusive of the management of programmes. Therefore this component will also serve the governance of programmes (which in most instances are a level higher than projects).

6.4 Disclosure and Reporting

One of the fundamental corporate governance principles is the establishment of an audit committee that oversees the functioning of the internal audit division of an organisation. This was discussed in the chapter on corporate governance.

Therefore, because project governance involves a great deal of corporate compliance, many organisations are now creating additional positions specifically geared towards the monitoring and auditing of projects, which form part of the "Disclosure and Reporting" aspect for the project governance framework.

It is not within the scope of this research study to provide a detailed discussion on the precise functionality of the internal project auditing division

of an organisation; however it is important to briefly discuss how it fits within the project governance of organisations.

A culture of open and honest disclosure is required for effective reporting (APM, 2004:11). This requires independent verification of information and that threats to projects must immediately be communicated prior to major project approvals or when projects that have already begun, encounter serious difficulties.

Frank (2003:1 para.8) states that internal auditors predominantly ask questions such as these when assessing projects:

- How many projects are planned for the year?
- Will any projects span multiple quarters or traverse annual plan years?
- While ranking projects, which projects correlate to each other? Share similar risks?
- Does each project have a critical path to completion?
- What requirements for completion are identified for each project?
- How are sign-off for project completion and responsibility for milestones tracked?
- Will quality assurance be performed during project execution and on project deliverables?
- How will projects be staffed? Based upon availability or proficiency?
- What is the budget for the year? Will additional resources and funds be required?

With these questions in mind, the internal project auditors will work with key project role-players (in the project steering committee) to assess whether the organisation is properly safeguarding shareholders' investments which they are utilising for project investments.

Therefore, these auditors would require assistance from the PMO (at each organisational level) to provide them with critical project data and any other information they require in order to assure them that the governance of projects is conducted properly.

The aforementioned project governance components and how they correspond to each type of project management office is depicted in the Figure below.
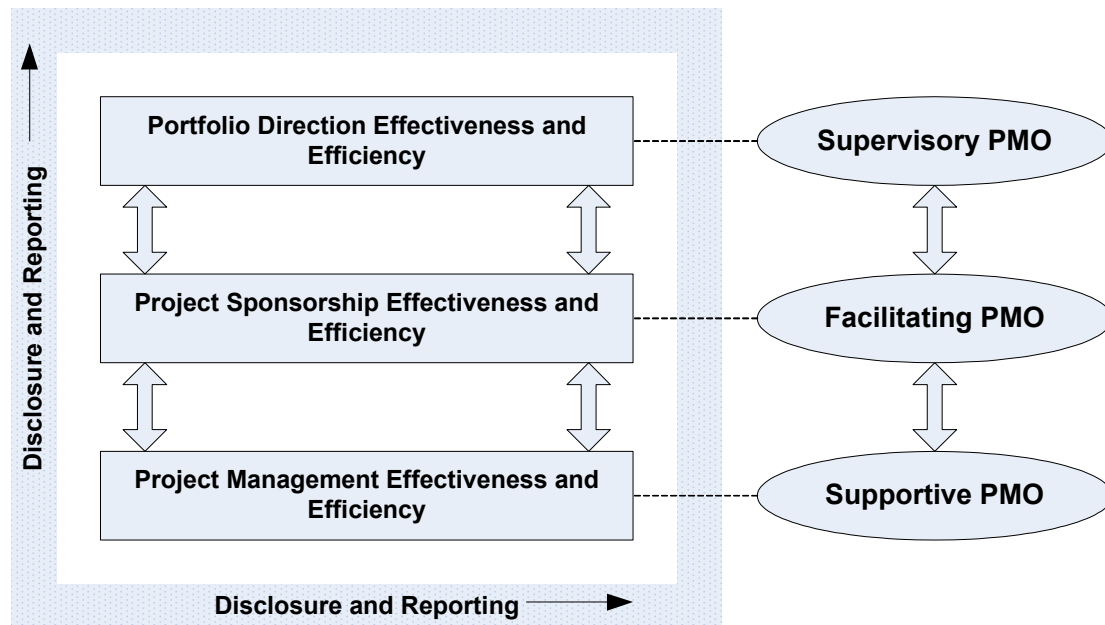
Figure 5.7: Components of project governance and their corresponding PMO

As Figure 5.7 depicts, each component of the framework would make use of its corresponding PMO on each organisational level. However, the "Disclosure and Reporting" component uses all the PMOs in order to gather key project data and communicate this to those in decision-making bodies.

7. Configuring the framework to complement COBIT
In order to have this project governance framework work together with COBIT they have to be complementary in terms of structure and related elements.

Therefore it is essential that the four components of the framework (which are essentially processes), be configured to fit within the same COBIT structure of processes, information criteria and resources. The first discussion focuses on the project processes.

7.1 Project Processes: Domains
COBIT groups each of its IT processes into four domains. This means that the project governance components should also fall under one of Planning and

Organisation, Acquisition and Implementation, Delivery and Support or Monitoring.

7.1.1 Applicable domains

Since the Planning and Organisation domain in COBIT addresses strategy and tactics (ITGI, 2000:16) and since projects (as per definition) are a direct result of strategy and tactics, the following components (which also comprise of control objectives or activities) should form part of this domain:

- Portfolio Direction Effectiveness and Efficiency
- Project Sponsorship Effectiveness and Efficiency
- Project Management Effectiveness and Efficiency.

The Disclosure and Reporting component falls under the Monitoring domain as this domain addresses management's oversight of the organisation's control process and independent assurance provided by internal and external audit or obtained from alternative sources (ITGI, 2000:17).

7.1.2 Non-Applicable domains

A question remains regarding the remaining two domains namely Acquisition and Implementation as well as Delivery and Support. Whilst it is not within the scope of this research study to attempt to create processes for these domains, the author proposes that they still be included in the project governance framework may be the focus of a future research study.

The first two domains deal primarily with ongoing project activities. What needs to be identified is the components or processes which are required for pre-project activities as well as post-project activities (such as project delivery).

In order to configure the project governance framework for the Acquisition and Implementation domain, processes need to be identified that address how projects are to be identified, developed or acquired to realise corporate strategy.

For the last domain, namely Delivery and Support, processes need to be put in place to address the actual delivery of the project after its completion. In addition, aspects such as training users during and after the project would also be addressed.

7.2 Information Criteria

As already stated in the previous chapter, COBIT also has information criteria which are impacted by the various processes. Therefore, the three project governance components which fall under the Planning and Organisation domain would satisfy the fiduciary requirements of effectiveness and efficiency.

The Monitoring domain's component (Disclosure and Reporting) would therefore impact on effectiveness, efficiency and compliance.

7.3 Project Resources

As in the case with COBIT, management must also optimise the use of available resources, including data, application systems, technology, facilities and people. This means that in order to effectively govern projects, the various PMOs require these resources to perform their respective functions.

7.4 Complementary documents

As already stated in Chapter 2, the PMBoK is a widely-accepted standard for project management.

Since the project management level is required to provide support to the project governance layers (as per Figure 5.1), the PMBoK is utilised in a complementary manner via its nine knowledge areas and tools and techniques. Therefore, the PMBoK acts in the same manner as ITIL does for COBIT.

Since the frameworks now complementary, it is now possible to place this project governance framework (referred to as the PG framework for the remainder of this research study) alongside COBIT within the corporate governance framework. This is depicted in Figure 5.8.
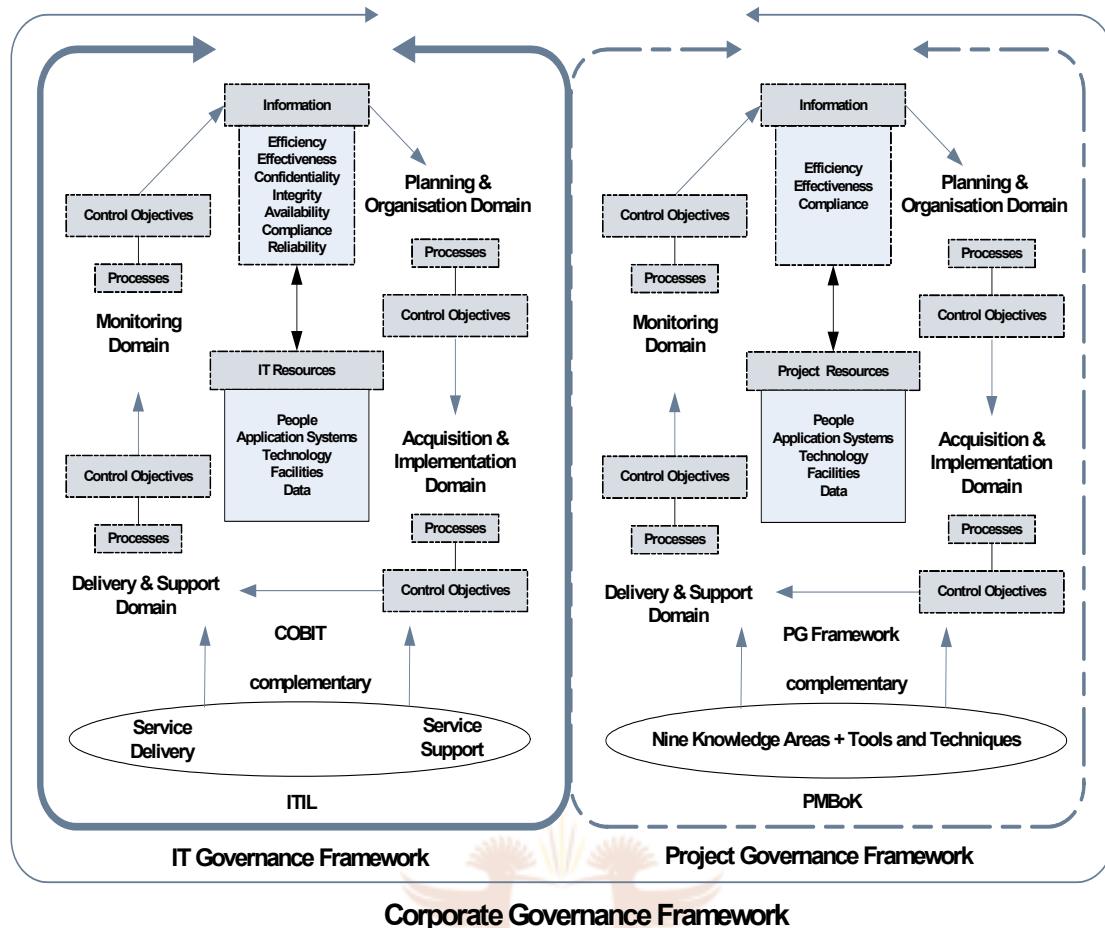
Figure 5.8: COBIT and the PG framework placed within a corporate governance framework

As Figure 5.8 depicts, the PG framework (complemented by the PMBoK) is now comparable with COBIT (which is complemented by ITIL). These two frameworks provide detailed control objectives specific to their respective types of governance.

This now enables the project governance committee to effectively govern IT projects utilising elements from COBIT and the PG framework. By doing so, the governance of IT projects (as per both frameworks) would be completely addressed as some of COBIT's PO10 objectives refer to aspects that are not in any of the components in the PG framework.

8. Research Value

This chapter sought to introduce new terms and concepts to the reader with regards to project governance. It was demonstrated that project governance

is not a subset of IT governance but of overall corporate governance, which is something many literature studies erroneously mention.

The concept of a project management office was introduced and it was shown that it can be used as an effective project governance force. The chapter on corporate governance (Chapter 3) left a hanging question with regards to whether there would be someone who would oversee project governance. This question was answered when the concepts of a chief project officer and the three levels of project governance committees were introduced.

Furthermore, a generic project governance framework was devised that would work together with the COBIT IT governance framework. This is the first attempt at devising such a framework and gives the reader an idea of the requirements for organisations to effectively govern their overall project management activities, from strategic down to project level.

9. Conclusion

Chapter 3 brought about two additional governance concepts, namely IT and project governance. This chapter served to present a holistic overview of project governance by introducing new terms and concepts and by devising a generic project governance framework that would work together with COBIT so that organisations would be able to govern their IT projects effectively.

The first section aimed to expand on the definition of project governance. This was accomplished by concluding that project governance governs and audits all project management-related activities. In addition, the benefits of implementing project governance structures and mechanisms were shown.

The objective of the second section was to determine the role of a project management office within an organisation. The author suggests that the PMO be implemented in an organisation, not only to streamline all project management processes and activities but to become an effective governance force that would be able to link projects with overall strategic objectives and the corporate goal.

The third section introduced the role of the chief project officer (CPO) and project governance committee. Implementation of the CPO at various project-oriented organisations and its importance will no doubt increase as organisations realise the far-reaching implications of what SOX and King II stipulate with regards to corporate compliance as well as safeguarding and maximising shareholder investments.

The aim of the fourth section was to determine whether there were any project governance frameworks that had been overwhelmingly embraced by industry. It was concluded that such a framework does not exist and thus a new one had to be developed.

The fifth section developed the generic project governance framework based on a guide to the governance of project management published by the Association for Project Managers in the United Kingdom. The guide refers to the four components of project governance. As this is an initial attempt by any of the recognised bodies to publish a guide to project governance, the author concluded that it should form part of a project governance framework.

Lastly, the final section configured the initial project governance framework (known as the PG framework) into COBIT's four domains, thus making the two frameworks complementary. This therefore allows the project governance committee to supplement any project management control objectives in COBIT that may be lacking in the PG framework and vice versa.

As demonstrated, project governance has many tangible benefits for organisations. In addition to these benefits, pressures from SOX and King II are forcing organisations to implement proper governance structures especially in the realm of project management. As a result, a proper project governance structure that ensures proper internal control and strategic alignment must be implemented by organisations in order to safeguard and maximise shareholder investments. After all, it is these investments that are used to develop new projects.

Therefore, with such a framework now in place, it is now possible to adequately govern IT projects by using it in combination with COBIT.

The following chapter introduces the concept of a project sponsor. The second goal of this research study is to define the role of the project sponsor. Therefore, since the corporate governance framework has now been developed, it is now possible to focus on this goal.

Chapter 6

The IT Project Sponsor

"A leader takes people where they want to go. A great leader takes people where they don't necessarily want to go, but ought to be."

Rosalynn Carter – Former First Lady of the United States of America (1927 -)

1. Introduction

1.1 Background

The previous three chapters (corporate, IT and project governance) set out to develop a holistic corporate governance framework that encompasses the roles of IT and project management within corporate governance.

It is by utilising the control objectives in this framework that enables executives to be more supportive as they are now forced (via control objectives) to align organisational activities (and ultimately shareholder interest) with corporate strategy.

This chapter seeks to introduce the concept of a project sponsor within this framework by first defining what a sponsor is and subsequently positioning this role within the organisation. It will be shown that the sponsor forms the link between the executive and project managers.

1.2 Goal

The goal of this chapter is to present an introductory view of a project sponsor and to position this person within a project-oriented organisation from a governance perspective.

1.3 Objectives

In order to reach the goal mentioned above, some objectives must first be met:

- The first objective is to introduce who the project sponsor is and the importance of this position. This emphasises why it is essential that effective and efficient sponsorship must exist.
- The second objective is to present a model depicting where the project sponsor is positioned in a project-oriented organisation. This entails

identifying other project role-players with whom the project sponsor has a relationship during the course of a project.

- The third objective is to identify where the project sponsor fits within the project life-cycle. It determines whether the project life-cycle in its present form should be adapted to embrace the role of the project sponsor.

- The fourth objective is to elaborate on which control objectives from the corporate governance framework (the combination of COBIT and the PG framework) are relevant for the sponsoring of projects. This provides a better understanding of what is required from a governance point of view regarding the sponsoring of projects.

1.4 Layout

The first section introduces the concept of the project sponsor. Once this is accomplished, a wide-ranging definition is given. The second section presents various types of relationships that a sponsor must have during the course of the project. This culminates in a model that presents exactly where a sponsor is positioned in a project-oriented organisation.

The third section elaborates on how the sponsor fits within the project life-cycle and whether or not there is a need to extend the project life-cycle phases to accommodate the sponsor's role.

The final section presents an investigation into which of the control objectives provided in COBIT and the PG framework are applicable to project sponsorship.

2. An Introduction to the project sponsor

Section 3 of Chapter 2 presented various statistics on the state of IT project management in the United States of America, the United Kingdom and South Africa. All three reports presented figures regarding the failure rates of projects and especially the amount of money spent on projects (and subsequently lost).

A set of recommendations and project success factors were consolidated in tabular format to present common elements that plagued IT projects in all three countries. These common elements were:

- Executive support and top management commitment.
- Clear business objectives and alignment of IT project initiatives to business strategy.
- Better business cases and processes for building the case.

With the corporate governance framework developed in the previous chapter, organisations are able to align their IT project initiatives to their business strategy by implementing the relevant control objectives.

It is within this framework that executives and other project stakeholders will be more committed to realising the benefits of the projects they authorise.

One of these stakeholders who will play a crucial role in this framework is the project sponsor.

2.1 Definition of the project sponsor

Section 2.3 of Chapter 2 introduced various stakeholders that were involved in the management of projects in an organisation. The sponsor was briefly mentioned as the person responsible for assuming the primary role of sponsorship which in effect is the person responsible for providing direction and for funding the project.

It is now important to expand on this concept and present a broader definition of who the sponsor is.

Knutson (2005:1 para.3) states that the term "sponsor" is often incorrectly used to refer to the original requester or others who support the project, but may not have the appropriate organisational authority. The sponsor must therefore be someone in the organisation who both wants the project accomplished and has responsibility for all the organisational units affected by its implementation.

This view is supported by Kapur (2004:1 para.2) who expands on this idea by stating that the project sponsor is someone who:

- Is in a senior or executive management position and can financially and politically back the project.

- Reviews the project's progress regularly.

- Removes roadblocks that impede the project team's progress.

- Provides the project team with the bigger political picture and explains any possible impacts.

- Ensures that the project manager and project team have the skills necessary to manage the project.

- Clarifies the project mission organisationally and strategically and provides guidance for key business strategies.

- Questions plans, deliverables, schedules and costs.

- "Kicks off" the project and celebrates with the team at its completion.

- Ensures that the projects benefits are realised within the organisation.

By accomplishing these tasks, Knutson (2005:2 para.10) states that the project's chances of success are greatly improved.

However, another important aspect that Treiber (2004:1 para.1) introduces is that the project sponsor is accountable for the project results, and if a poor relationship develops between the sponsor and project manager it may potentially cause the project to fail. This is very important as it also places accountability on the sponsor's shoulders, which is a crucial factor in corporate governance.

Therefore control objectives derived from the corporate governance framework must be in place in order to monitor the project sponsor's activities before, during and after the project is completed. This assures the Board that the sponsorship component is effectively and efficiently conducted.

Therefore by utilising all these important elements, it is possible to formulate a wide-ranging definition of who the project sponsor is. The author defines the project sponsor as: A senior or executive manager who from project conception to benefits realisation is in a position of considerable political and

financial power to ensure that a project meets business objectives and supports organisational strategy.

A project sponsor is only successful when the organisation as a whole achieves maximum benefit from the project he or she is sponsoring (Koch & Schmid, 2004:2).

2.2 The importance of the project sponsor

Thomsett (2002:287) states that the role of the project sponsor is critical in ensuring the success of both IT and business (non-IT) projects. Furthermore the effectiveness of the project sponsor's role is the single best predictor of project success or failure.

This view is supported by Koch and Schmid (2004:1) who state that the individual behaviour or inter-personal skills of project sponsors have a higher impact on the success of a project than the qualification of project managers and the project processes that are established.

The converse also applies, especially in organisations where projects are started with unrealistic expectations, due dates and budgets. In such scenarios project managers are often forced to work on such projects even if the project outcome cannot be guaranteed. Project sponsors become the limiting factor for project success because of their decision-making powers that overrules many good project managers (Koch & Schmid, 2004:1).

Furthermore, an important aspect that ensures effective sponsorship is the ability of the sponsor to ensure that all project participants are focused and committed to a common purpose and vision of success (Knutson, 2005:2 para.10).

Should there arise serious doubt about the value of the project to the organisation or about its chances for success, it is the sponsor's responsibility to bring this to the attention of the authorising management body.

Therefore, the role of a sponsor is crucial within project-oriented organisations and competent project sponsorship is of great benefit to even the best project managers (APM, 2004:9).

It is now relevant to determine where the project sponsor is positioned and with whom the sponsor has a direct relationship.

3. Positioning the project sponsor

The purpose of this section is to determine with whom exactly the sponsor should have a relationship in a project-oriented organisation.

From this it will be possible to group the project sponsor's activities into categories and thus (as will be shown later in this chapter) group the relevant control objectives from the corporate governance framework into these same categories. It is assumed at this stage that the activities for the project sponsor will be grouped into three categories which are depicted in Figure 6.1.
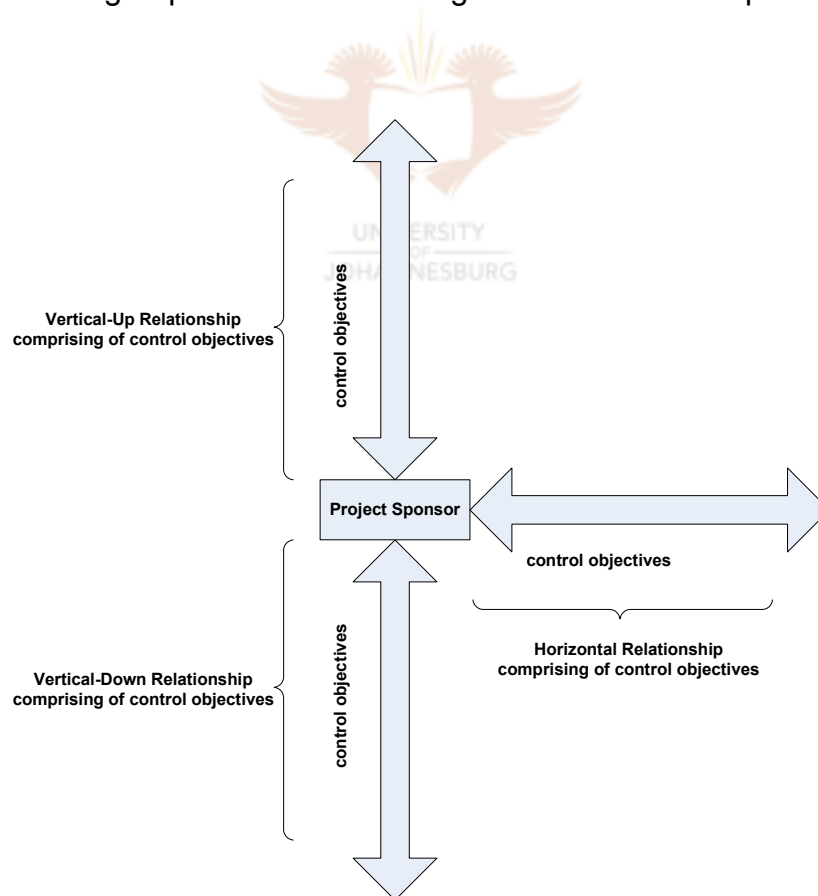
Figure 6.1: The project sponsor's relationship with the rest of the organisation

As Figure 6.1 depicts, the project sponsor has 3 categories of relationships in the organisation. These are:

- Vertical-down activities – Requirements from those positioned below the sponsor as well as what the sponsor requires of them.

- Vertical-up activities – Requirements from those positioned above the sponsor as well as what the sponsor requires of them.

- Horizontal activities – Requirements from those positioned to the side of the sponsor as well as what the sponsor requires of them.

Within these categories, the sponsor will have control objectives which are derived from the corporate governance framework. It is foreseen that some control objectives may reside in more than just one category.

It is now important to expand on these categories and identify with whom the sponsor has a relationship.

3.1 Vertical-Down Relationship

The previous chapter briefly mentioned the project sponsor as someone who is the chairperson of the project steering committee. The steering committee is effectively the project governance committee for an individual project and oversees the project during its life-cycle.

Therefore, as the project sponsor and other members of the steering committee oversee the project, the sponsor must ensure that the project manager and project team successfully deliver the project according to the quadruple constraint of time, cost, quality and scope.

This relationship is depicted in Figure 6.2
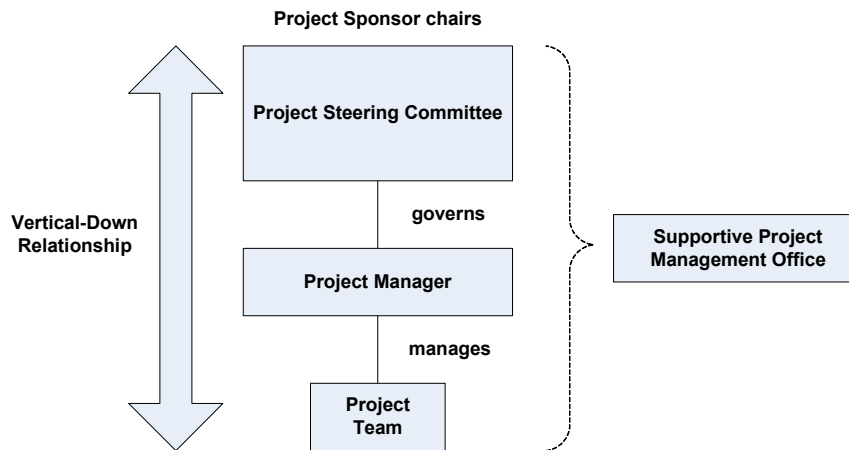
Figure 6.2: Vertical-down relationship from the sponsor's perspective

As Figure 6.2 depicts, there is a vertical-down relationship from the project sponsor's perspective. This means that the sponsor would require the project manager and team to perform their activities effectively and efficiently and in turn, the same is expected from the manager and team's perspective.

The project manager and team are supported by the supportive project management office, which was introduced in the previous chapter.

3.2 Horizontal Relationship

Additional members that operate within the project steering committee were introduced in the previous chapter, these included people such as the internal auditors, and representatives from key stakeholder groupings.

An additional member of the project steering committee that hasn't been mentioned yet is the programme manager. Since the project under implementation may form part of the programme manager's programme, it is important that this person also participates during project steering committee meetings and is constantly updated as to the project's status.

As already stated, the project sponsor is someone in the organisation who both wants the project accomplished and has responsibility for all the organisational units affected by its implementation (Knutson, 2005:1 para.3). This in effect means that sponsors must work together with the programme manager to ensure that the project's benefits are realised.

The horizontal relationship is depicted in Figure 6.3.
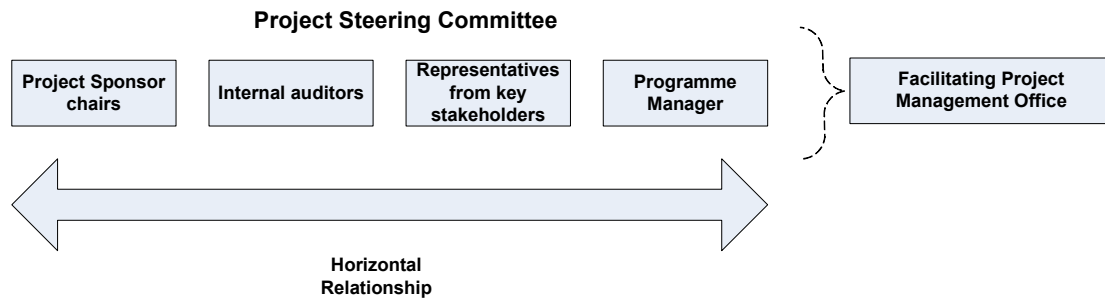
Figure 6.3: Horizontal relationship from the project sponsor's perspective

As Figure 6.3 depicts, the sponsor chairs the project steering committee and has a horizontal relationship with its members. This is because the sponsor will require certain activities, that fall out of the scope of the sponsor's expertise, to be performed by them

Some depictions of the composition of a project steering committee consider the project sponsor and the programme manager as the same individual. This is presented in the PMI's (Project Management Institute) draft standard for programme management (PMI, 2005b:27). The author takes a different point of view on the consolidation of these two roles.

The sponsor is responsible for achieving the business benefits of the new product or service that the project manager delivers. This means that the sponsor will have to live with the product or service (Watson, 2004:2 para.5). In addition, the sponsor might have to take action to monitor its effectiveness, and possibly initiate corrective or tuning actions (APM, 2004:10).

The programme manager manages an entire programme of projects (PMI, 2005a:10) and as such does not inherit the product or service which a specific project is commissioned to create.

Therefore, in the composite organisation which was mentioned in Chapter 2, and depicted in Figure 2.4, the project sponsor is effectively the head of a specific functional division (a functional manager or functional director) whilst the programme manager manages the project managers that fall within the programme.

The sponsor will utilise the facilitating project management office. As already stated, the facilitating PMO is ideal because complex projects may require a wealth of resource participation from all over the organisation (Heard, 2004: 5). This type of PMO fills gaps between execution and strategy by communicating the business benefits and value that each project has on an organisation.

3.3 Vertical-Up Relationship

The project sponsor has a vertical-up relationship with the executive team (executive officers) in the organisation. As already stated, the sponsor is effectively the head of a functional division (functional manager as per Figure 2.4) and as such is charged to fulfil the strategic objectives that the executive team have formulated (from the organisational strategy).

This view is supported by Buttrick (2003c:1 para.2) who states that the sponsor is accountable to the leadership team or CEO. The project sponsor, as already stated, inherits the project and as such is in charge of realising its benefits. Therefore, the project sponsor will only be appraised on whether or not the implemented project has been able to support business objectives.

For example, if the project's delivery date is significantly affected, it will delay the sponsor's functional division being able to utilise the product and as such affects business. This has to be communicated to the executive team who ensure that the organisation realises its strategy via the projects it implements.

Therefore, such a relationship is depicted in Figure 6.4.
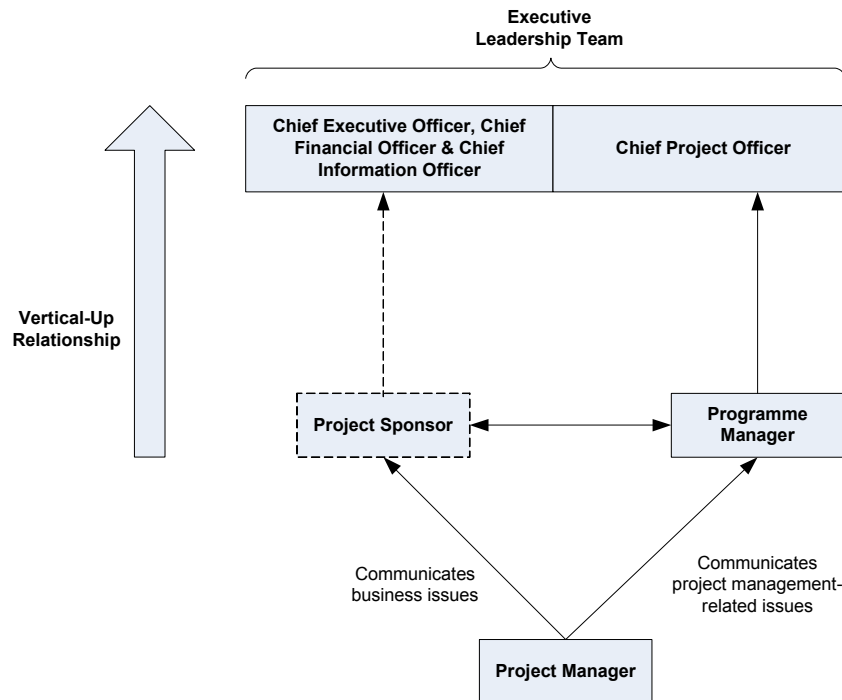
Figure 6.4: Vertical-up relationship from the project sponsor's perspective

Therefore, as Figure 6.4 depicts, the project manager communicates two sets of issues to those positioned above. Business issues related to the project that directly affect the organisational objectives, which are derived from the strategy, must be communicated to the project sponsor who in turn communicates this to the executive officers. In a larger organisation where many projects are conducted, this could be those in charge of a specific business unit.

The programme manager receives project-management related issues from the project manager. The programme manager has to ensure that all projects within the programme are on track, on budget and meet scope requirements (PMI, 2005a:32). It is these criteria that the programme manager will be appraised of, and as such, project management-related risks will not fall within the scope of the role of the sponsor.

By combining Figure 6.2, Figure 6.3 and Figure 6.4 it is possible to position the project sponsor within a project-oriented organisation. This is presented in Figure 6.5
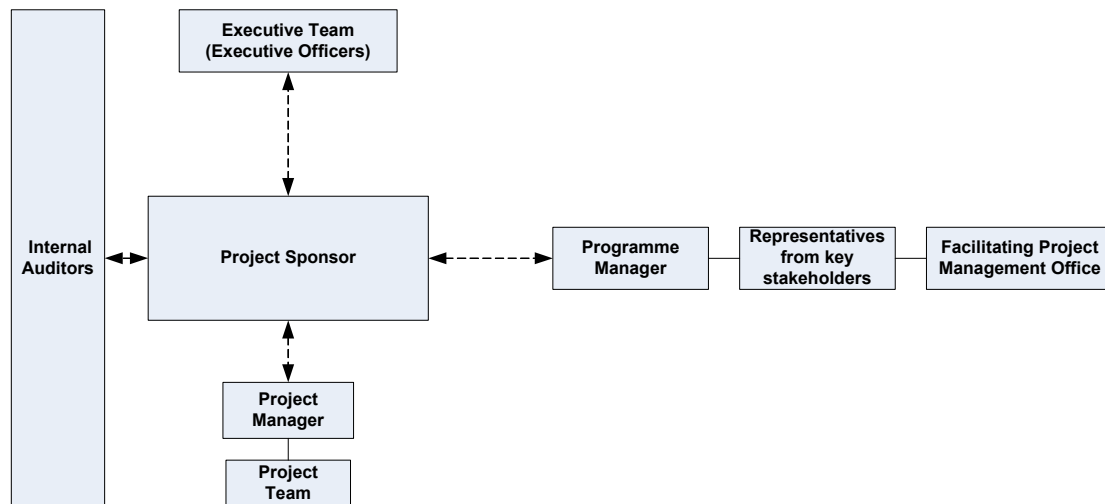
Figure 6.5: Position of a project sponsor within a project-oriented organisation

In Figure 6.5, all three relationship categories for the project sponsor have been addressed and it is possible to demonstrate how important this position is in the greater context of project management.

It can be seen that the project sponsor is the linchpin between the project manager and the executive team in achieving success for the project (project management success) and the organisation as a whole (project success). Therefore, a healthy relationship between these two positions is essential to ensure the delivered project is successful both in terms of the time, cost, quality and scope and that it meets organisational objectives.

It is now relevant to determine how the project sponsor fits within project the life-cycle and whether or not the life-cycle in its current form is sufficient to accommodate the sponsor's role.

The next section aims to elaborate on this topic.

4. The project life-cycle from the project sponsor's perspective

The project life-cycle was introduced in section 2.7 of Chapter 2. This elaborated on the phases involved in the traditional life span of a project from the project manager's perspective. It is now important to determine whether or not this model is suitable to accommodate the sponsor's role after the project is completed and to determine where the sponsor could reside in such a model.

As already stated, the project sponsor has to ensure that the project under implementation realises its benefits after completion. The model of the project life-cycle presented in Chapter 2 does not allow accommodation for this particular role of the sponsor. The mapping of the systems development life-cycle onto the project life-cycle also does not consider the role of the project sponsor.

Watson (2004:2 para.4) suggests that by utilising two phases from the British Standard Guideline for Project Management's product life-cycle (BSI, 1996) it is possible to accommodate the sponsor's role in benefits realisation.

It is therefore proposed that these two phases, namely "operation" and "termination", be added onto to the traditional project life-cycle and that they collectively be grouped into the "Benefits Realisation" stage.

This new project life-cycle (adapted from BSI (1996) is depicted in Figure 6.6.
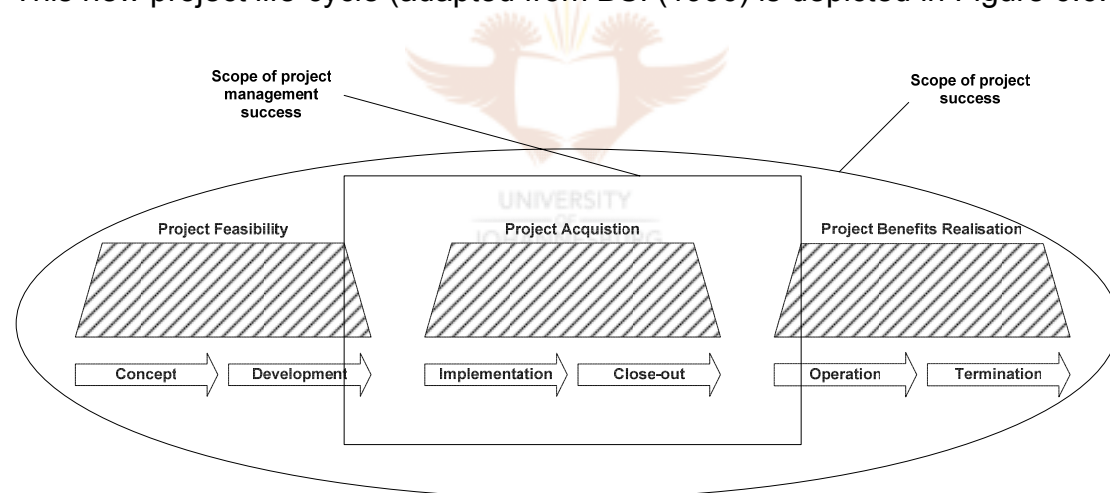
Figure 6.6: A proposed new project life-cycle

In addition to this proposed project life-cycle depicted in Figure 6.6, Watson (2004:2 para.4) implies that the scope of project management success should only be limited to the actual work conducted by the project manager.

This means that the manager's work is limited only to work conducted:

- At the end of the feasibility stage (towards the end of development);
- During the entire acquisition stage (including implementation and close-out);

- At the beginning of the benefits realisation stage. This would be at the beginning of operations (especially when a system has problems that need to be tended to after installation).

The sponsor's role however incorporates the entire project life-cycle, from project feasibility through to the termination phase of the project benefits realisation stage. As already stated, the benefits realisation stage contains two phases, namely "operations" and "terminations".

Operations encompass the actual utilisation of the product or service which the implemented project sets out to deliver. Once a product or service is deemed outdated or if there has been a decision to replace the current one, the termination phase is entered, which would see the old product or service replaced and subsequently terminated.

A detailed discussion on the role the sponsor plays in each stage of this new project life-cycle will follow in the next chapter.

It is now important to determine which control objectives, derived from the corporate governance framework are applicable to the role of the project sponsor.

5. Control Objectives for project sponsorship
The development of the corporate governance framework in the previous chapter allows an organisation to align all its initiatives by utilising control objectives that are structured within their respective domains.

Since both COBIT and the PG framework (which together form this framework) address the governance of projects, it is important to understand which control objectives are relevant for project sponsorship.

Consequently, it is possible to then combine these activities (in the following chapter) into a set that encompasses everything required of the sponsor, in order for this position to have a positive effect on the success of a project (before, during and after its completion).

5.1 Relevant Control Objectives from COBIT

COBIT's control objectives for the governance of IT project management are placed under the PO10 domain (Planning and Organisation Domain 10).

However, the PO10 control objectives do not explicitly state which are applicable for sponsoring a project. Therefore, it is important to determine which control objectives require direct involvement from the project sponsor and which do not.

The PO10 control objectives take into consideration aspects such as (ITGI, 2000:60):

- Business management sponsorship for projects
- Programme management
- Project management capabilities
- User involvement
- Task breakdown, milestone definition and phase approvals
- Allocation of responsibilities
- Rigorous tracking of milestones and deliverables
- Cost and manpower budgets as well as balancing internal and external resources
- Quality assurance plans and methods
- Programme and project risk assessments
- Transition from development to operations.

The control objectives are:

- **PO10.1 - Project Management Framework:** This control objective is the umbrella objective for all the other objectives within PO10 as it takes into consideration (amongst other things) the allocation of responsibilities, check points and approvals.

  This means (as will be shown in a later control objective) that the project sponsor assigns responsibility for overall project delivery to the project manager and that check points and approvals be initiated during each phase and stage of the project's life-cycle.

- **PO10.2 - User Department Participation in Project Initiation:** This control objective takes into consideration the participation by the affected user department's management. Since the project sponsor inherits the product or service under development, it is important that the sponsor ensures that additional members or key stakeholders within the affected department co-operate with the project manager during project initiation.

- **PO10.3 - Project Team Membership and Responsibilities:** This control objective takes into consideration the assigning of staff members, responsibilities and authorities of the project team members. It is the project manager's responsibility to ensure this control objective is met.

- **PO10.4 - Project Definition:** This control objective takes into consideration the creation of a clear written statement defining the nature and scope of the project before work on the project begins. This may be in the form of the project charter which is a document that formally recognises the existence of a project and provides direction on the project's objectives and management (Schwalbe, 2004:153).

  As will be shown later, the project sponsor must sign this document.

- **PO10.5 - Project Approval:** This control objective focuses on senior management's role in reviewing the reports of relevant feasibility studies as a basis for its decision whether to proceed with the project.

  This means that either the sponsor, or another designated individual should determine whether or not the project is a viable undertaking. This is then reviewed by various members, which may include the chief project officer, the chief information officer, the chief financial officer and other important stakeholders.

- **PO10.6 - Project Phase Approval:** This control objective takes into consideration the approval of work in each phase of the project life-cycle before work on the next phase begins. This is a primary example of a function performed by the project steering committee that the sponsor chairs.

- **PO10.7 - Project Master Plan:** This control objective takes into consideration that a project master plan is created that (amongst other things) includes progress measures for the project steering committee (that the sponsor chairs).

- **PO10.8 - System Quality Assurance Plan:** This control objective ensures that a system quality plan be formally created by the project manager. This links back to the quality management knowledge area and is therefore something that the project manager is responsible for creating.

- **PO10.9 – Planning of Assurance Methods:** This control objective ensures that the project manager ensures that the internal controls and security features (if applicable) meet the related requirements.

- **PO10.10 - Formal Project Risk Management** – This control objective takes into consideration the implementation of a formal risk management programme on the part of the project manager. This directly affects the sponsor and as such the sponsor should be aware of potential business risks that may arise during the project's implementation.

- **PO10.11 Test Plan:** This control objective focuses on the development of a test plan for a system or product that is being developed. This test plan should be developed by the project team and takes into consideration all possible user inputs and outputs by the user department that inherits the project.
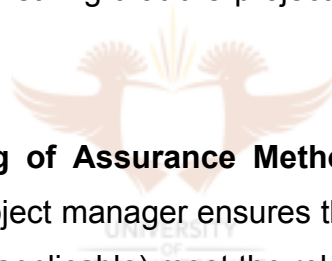
- **PO10.12 - Training Plan:** This control objective specifies that a training plan be developed for the affected user department's staff that inherits the product or service. As such, this is also a task for the project manager.

- **PO10.13 - Post-Implementation Review Plan:** This control objective takes into consideration a review of whether the project has delivered the planned benefits. This is probably the most crucial part of the sponsor's role as it is the sponsor who will determine whether the project's benefits will be realised in the long-run. COBIT however makes use of the word "implementation" which in this context is interchangeably used with the project life-cycle's "acquisition" stage.

  This is because once project acquisition is completed; the benefits realisation stage begins, which determines whether the project has delivered the planned benefits.

As can be seen, most of COBIT's PO10 control objectives have varying degrees of impact on the project sponsor. This further emphasises the role a sponsor plays in the overall success of a project.

The control objectives required to be met by the project manager are therefore PO10.3, PO10.8, PO10.9, PO10.11 and PO10.12. The steering committee however, which as already stated is chaired by the sponsor should ensure that the manager meets these objectives.

The control objectives required to be met by the project sponsor are therefore PO10.1, PO10.2, PO10.4, PO10.5, PO10.6, PO10.7, PO10.10 and PO10.13. The sponsor is directly involved in fulfilling these control objectives either together with the project manager, the steering committee or those positioned above the sponsor (senior management or senior executives).

The control objectives for the PG framework are more specific in terms of what is required from project sponsors. This is because the PG framework (as

stated in the previous chapter), divides the requirements from each level in the project management process, into individual components (APM, 2004:9).

However, apart from project sponsorship, there are some control objectives that fall under other components that should also be taken into consideration. The sponsorship control objectives, and the other relevant objectives not within the sponsorship component, will now be discussed.

5.2 Relevant Control Objectives from the PG Framework

The various control objectives in the PG framework are not as descriptive as the control objectives provided for in COBIT. This is to be expected, especially considering that COBIT is in its third edition whilst the PG framework was only published in 2004.

The control objectives from the PG framework are as follows:

PS1 - Project Sponsor competency: This control objective briefly states that all projects must have competent sponsors at all times. It does not mention what project sponsor competency entails and as such requires further investigation

PS2 - Time Management: This control objective asks whether project sponsors devote enough time to the project. It does not specify how much time the sponsor should spend during any of the project life-cycle stages.

PS3 - Project status: This control objective ensures that sponsors hold regular meetings with project managers and that they should be sufficiently aware of the project status. This could be in the form of the project steering committee meetings attended by all affected stakeholders and internal auditors receiving updates on the status of the project under implementation.

PS4 - Directions and Decisions: This control objective states that sponsors have to provide clear and timely directions and decisions. Although not elaborated upon, it does imply and further emphasise the fact that the sponsor has to ensure that the project is a success to the organisation over and above the success of the project management process.

PS5 - Access to sufficient resources and skills: This control objective specifies that sponsors have to ensure that project managers have access to sufficient resources with the right skills to deliver projects. This objective can be met by implementing the supportive project management office which was introduced in the previous chapter.

PS6 – Appropriate Project Close-Out: This control objective asks whether projects are closed at the appropriate time. It does not specify when projects should be closed; however, the author concludes that the sponsor must ensure that the project management close-out phase (in Project Acquisition) is done correctly.

PS7 - Independent appraisal of projects: This control objective states that independent evaluation of the value of a project should be conducted before it is implemented. Thus, the merits for implementing it should be evaluated beforehand. This can also apply to the post-implementation review.

PS8 - Project Sponsor Accountability for the Business Case: This control objective assigns accountability to the sponsor for owning and maintaining the business case for the project. This is to say, that the sponsor has to ensure that the project under implementation is on course and that the business objectives for implementing the project (specified in the business case) are met.

PS9 - Project Sponsor accountability for realisation of benefits: This control objective assigns accountability to the sponsor to ensure that the benefits for implementing the projects are realised. This means that once the project is handed over to the sponsor after completion that the intended business objectives of implementing such a project are attained.

PS10 - Project representation: This control objective merely states that sponsors should adequately represent the project throughout the organisation. This links to the three relationship categories where the sponsor has vertical (up and down) and horizontal relationships with various stakeholders in the organisation.

PS11 - Stakeholder interests: This control objective states that sponsors should always ensure that the interests of key stakeholders are aligned with project success. This once again links to the relationship categories and ensures that the interests of all involved parties are taken into consideration.

PM1 - Clear success criteria (Project Management Component): This control objective does not form part of the sponsorship component, but it is the author's opinion that the sponsor (together with other stakeholders) ensures that the project being undertaken has clear success criteria and that it is measured not only on the success of the project management process, but on its ability to support organisational objectives (via strategy).

DR1 - Project Forecasts (Disclosure and Reporting Component): This is particularly relevant as it specifies that the Board (and the executive team) receive timely, relevant and reliable information of project forecasts, including those produced for the business case at project authorisation points.

As already stated in control objective PS8, the sponsor owns and maintains the business case and as such this particular control objective is also particularly relevant. Therefore, the sponsor would be required to provide data relevant to this control objective to internal auditors who would sit in on project steering committee meetings.

6. Research Value

This chapter introduced the concept of the project sponsor that provided a broader perspective on the role this person plays within project management.

It was also shown that the sponsor has important relationships with various role-players in the organisation. As such, effective and efficient sponsorship is vital for a project in order to ensure that it is a success both in terms of its management and in terms of realising its intended benefits.

In addition to this, it was shown that the project life-cycle, presented earlier in this research study, did not properly reflect the role of the project sponsor after the project had been completed. As such, an extension to the life-cycle

was added which reflected the benefits realisation stage of a project within which the sponsor plays a direct and active role. Thus, two additional phases that were not earlier introduced have been added, and as such must be further elaborated upon.

Finally, the control objectives derived from the corporate governance framework were presented. It was shown that the project sponsor has many requirements from a governance perspective to fulfil in order to ensure overall project success. Questions were raised regarding how these control objectives map onto the project life-cycle, and how they relate to the relationship categories.

7. Conclusion

This chapter presented an introductory presentation of the role of the project sponsor. It sought to determine who the sponsor is and to position this person within a project-oriented organisation.

The first objective was to introduce who the project sponsor is and to determine why this role is important. This was achieved by formulating a definition for who the sponsor, is based on the roles and responsibilities conducted by this position. Furthermore, some research studies conclude that the skills of the sponsor have a significant impact on the success of a project, more so than the qualification of project managers and the project processes that are established.

The second objective was to present a model of where the project sponsor is positioned in a project-oriented organisation. This was done by establishing that the sponsor has relationships with those positioned to the side (horizontal), above (vertical-up) and below (vertical-down). It is within these three categories that the sponsor will form the linchpin of project success. Figure 6.5 combines all these relationships into a model that positions the sponsor within the project-oriented organisation.

The third objective sought out to determine where the project sponsor fits onto the project life-cycle and whether or not the project life-cycle in its present

form (Figure 2.3) required adaptation to embrace the role of benefits realisation. It was shown in Figure 6.6 that the scope of project success begins during the feasibility stage of the project and extends beyond the acquisition stage and into the benefits realisation stage. As such, an additional "Project Benefits Realisation" stage was added to the traditional project life-cycle stages.

The final objective was to determine which control objectives derived from the governance framework were applicable to the sponsoring of projects. It was demonstrated that all of COBIT's control objectives involved the project sponsor either directly or indirectly. Furthermore, all of the PG framework's project sponsorship component control objectives are applicable as well as two additional objectives, namely PM1 and DR1.

To conclude, it can be stated that support from senior management in the form of project sponsorship is essential to the success of any project. With an increasing number of organisations embracing the project management method of conducting business and with statistics on the success of IT project management stating that top management support is an essential success factor, effective and efficient sponsorship of projects is very important.

Furthermore, with these same organisations pressured via acts of legislation and corporate governance regulations to protect and maximise shareholders' investments, they have to meet control objectives derived from relevant governance frameworks.

The corporate governance framework developed in the previous chapter, which encompasses COBIT (IT governance) and the PG framework (project governance) provides detailed control objectives for the project sponsor to fulfil. These control objectives need detailed examination. An investigation into how they map onto the project life-cycle is also of great importance.

The next chapter details how each of these control objectives map onto the project life-cycle. Once this is completed, a detailed discussion is presented

on the exact requirements that the sponsor needs to fulfil.

Chapter 7

The Role of the IT Project Sponsor from a Governance Perspective

"Knowing is not enough; we must apply. Willing is not enough; we must do."

Johann Wolfgang von Goethe - German playwright (1749 -1832)

1. Introduction

1.1 Background

The previous chapter sought out to present an introductory view of the IT project sponsor and to determine where this person is positioned within a project-oriented organisation. Furthermore, it was shown that the project life-cycle had to be adapted to suit the role of the sponsor and that there were control objectives derived from the governance framework that the sponsor had to fulfil.

1.2 Goal

The goal of this chapter is to establish a comprehensive set of measures to allow the project sponsor to be compliant with IT and project governance.

1.3 Objectives

In order to reach the goal mentioned above, some objectives must first be met:

- The first objective is to compare the sponsor's control objectives derived from the COBIT and PG frameworks respectively and to determine whether any similarities or differences between them exist in terms of the topics they address.

- The second objective is to determine what is expected of the project sponsor at each stage of the project life-cycle from a governance perspective.

- The third objective is to determine what measures should be in place to successfully fulfil each control objective. This will give the sponsor a better understanding of what is required by introducing tangible measures for each control objective.

1.4 Layout

The first section of this chapter compares the control objectives derived from the PG and COBIT frameworks respectively and to furthermore determine whether a consolidation is required for those objectives that are similar in nature. Once this is presented, a new naming scheme is given for both sets of control objectives.

The second section maps the consolidated control objectives onto the adapted project life-cycle which was introduced in the previous chapter. This seeks to provide a better understanding of what is required from the sponsor at each phase and stage of the project life-cycle.

The third section explains how each control objective can be successfully fulfilled by providing tangible measures that quantify them.

2. Comparison and consolidation of control objectives

The previous chapter introduced all the control objectives from the corporate governance framework (PG and COBIT) that the project sponsor must fulfil in order for the project to be considered a success.

This section seeks to compare the control objectives from both frameworks in order to determine whether any similarities exist. If any do exist, they will be consolidated into one control objective to provide the sponsor with a clearer understanding of what is required from the corporate governance framework.

2.1 Comparison and consolidation of the COBIT and PG frameworks' control objectives

The reader will recall the following control objectives relevant to the sponsor from the COBIT framework:

Table 7.1: Control objectives relevant to IT project sponsorship from the COBIT framework

COBIT Framework (IT Governance)
PO10.1 Project Management Framework
PO10.2 User Department Participation in Project Initiation
PO10.4 Project Definition
PO10.5 Project Approval
PO10.6 Project Phase Approval
PO10.7 Project Master Plan
PO10.10 Formal Project Risk Management
PO10.13 Post-Implementation Review Plan

The reader will recall the following control objectives relevant to the sponsor originally from the PG framework:

Table 7.2: Control objectives relevant to IT project sponsorship from the PG framework

PG framework (Project Governance)
PS1: Project Sponsor Competency
PS2: Project Sponsor Time Management
PS3: Project status
PS4: Directions and Decisions
PS5: Access to sufficient resources and skills
PS6: Appropriate Project Close-Out
PS7: Independent Appraisal of Projects
PS8: Project Sponsor Accountability for the Business Case
PS9: Project Sponsor Accountability for Realisation of Benefits
PS10: Project Representation
PS11: Stakeholder interests
PM1: Clear success criteria
DR1: Project Forecasts

A table of comparison for the two sets of control objectives is depicted in Table 7.3.

Table 7.3: A comparison of the control objectives relevant to IT project sponsorship from the PG and COBIT framework.

PG / COBIT	PS1	PS2	PS3	PS4	PS5	PS6	PS7	PS8	PS9	PS10	PS11	PM1	DR1
PO10.1				X									
PO10.2											X		
PO10.4	No exact comparison												
PO10.5							X						
PO10.6				X									
PO10.7								X					
PO10.10	No exact comparison												
PO10.13									X				

As table 7.3 illustrates, there are six control objectives from the COBIT and PG frameworks that are similar. These are:

2.1.1 COBIT PO10.1 and PG PS4
COBIT's PO10.1 Project Management Framework contains a requirement that the allocation of responsibilities be should conducted by the project steering committee - therefore the sponsor assigns project delivery to the project manager. This correlates to the PG framework's PS4 control objective that asks whether sponsors provide clear and timely directions and decisions.

The assignment of delivery to the project manager is an important decision that is made by the sponsor. As such, these two control objectives are consolidated into one.

2.1.2 COBIT PO10.2 and PG PS11
COBIT's PO10.2 User Department Participation in Project Initiation takes into consideration the participation by the affected user department's management. Since the project sponsor inherits the product or service under development, it is important that the sponsor bring additional members or key stakeholders within the affected department, to work with the project manager during project implementation.

This correlates to the PG framework's PS11 control objective, which states that the sponsor should ensure that interests from key project stakeholders, who include those affected by the implemented project, are aligned with project success. These two control objectives are consolidated into one.

2.1.3 COBIT PO10.5 and PG PS7

COBIT's PO10.5 Project Approval ensures that for each project the organisation's senior management reviews feasibility reports and other studies as a basis for deciding whether to proceed with the project.

This is similar to the PG framework's PS7 control objective which states that independent appraisal should be conducted for projects before proceeding with them. These two control objectives are consolidated into one.

2.1.4 COBIT PO10.6 and PG PS4

COBIT's PO10.6 Project Phase Approval takes into consideration the fact that work accomplished in each phase of the project life-cycle has to be approved before work on the next phase begins.

The sponsor is in charge of the business case and therefore it is his responsibility to ensure that the project being implemented delivers its benefits. This objective correlates with the directions and decisions control objective in the PG framework (PG PS4). Therefore, the sponsor, together with the steering committee will decide whether any additional work is required in the phase before work begins in the next phase.

2.1.5 COBIT PO10.7 and PG PS8

COBIT's PO10.7 Project Master Plan contains all the elements that are contained within a business case (Turbitt, 2005:2). These elements include statements of scope, objectives, required resources and methods for monitoring time and costs. The PG framework's PS8 control objective assigns accountability to the sponsor for owning and maintaining the business case for the project.

Therefore, it is argued that since both of these control objectives address the same issues that they also be consolidated into one control objective.

2.1.6 COBIT PO10.13 and PG PS9

COBIT's PO10.13 Post-Implementation Review Plan takes into consideration a review of whether the project has delivered its planned benefits.

This is similar to the PG's PS9 control objective which specifies that the project sponsor take accountability for the realisation of benefits. Furthermore, and as already stated in the previous chapter, COBIT has interchangeably used the word "implementation" for this control objective with both the implementation phase and close-out phase of the project life-cycle. Therefore, these two control objectives will also be consolidated into one control objective under the benefits realisation "umbrella".

It is worthwhile to devise a new naming scheme for all the control objectives such that the new consolidated control objectives will have new titles and that they may be placed alongside those objectives that were not grouped together.

Furthermore, devising a new naming scheme will also dispel any confusion that may arise over which of the two frameworks (COBIT and PG) should be assigned more weight than the other. It is essential that both frameworks' control objectives should be addressed.

2.2 New Naming Convention

A proposed naming scheme for the control objectives will be called PSCO which stands for Project Sponsor Control Objectives. This as well as the consolidation of the similar control objectives from the two frameworks is depicted in Table 7.4.

Table 7.4: A Proposed Naming Convention for the project sponsor's control objectives

Old Control Objective Name (PG and COBIT)	New Control Objective Name (PSCO)
PG PS1	PSCO 1 – Project Sponsor Competency
PG PS2	PSCO 2 – Project Sponsor Time Management
PG PS3	PSCO 3 – Project status
PG PS4 and COBIT PO10.1 and COBIT 10.6	PSCO 4 – Directions and Decisions
PG PS5	PSCO 5 – Access to sufficient resources and skills
PG PS6	PSCO 6 – Appropriate Project Close-Out
PG PS7 and COBIT PO10.5	PSCO 7 – Project Appraisal and Approval
PG PS8 and COBIT 10.7	PSCO 8 – Project Sponsor Accountability for the Business Case
PG PS9 and COBIT PO10.13	PSCO 9 – Project Sponsor Accountability for Realisation of Benefits
PG PS10	PSCO 10 – Project Representation
PG PS11 and COBIT PO10.2	PSCO 11 – Stakeholder interests
PG PM1	PSCO 12 – Clear success criteria
PG DR1	PSCO 13 – Project Forecasts
COBIT 10.4	PSCO 14 – Project Definition
COBIT 10.10	PSCO 15 – Formal Project Risk Management

As Table 7.4 demonstrates, the consolidated control objectives from the PG and COBIT frameworks have now been given a new naming convention. Therefore, there are fifteen control objectives that the project sponsor has to meet in order for this position to effectively and efficiently ensure that the project, from conception to termination, is a success.

It is now relevant to map these control objectives onto the project life-cycle. This will give the sponsor a better understanding of what is required in each stage and phase of the life-cycle from a governance perspective.

3. Control Objectives and their relation to the project life-cycle

The previous chapter introduced all the control objectives from the corporate governance framework (PG and COBIT) that the project sponsor must fulfil in order for the project to be a success

This section aims to correlate all the control objectives with the project life-cycle in order to determine which control objective is relevant for a particular phase and stage of the life-cycle.

3.1 Mapping the control objectives onto the project life-cycle

3.1.1 PSCO 1 - Project Sponsor Competency

As already stated, the individual behaviour and inter-personal skills of a project sponsor will in most cases have a greater impact on the success of a project than any project management process or even the competency of the project manager (Koch & Schmid, 2004:1).
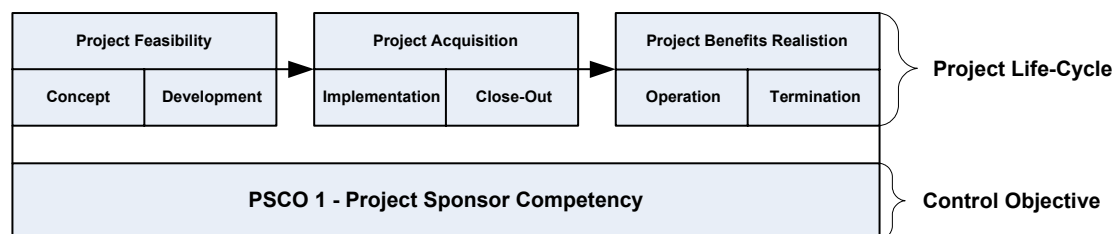
Figure 7.1: The project sponsorship competency control objective (PSCO 1) in relation to the project life-cycle

As such, and as depicted in Figure 7.1, the competency of the project sponsor is very important and will therefore be applicable to all the stages of the project life-cycle, from feasibility through to benefits realisation.

The method by which the competency of the sponsor can be measured remains unanswered. This question will be elaborated upon in the following section.

3.1.2 PSCO 2 - Project Sponsor Time Management

This control objective focuses on the time spent by project sponsors during the project.
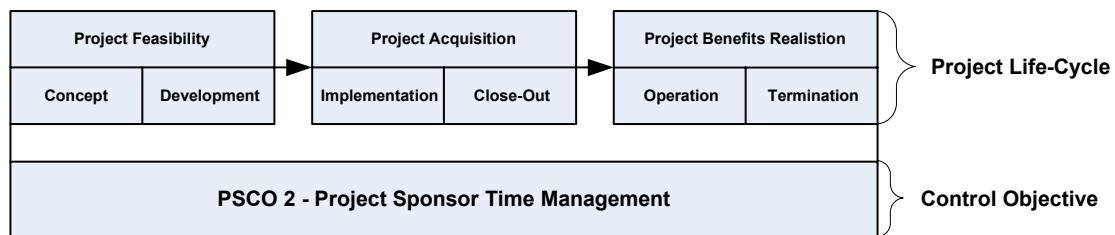
Figure 7.2: The project sponsor time management control objective (PSCO 2) in relation to the project life-cycle

This control objective questions whether sponsors devote enough time to the project. As depicted in Figure 7.2, this will also apply to all stages of the project life-cycle because the sponsor is involved right from project inception.

What is left unanswered with regards to this control objective is how much time a sponsor should spend on a project? This question is answered in the following section.

3.1.3 PSCO 3 - Project Status

This control objective questions whether the project sponsor is aware of the status of the project, that is, do they hold regular meetings with the project manager.
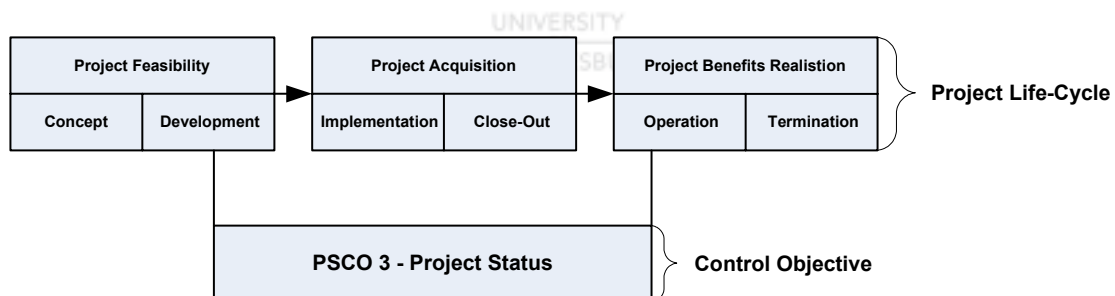
Figure 7.3: The project status control objective (PSCO 3) in relation to the project life-cycle

As already stated, the project manager's work begins towards the end of the development phase of the feasibility stage and ends at the beginning of the operation stage of the benefits realisation stage. Therefore, as Figure 7.3 depicts, the relationship between the project sponsor and project manager begins as soon as the project manager starts work on the project.

3.1.4 PSCO 4 - Directions and Decisions

This control objective asks whether the sponsor provides clear and timely directions and decisions.
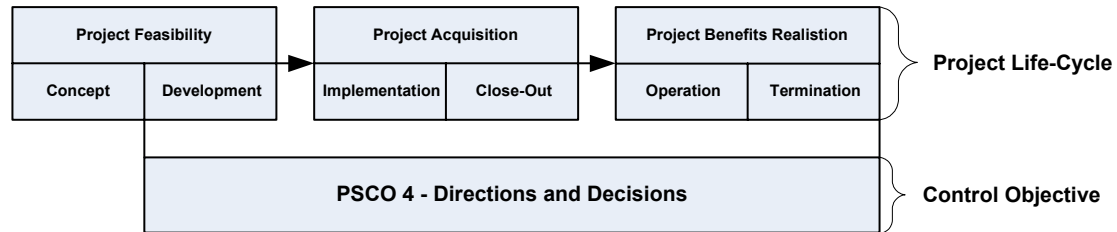
Figure 7.4: The directions and decisions control objective (PSCO 4) in relation to the project life-cycle

As depicted in Figure 7.4, project sponsors will therefore provide directions and decisions from the moment they are in an authoritative position. This means that once the project has been conceptualised, it is the responsibility of the project sponsor to develop the business case which will begin during the development stage, and only concludes at the end of the termination phase which is when the project ceases to exist.

The types of decisions and directions required are discussed in the following section.

3.1.5 PSCO 5 - Access to sufficient resources and skills

The function of this control objective is to ensure that the project sponsor is capable of assisting the project manager (if the project manager so requires) in clearing paths and clearing obstructions that hinder the project's implementation.
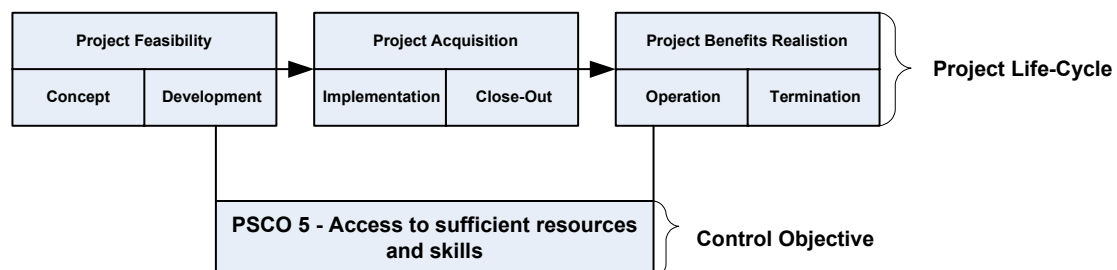
Figure 7.5: The access to sufficient resources and skills control objective (PSCO 5) in relation to the project life-cycle

As depicted in Figure 7.5, because the sponsor initiates work with the project manager during development, and concludes work with the manager just after the beginning of operation, this control objective would therefore apply to these specific life-cycle phases.

3.1.6 PSCO 6 - Appropriate Project Close-Out

Project close-out specifies that sponsors should ensure that projects are closed at the appropriate time.
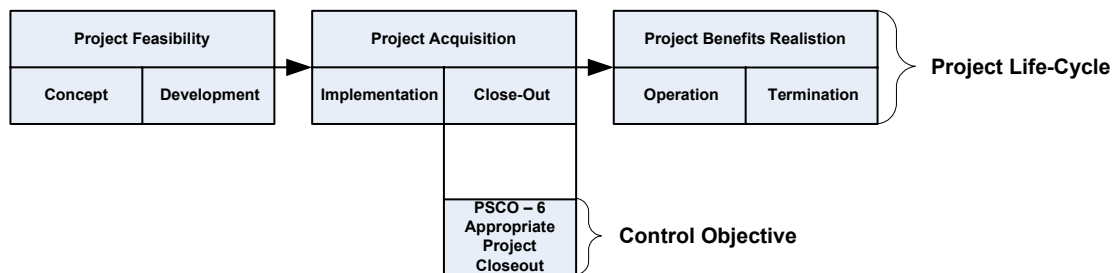
Figure 7.6: The appropriate close-out control objective (PSCO 6) in relation to the project life-cycle

As depicted in Figure 7.6, the appropriate close out control objective maps directly over the close-out phase of the project acquisition stage. What remains questionable is what is meant by appropriate closure? This question is also answered in the following section.

3.1.7 PSCO 7 - Project Appraisal and Approval

This control objective focuses on ensuring that independent advice (if required) is procured to determine the value of a project before its implementation. Once it is determined that the project is indeed feasible, then the project's implementation will be approved of.
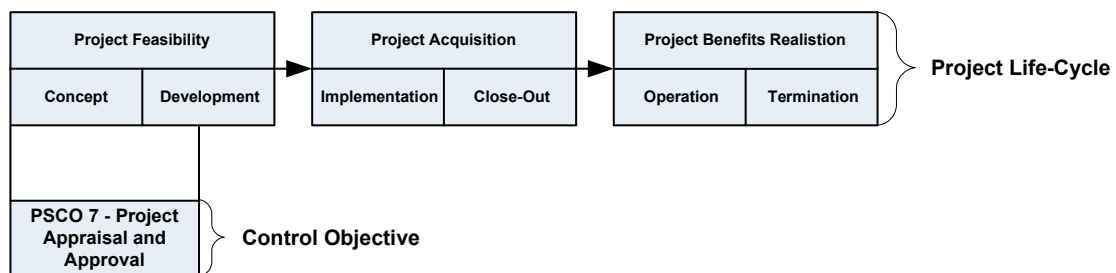
Figure 7.7: The appraisal and approval of projects control objective (PSCO 7) in relation to the project life-cycle

As Figure 7.7 depicts, the appraisal and approval of projects is conducted during the feasibility phase and at the beginning of the development phase. This view is supported by Knutson (2005:1 para.8) who states that the sponsor collaborates with the senior management team (the chief information officer and the chief project officer) to clarify the potential benefits of conducting an IT project. This would be during the concept phase.

Once completed, the assigned project manager collaborates with the project sponsor to determine the possible and estimated costs would be for implementing the project and any other issues that may arise before the project can be implemented (Knutson, 2005:1 para.8).

3.1.8 PSCO 8 - Project Sponsor Accountability for the Business Case

This control objective states that the sponsor owns and maintains the business case for the project. The business case is a document that justifies the project and includes financial metrics such as return on investment (PMI, 2004:82).
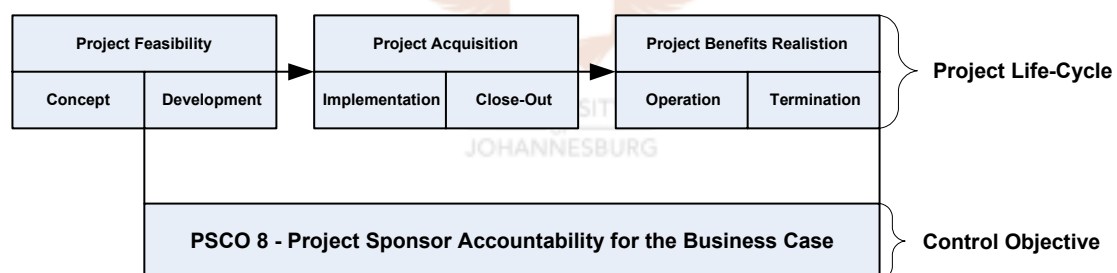
Figure 7.8: The sponsor's accountability for the business case control objective (PSCO 8) in relation to the project life-cycle

As Figure 7.8 depicts, this control objective takes into effect during the development phase of the feasibility stage. This means that once the initial concept for the project was created, the project sponsor will develop a case for conducting the project.

The sponsor then maintains the business case throughout the project ensuring that during its acquisition, the project continually meets its business objectives. After acquisition, the realised benefits will be monitored with respect to the requirements specified in the business case.

3.1.9 PSCO 9 - Project Sponsor Accountability for Realisation of Benefits

This control objective specifies that sponsors should be accountable for the realisation of benefits.
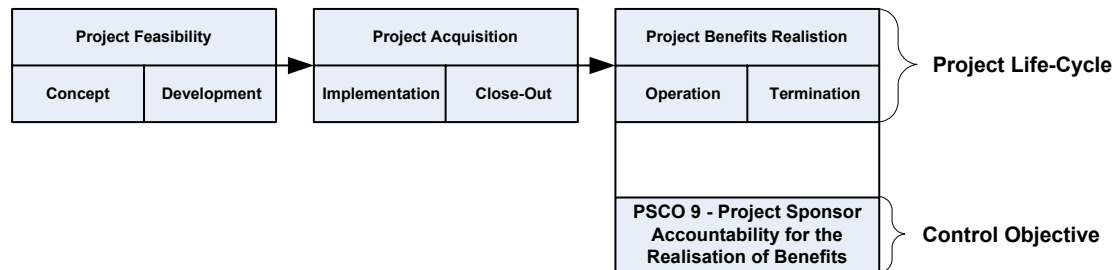
Figure 7.9: The sponsor's accountability for the realisation of benefits control objective (PSCO 9) in relation to the project life-cycle

As Figure 7.9 depicts, the accountability for the realisation of benefits begins during the benefits realisation stage of the project life-cycle (during operation) and ends at the termination phase.

It is important to note that Thomsett (2002:57) states that a benefits realisation plan should be developed and contained within the business case that is developed in the development phase. This document contains a detailed analysis of the expected benefits of the project. Once the project is delivered, the benefits realisation plan is implemented.

However, the accountability for monitoring of the realisation of benefits is applicable to this particular stage of the project life-cycle.

3.1.10 PSCO 10 - Project Representation

This control objective asks whether the sponsor adequately represents the project throughout the organisation.
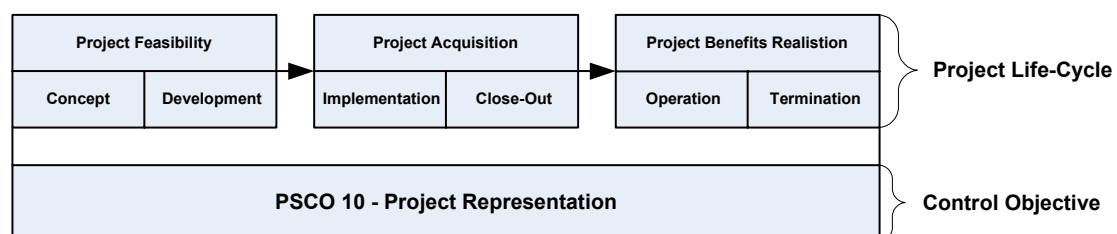
Figure 7.10: The sponsor's project representation control objective (PSCO 10) in relation to the project life-cycle

As depicted in Figure 7.10, this control objective affects each project life-cycle stage, as sponsor (who will ultimately inherit the product or service which is under development) has to "champion" the project throughout the organisation. This means for example, that barriers that would otherwise hamper project success have to be "broken down" by the sponsor.

3.1.11 PSCO 11 - Stakeholder interests

This control objective specifies that the interests of key stakeholders including providers of finance, suppliers, regulators and others are aligned with project success.
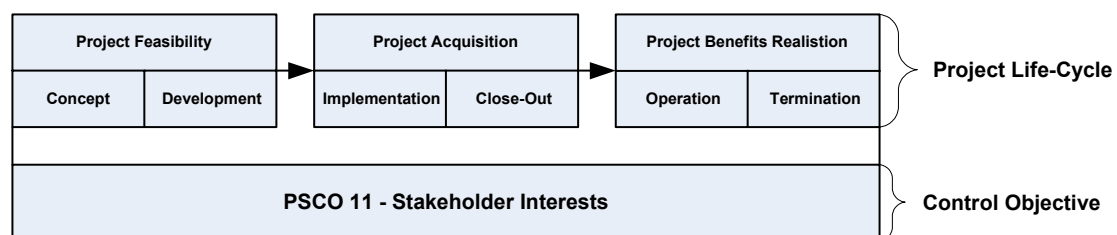
Figure 7.11: The stakeholder interests control objective (PSCO 11) in relation to the project life-cycle

As Figure 7.11 depicts, the sponsor has to ensure that throughout the project's life-cycle, that the interests of all those affected by the project are aligned with the project's success. Therefore, adequate financing of the project must be available and those affected by the delivery of the project must be adequately prepared for the change that may arise after it has been handed over.

3.1.12 PSCO 12 - Clear success criteria

According to the APM (2004:10), this control objective falls outside of the scope of the project sponsorship component.

However, as already stated, the project sponsor ultimately inherits the project under implementation. Therefore, the sponsor and project manager will devise a set of success criteria that decide whether the completed project was a success benefiting the organisation and not only limited to project management success (the quadruple-constraint).
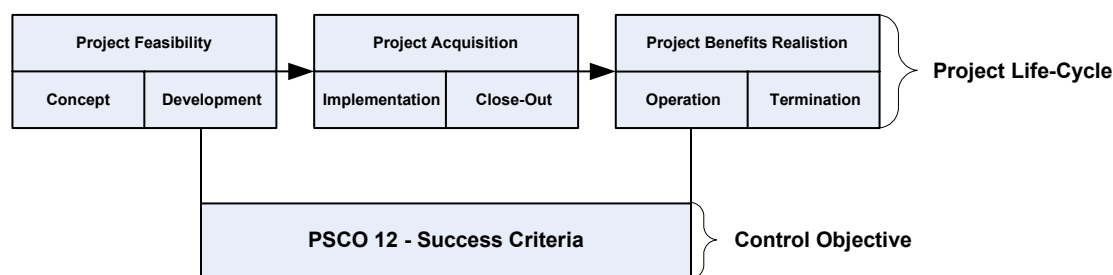
Figure 7.12: The success criteria control objective (PSCO 12) in relation to the project life-cycle

As Figure 7.12 depicts, the project sponsor and project manager, whilst devising the business case, would devise a set of success criteria that would ultimately determine if the delivered project was a success. This is completed during the development phase of the project feasibility stage. This will assist both the project manager and project team, who during implementation will have a greater understanding of what is expected of the project once it has been delivered.

Therefore, during the acquisition stage, the project will be continually measured against this success criteria and then during the benefits realisation stage, it will be determined if the criteria have been met.

3.1.13 PSCO 13 - Project Forecasts
According to the APM (2004:12), this control objective falls outside of the scope of the project sponsorship component.

As already stated, the project sponsor owns and maintains the business case throughout the duration of the project life-cycle. Therefore the internal auditors, who oversee all the disclosure and reporting control objectives, must ensure that the executive team who devise IT projects (the chief information officer and chief project officer) receive project forecasts contained within the business case.
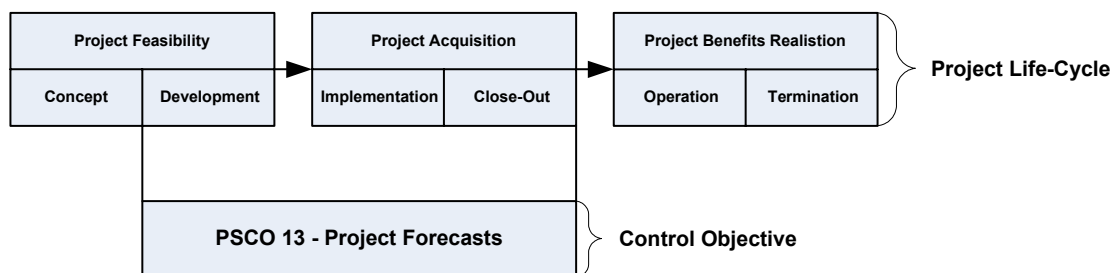
Figure 7.13: The project forecast control objective (PSCO 13) in relation to the project life-cycle

As Figure 7.13 depicts, the project forecasts are produced during the development phase of the feasibility stage. This occurs after formulating the original concept for the project by the chief project officer and chief information officer (who as already stated translate the IT strategy into IT projects).

Therefore, the internal auditors should ensure that the sponsor is fulfilling this control objective by providing this information to the CIO and CPO who will then be able to prioritise the project or abandon it.

3.1.14 PSCO 14 - Project Definition

The project definition control objective states that the project management framework should provide for the creation of a clear written statement defining the nature and scope of the project.

Turbit (2005:1) states that this document is interchangeably used with the "project charter" which according to Schwalbe (2004:641) is a document that formally recognises the existence of a project and provides direction on the project's objectives and management.
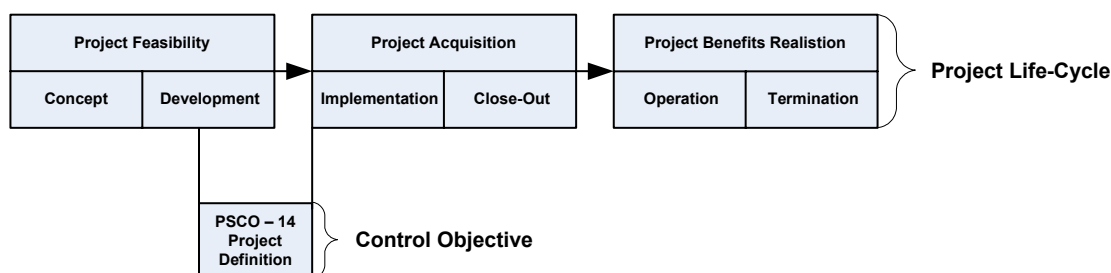
Figure 7.14: The project definition control objective (PSCO 14) in relation to the project life-cycle

As depicted in Figure 7.14, the project definition or project charter is conceived in the development phase. According to Turbit (2005:1) it is done in this phase because it defines the manner in which the project will be managed and governed which is essential before actual implementation begins.

3.1.15 PSCO 15 - Formal Project Risk Management

The final control objective which the project sponsor has to meet is the requirement to fulfil a formal project risk management programme in order to communicate business-related issues that may arise as a result of the project's implementation.
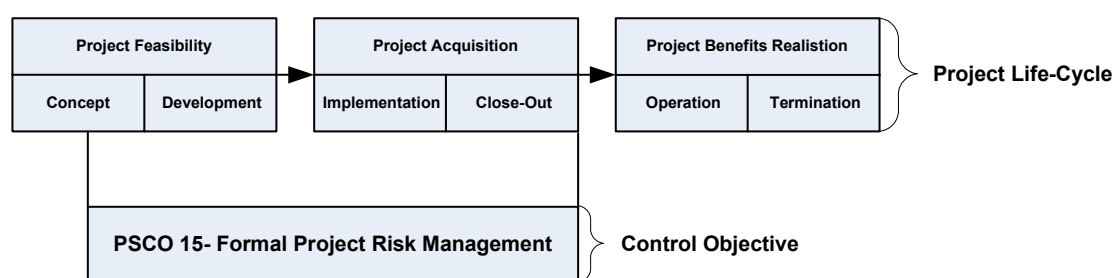
Figure 7.15: The formal project risk management objective (PSCO 15) in relation to the project life-cycle

The project sponsor should ensure that all business risks associated with implementation of the project are communicated to the executive during the initial conception. This implies that during the feasibility study, a risk assessment must be conducted by the sponsor in conjunction with the authorising body.

Once the project is eventually approved for development, then the sponsor and project manager must collaborate in developing a risk management programme to communicate business issues that may arise during development and eventual implementation.

3.1.16 A combination of the mappings

A combination of all the aforementioned mappings is depicted in Figure 7.16 below.
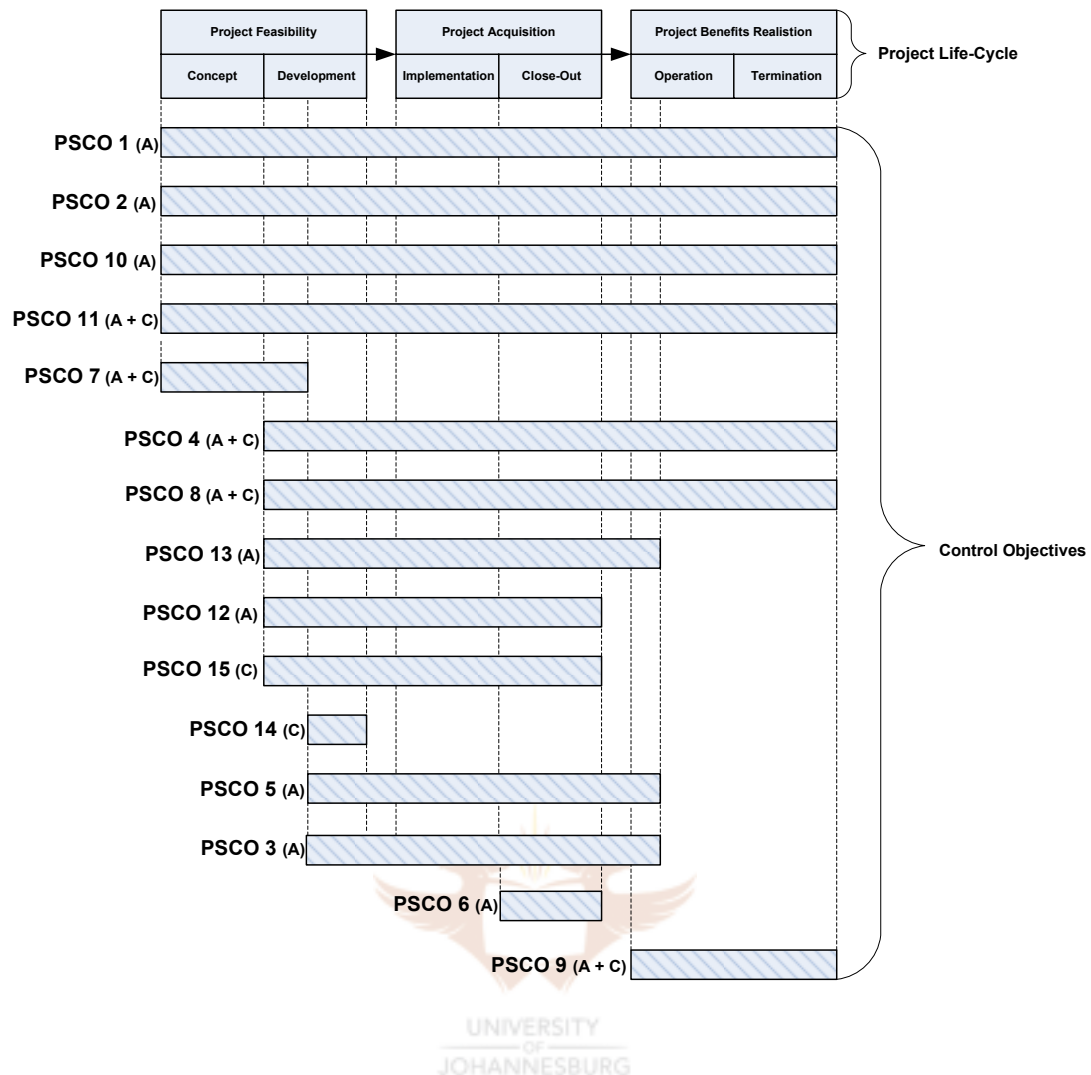
(A) = Originally from PG Framework
(C) = Originally from COBIT Framework
(A + C) = Consolidation of both frameworks' control objectives

Figure 7.16: Combination of all the sponsor's control objectives mapped onto the project life-cycle

Figure 7.16 further justifies the need to map the control objectives onto the project life-cycle as a clear picture is presented as to the requirements of the sponsor at each stage of the life-cycle.

As depicted from the Figure, the sponsor's control of the project is initiated at the very beginning during the concept phase and concludes at the termination phase. However, apart for PSCO 9, no other control objective starts with the project benefits realisation stage of the project life-cycle.

The other control objectives start in other phases and stages and may encroach on the benefits realisation stage, but there is definitely a gap in the theory (from both the APM and COBIT) regarding specific control objectives that need to be devised to monitor the effectiveness of the project benefits realisation stage, once its begins during operation.

The reason for this is that the concept of benefits realisation is relatively new in comparison to project acquisition and is therefore poorly understood compared to the other stages. If the sponsor is to realise adequately the benefits of the delivered project, additional control objectives specific to the operation and termination phase of the project life-cycle must be developed.

With the mappings complete, it is now relevant to determine how the project sponsor should fulfil the aforementioned control objectives. The next section aims to elaborate on this by providing measures to all fifteen control objectives.

4. Successfully measuring each project sponsor control objective

The premise of having control objectives is that each control objective needs to have measures whereby its effectiveness can be quantified. Once the control objective is quantified, can it be determined whether the objective has been met (ITGI, 2000:15).

The control objectives derived from the corporate governance framework do not explicitly state what measures are required for compliance. Therefore, in order to satisfy the Board of Directors and the various governance committees that the sponsorship component is sound and contributes as much as possible to overall project success, it is important to interpret how each control objective can be successfully measured.

This section will determine these measures by elaborating on how sponsors can fulfil these objectives (PSCO 1 – PSCO 15) alone or with the various role-players that were introduced in the relationship categories in the previous chapter.

4.1 PSCO 1 - Project Sponsorship Competency

One of the objectives of this research study is to determine the competencies required for the project sponsor to successfully sponsor IT projects from a governance perspective, as such this control objective is expanded in the form of a tangible competency framework in the next chapter.

Project managers are certified as Project Management Professionals (PMP) by the Project Management Institute for their role in project management. Furthermore, the Association for Project Managers in the United Kingdom also have their own certification for their members (APM, 2005).

Therefore, as certification of project managers is a generally accepted method to measure competency, it is argued that in future, project sponsors should also receive certification in order to be able to successfully sponsor projects.

Therefore, in addition to the competency framework, it is proposed that certifying the project sponsor can be used as a measure for this control objective.

4.2 PSCO 2 - Project Sponsorship Time Management

This objective is particularly difficult to quantify as the time a sponsor should devote to a project varies from organisation to organisation and from project to project, and, as such, is subjective in nature.

It is also important to understand that this sponsorship time management objective differs from the project manager's time management knowledge area which was introduced in Chapter 2. However, no matter whether a person serves on the executive leadership team, is a senior manager or a business-line manager; if they are the project sponsor, time should be set aside to control and direct the project.

Koch and Schmid (2004:5) recommend that the sponsor place regular time windows linked to the project life-cycle, into their calendar for communication with the project manager.

This dedicated time should be more frequent at the beginning of a project (Bushell, 2004; Koch & Schmid, 2004:5), less during the implementation phase, and extremely active in the benefits realisation phase (Bushell, 2004).

However for purposes of measurement, it is suggested that the project sponsor must spend 5% of the project manager's total time during the duration of the project, with more time at critical stages (Shannon, 2005).

4.3 PSCO 3 - Project Status

This control objective states that project sponsors should conduct regular meetings with project managers and be made sufficiently aware of the project status.

Müller (2003:21) states that monthly communication in the form of a monthly report or face-to-face meetings is the most often recommended method of communication.

Further to this, the Prince2 methodology (CCTA, 1999), the mandatory project management methodology for all Government projects in the United Kingdom, recommends that the reporting frequency between the project manager and the project sponsor be, at the very least during the end of a stage (in the form of a stage end report); at the end of a phase (in the form of a mid-stage report); and during project closure (in the form of a project closure report).

The documented minutes of these meetings will provide measures for this control objective.

However, with the introduction of the project management office in Chapter 5, the sponsor and all other affected stakeholders now have unlimited access to databases with project-related information such as data on cost, timing and achieved functionality.

This allows for the provision of up-to-the-minute status information to the project manager and the project sponsor simultaneously (Müller, 2003:22). Therefore, it is argued that the sponsor can remain sufficiently aware of project status by logging into these databases and that entry logs depicting

the sponsor's login times will provide an additional measure as to whether the sponsor was aware of the project status throughout its implementation.

4.4 PSCO 4 - Directions and Decisions

Without the project sponsor's direction, the project team may well make decisions, which benefits them rather than those that would be in the best interests of the sponsor and the company (Buttrick, 2004a:21).

Therefore, this control objective checks whether sponsors provide clear and timely directions and entails the following:

Firstly, the project sponsor will assign overall project delivery to the project manager. This does not mean direct appointment of the project by the sponsor, but indicates an agreement between the sponsor and project manager formally initiating their relationship.

Secondly, during the course of the project, the sponsor will receive various requests from the project manager. These may be decision requests where the sponsor is required to make certain decisions; or change requests, where the sponsor authorises change to the scope and/or deliverables (Knutson, 2005:2).

This is depicted in Figure 7.17.
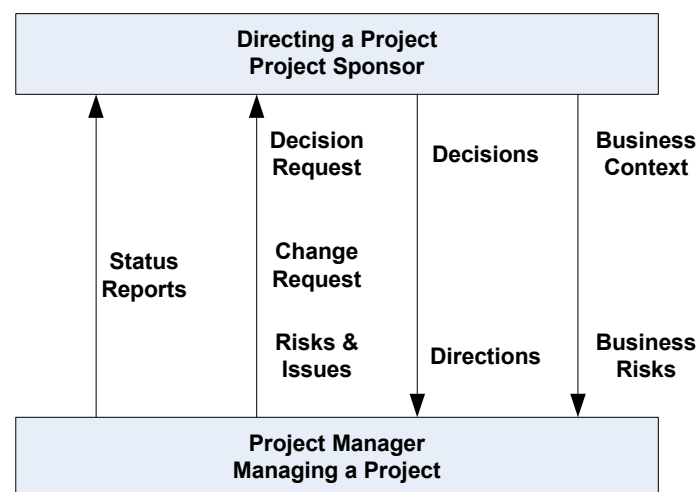
Figure 7.17: Decisional and Directional relationship between the project sponsor and project manager (Buttrick, 2004a:21)

Figure 7.17 depicts the relationship between the sponsor and manager regarding the type of directions and decisions required on the part of the sponsor. The sponsor must therefore sign off on these requests (which will be made using a request form).

The request form must contain the date of the request and a time-limit of when the decision must be made by the sponsor. Once this is completed, the request forms are documented for auditing purposes. All of these specific instructions will be contained in a policy.

Furthermore, the sponsor (who chairs the project steering committee) must approve the work accomplished in each phase of the project life-cycle before work on the next phase is initiated. This will be in the form of approval of the aforementioned status reports. The sponsor will also sign off on the deliverables and milestones achieved by the project team.

Once the project has reached the benefits realisation stage, which then falls outside of the scope of the project manager's responsibility, then the sponsor will direct those affected by the project's delivery on how best to realise its benefits. During the course of this stage, quarterly reviews are recommended to monitor and measure the benefits realised (Thomsett, 2002:273).

The minutes of these meetings will also be documented and the sponsor will sign off on these reports.

4.5 PSCO 5 - Access to Sufficient Resources and Skills

The project manager will often require resources and skills over and above those of the project team that they are managing. These may be found in the form of quality consultants, professional risk services and other external sources. The supportive project management office will often provide the manager with these resources.

However, should the project manager be unable to access resources and skills from within the organisation, then the project sponsor may be called upon to assist the manager in obtaining them. This is possible only because

the sponsor is one who is in a position that can politically and financially back the project, which is effectively the "organisational project champion".

As it is in their own interest to invest their division's budget into the project, sponsors must ensure that project managers have resources and skills at their disposal if no one else is available to provide such political and financial clout.

Therefore it is argued that the sponsor should be mandated by the authorising body to request for specific and additional resources and that this is also to be contained within a specific policy that the sponsor should adhere to.

The sponsor will then make a request from the authorising body to provide these resources and skills to the project team. By making this request, sponsors will be able to prove that a request for the provision of these resources and skills was made.

4.6 PSCO 6 - Appropriate Project Close-Out

The close-out phase of a project takes place when all the work has been completed and when there is acceptance by the customer who inherits the product or service (in this case the project sponsor) (Schwalbe, 2004:45).

During this phase, a comparison is made between what was accomplished as opposed to what was set out to be accomplished. In other words, were all the goals and objectives of the project manager and the project sponsor during planning, successfully met? (Martin & Tate, 2002:76)

The project manager would typically compile a final status report which summarises approved changes made to the project plan. This is distributed to all stakeholders (including the sponsor) and others who have received status reports throughout the project's implementation. This will be signed off by the project sponsor.

A growing practice today is for organisations to ensure constructive variance and trend analysis of time, cost, scope and quality for their projects. As such, it is worthwhile for the project sponsor to ensure that the project manager

documents all of this data for future reference (ASAPM, 2003:2). This must be forecasted into the project's budget, as the project manager cannot necessarily budget for this after the project has already been initiated.

Once all this has been completed, the sponsor will then sign-off a project closure document formerly closing the project (Schwalbe, 2004:635).

4.7 PSCO 7 - Project Appraisal and Approval

As already stated, this control objective occurs during the feasibility stage when feasibility studies and verification of certain issues regarding the project are required before actual implementation.

It is essential that if serious doubts arise regarding the value of the project to the company, or about its chances for success, then the sponsor has the responsibility of notifying the authorising body (the chief project officer, the chief information officer and other executives), that the project is not feasible and that implementing it would be considered a waste of scarce resources (Knutson, 2005:2; Watson, 2004:2).

Therefore a special review, informal or a formal audit must be conducted and documented. The scope of such a review would be set by the sponsor (Shannon, 2005).

It is this documented review process that will provide a measure for this specific control objective.

4.8 PSCO 8 - Project Sponsor Accountability for the Business Case

Before the project can be approved for implementation, it is essential that the project sponsor ensure that the business case (which, amongst other things, contains calculations for benefits realisation) is in place before the authorising body can allow the project to continue (Thomsett, 2002:57).

The sponsor must ensure that project objectives are clear and that a detailed cost-benefit analysis ensures that the project is a good investment of the company's resources (Knutson, 2005:1). Once this has been completed, the executives (or senior management) will place the business case

accountability on the shoulders of the sponsor because it is the sponsor who is in charge of ensuring that the project delivered, meets all of the criteria set out in the document.

Therefore sponsors must ensure that all financial calculations are correct and that any financial indicators that appear skewed must be corrected, otherwise they themselves will be liable for any fraud that may arise as a result of these calculations.

The sponsor will then sign the business case formally agreeing to its contents and accepting accountability.

4.9 PSCO 9 - Project Sponsor Accountability for the Realisation of Benefits

The concept of benefits realisation was introduced in the previous chapter as an additional stage in the project life-cycle. Many practitioners see this stage as the most important with regard to the sponsor's role in overall project success. It is just as critical to the success of the project as the feasibility stage (Edwards, 2004:3).

It is now accepted that benefits realisation (and hence its measurement) primarily happens after the point of project delivery and it is thus inappropriate for the project manager to have direct accountability for this (Buttrick, 2003d:3).

Depending on the nature of the project and the benefits that must be realised; there should be a series of benefit review points determined according to which the progress of the realisation process can be monitored and evaluated. As already stated, the recommended frequency of such reviews is quarterly and the sponsor should sign off on these reports. This will provide measures for this specific control objective.

A policy should therefore be in place stating that the realisations of benefits will be a factor in appraising sponsors' performance as heads of their functional divisions.

4.10 PSCO 10 - Project Representation

This control objective primarily focuses on the fact that the sponsor is seen as being the chairperson of the project steering committee (Slocombe, 2005).

Formal recognition should be given for this role and should be documented as such. Furthermore, the sponsor has to choose the members of the project steering committee and must therefore formerly document who these members are.

This will form part of the sponsor's job description and the sponsor will therefore be appraised on his ability to effectively chair the steering committee.

4.11 PSCO 11 - Stakeholder interests

This control objective specifies that sponsors should always keep stakeholders' interests in alignment with project success.

The implementation of most IT projects can bring about a change in the business process. This may result in wide-ranging implications on job profiles and functional relationships between workers, supervisors and managers. The sponsor's role in this is crucial because poor change management is often cited as a significant barrier to organisational project success and the realisation of project benefits (Khaitan, 2003:1 para.6).

Therefore, the sponsor must assume responsibility to drive change management whilst the project is being implemented (Knutson, 2005:2). From this it is implied that a divisional change management plan must be developed by the sponsor in order to effectively quantify and manage the change that will arise as a result of the project's successful implementation throughout the affected department or division.

The project sponsor must also hold regular meetings with all affected stakeholders. The minutes for these meetings will (in addition to the change management plan) provide a measure to show that the sponsor has kept all stakeholders abreast of the project status and has apprised them of all requirements in their respective roles.

4.12 PSCO 12 - Clear Success Criteria

This control objective specifies that projects have to have clear success criteria which will be employed to inform decision-making. The sponsor must therefore communicate clear and quantifiable success criteria (such as the quadruple constraint) to the project manager and team to ensure that they understand what should be done to successfully complete the project.

This will facilitate greater benefits realisation for the sponsor as the project that has been delivered will be able to have all of its outcomes positively realised as they have been based on these criteria.

4.13 PSCO 13 - Project Forecasts

As already stated, estimated benefits and costs of the project during the feasibility stage involve financial calculations. As such, the internal auditors that monitor controls must be satisfied that methods for these calculations have been correctly utilised.

The project sponsor will then provide the internal auditors with these forecasts. After verifying the information, they will be handed to the external auditors who will need this information during their audit.

Regular forecasts are also applicable during the project's implementation. These provide the internal auditors with an indication of whether the project is on course according to the original forecasts. Earned value is the recommended method of control that Prince2 and many other methodologies utilise (Müller, 2003:20).

4.14 PSCO 14 - Project Definition

The project definition is essentially the project charter (Schwalbe, 2004:153). The importance of such a document is that changes made as a result of poor project definition can be costly and affect the delivery date. This, in turn, may affect the return on investment.

The sponsor must therefore sign this document and formally agree to be the project sponsor for the specific project.

4.15 PSCO 15 - Formal Project Risk Management

This control objective originates from the COBIT framework's project risk management programme control objective, which specifies that management implement a risk management programme for eliminating or minimising risks associated with an individual project.

The project sponsor is particularly interested in business risks and issues that may arise should the project fail to deliver according to guidelines set out in the business case.

Therefore, the author argues that an initial risk assessment be conducted by the sponsor that will inform the authorising body of any potential risks that will occur during the project's implementation (Thomsett, 2002:57). This risk assessment will be signed by the project sponsor.

The project sponsor and manager will then develop a risk programme with the sponsor's particular risks in mind so that it can identify and control business risks in projects that have the potential to cause unwanted change and ultimately a significant deviation from the projected benefits set out in the business case.

This programme or plan will specify the frequency for risk reporting from project managers. Sponsors must be satisfied that this programme addresses all relevant aspects so that it will allow them to communicate these risks and issues to the authorising body who may decide to terminate the project before additional funds are unnecessarily wasted.

A summary of all the control objectives and their corresponding measures is depicted in Table 7.5.

Table 7.5: Compliance measures for the project sponsor control objectives

Project Sponsor Control Objectives	Measure
PSCO 1 – Project Sponsor Competency	• Competency Framework • Certification
PSCO 2 – Project Sponsor Time Management	• At least 5% of the total time spent by the project manager on the project.
PSCO 3 – Project status	• Stage end report • A mid-stage report • Project closure report • Documented minutes of meetings • Database entry logs.
PSCO 4 – Directions and Decisions	• Change request form • Decision request form • Sign-off for deliverables and milestones • Sign-off for quarterly reports on benefits realisation • Formal and documented assignment of project delivery to the project manager.
PSCO 5 – Access to sufficient resources and skills	• Sponsor's request for access to resources and skills
PSCO 6 – Appropriate Project Close-Out	• Trend analysis documentation • Project closure document
PSCO 7 – Project Appraisal and Approval	• Documented review or a formal or informal audit.
PSCO 8 – Project Sponsor Accountability for the Business Case	• Project Business Case
PSCO 9 – Project Sponsor Accountability for Realisation of Benefits	• Benefits realisation policy • Sign-off for quarterly reports on benefits realisation
PSCO 10 – Project Representation	• Formal recognition of the sponsor as chair of the steering committee • Formal appointment of other steering committee members by the sponsor.
PSCO 11 – Stakeholder interests	• Documented minutes of meetings • Divisional Change Management Plan
PSCO 12 – Clear success criteria	• Formal documented communication of

	clear success criteria to project team
PSCO 13 – Project Forecasts	• Provisional project forecasts • Forecasts during project implementation (using Earned Value Management).
PSCO 14 – Project Definition	• Project Charter
PSCO 15 – Formal Project Risk Management	• Risk Assessment • Risk Management Programme or Plan

Quantifiable measures have now been placed for each of the control objectives. This therefore gives the project sponsor an understanding of what is required to be compliant with IT and project governance.

5. Research Value

In this chapter it was shown that the project sponsor is not merely a Figurehead role, but is fundamentally accountable for the project's success and realisation of its benefits.

Furthermore, it is important (as was seen from the mappings of the objectives on the project life-cycle) for theorists and practitioners to devise additional and more specific control objectives that would address the very important stage of benefits realisation.

Finally, all of the control objectives derived from the corporate governance framework were given tangible measures in order to determine how best the sponsor can be compliant with IT and project governance. This provides the sponsor with a better idea of what is required of this position before, during, and after the project's implementation.

6. Conclusion

This chapter sought to establish a comprehensive set of measures to allow the project sponsor to be compliant with IT and project governance. The objectives were met as follows:

The first objective sought to compare the control objectives from the PG and COBIT frameworks. This resulted in a consolidation of certain control objectives.

With the consolidated control objectives in mind, and since both frameworks utilise two different naming schemes; the author argued that both frameworks had to be given equal weighting to dispel any possible confusion. As such a new naming scheme, namely PSCO or Project Sponsor Control Objectives was created.

The second objective was to determine what is expected of the project sponsor at each stage of the project life-cycle from a governance perspective. This was achieved by mapping each of the consolidated control objectives onto the project life-cycle which was adapted to suit the role of the sponsor in the previous chapter.

It was illustrated from the mappings that a significant gap from a governance perspective, exists regarding the benefits realisation stage and that specific control objectives need to be devised in order to monitor the effectiveness and efficiency of this stage.

The third objective sought to determine how each of these control objectives could be successfully fulfilled. This provided tangible measures for each control objectives so that the sponsor has full understanding of the expectations of this position for each of the control objectives.

It should now be clear that a significant amount of effort is required in order to successfully sponsor IT projects. The sponsor has detailed activities that must be successfully completed and audited against in order to sufficiently demonstrate to the Board of Directors and executive leadership team that the project sponsorship component is being effectively and efficiently utilised.

The only control objective not elaborated upon was the project sponsor's competency (PSCO 1). This control objective is measured by providing a project sponsor competency framework, which is developed in the following chapter.

Therefore, the following chapter seeks to determine the competencies that are required for the successful sponsoring of IT projects, which culminates in the project sponsorship competency framework.

Chapter 8

The Lechtman Project Sponsorship Competency Framework

"A competent leader can get efficient service from poor troops, while on the contrary an incapable leader can demoralise the best of troops."

John Joseph Pershing - Commander of the American Expeditionary Forces of World War I (1860 – 1948)

1. Introduction

1.1 Background

The previous chapter sought to establish a comprehensive set of measures that would sufficiently demonstrate that the IT project sponsor was compliant with IT and project governance. This was successfully done by mapping the control objectives derived from the corporate governance framework onto the project life-cycle and providing compliance measures that the sponsor will have to fulfil.

A question that remained from the previous chapter is how the competency of the project sponsor should be measured. As this was one of the control objectives (PSCO 1), it is important to elaborate on this, as it would enable the authorising body for projects to determine whether a person is suitable for this very important role.

1.2 Goal

The goal of this chapter is to devise a holistic project sponsorship competency framework that would provide an organisational benchmark to assess whether an individual is appropriately suited for the role of sponsoring an IT project.

1.3 Objectives

In order to reach the goal mentioned above, some objectives must first be met:

- The first objective is an investigation to determine whether any project sponsorship competency frameworks exist.
- The second objective is the development of the structure of the project sponsorship competency framework.
- The third objective is the application of the role of the project sponsor onto the structure of the competency framework

- The fourth objective is a graphic representation of the project sponsorship competency framework.

1.4 Layout

The first section of this chapter elaborates on the investigation into whether any existing project sponsorship competency frameworks exist. The second section presents a structure for the generic framework referred to in the chapter's goal.

The third section maps the role of the project sponsor (presented in the previous chapter) onto the framework by utilising the structure presented in the previous section. The final section graphically represents the sponsorship framework in its entirety.

2. Project Sponsorship Competency frameworks

Before a project sponsorship competency framework can be developed, it is worthwhile undertaking an investigation to determine if any other frameworks that address the competency of a project sponsor already exist.

As already stated in the research proposal, the role of the project sponsor (up until this research study) was poorly defined (Crawford & Brett, 2001). The author therefore hypothesises that no framework exists that specifically addresses the competency of the project sponsor.

This hypothesis was confirmed when the author, through an exhaustive investigation was unable to discover any existing frameworks that addressed project sponsorship competency, from a governance perspective or otherwise.

However, a few organisations have published material on how the competency of a project manager should be measured (Ireland, 2004; PMI, 2002; PMProf, 2003). This is to be expected, considering the role of the project manager has been well-defined for a number of years.

With the project sponsor's role now defined (from the previous chapter) and with no widely-accepted competency framework in existence, a generic

framework should be developed. The structure of such a framework must therefore be determined. This will be elaborated upon in the following section.

3. Definition and structure of the competency framework

3.1 Definition of competency when applied to project sponsorship

Various independent organisations have published material on how the competency of a project manager should be assessed.

Three of these organisations (Ireland, 2004:2; PMI, 2002:2; PMProf, 2003) have all stated that competency, when applied to project management, comprises the following three dimensions:

- Knowledge that focuses on the benefits individual project managers may bring to a project or project-related activity through their knowledge and understanding of project management theory.

- Performance (or Skills) that focuses on what project managers are able to demonstrate in their ability to successfully manage or complete project-related activities. It is essentially the application of the aforementioned knowledge dimension to project work.

- Personal characteristics and attitudes that focuses on how an individual behaviours when performing the project or activities as well as their attitudes and core personality traits.

Furthermore, a framework that assesses the competency of Architects (Bredemeyer Consulting, 2002:1) similarly divides competency into these three dimensions. Therefore it is accepted that to be recognised as fully competent, an individual must be evaluated successfully against each of these dimensions.

Consequently, competency, when applied to project sponsorship, should be similarly structured as this would be in line with generally accepted methods of measuring competency. Therefore the following criteria will be utilised to measure project sponsor competency:

1. Project Sponsorship Knowledge – What project sponsors should know about sponsoring projects.

2. Project Sponsorship Performance – What project sponsors are able to do or accomplish while applying their project sponsorship knowledge.

3. Project Sponsorship Personal Competency – How the sponsor behaves when sponsoring the project as well as their attitudes and core personality traits.

It is now possible to structure the competency framework.

The Project Management Institute developed a competency framework for project managers known as the Project Management Competency Development (PMCD) Framework (PMI, 2002). This framework was based on the premise that competencies have a direct effect on project performance.

As this is a framework developed by a recognised body in project management, namely the PMI, its basic structures will be utilised to develop a similar framework for project sponsors. It is, however, important to understand that as this is the first attempt to develop a framework for sponsors, it will not be as comprehensive as the framework for project managers.

3.2. Structure of the Project Sponsorship Competency framework

With the three aforementioned competency dimensions in mind, it is possible to structure the project sponsorship competency framework similar to that of the PMCD Framework. This is presented in Figure 8.1.
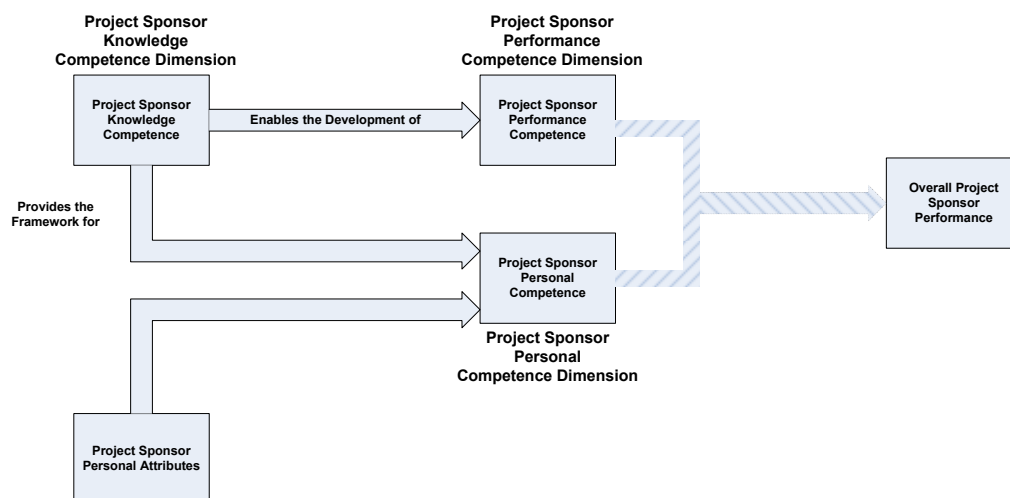
Figure 8.1: Structure of the Project Sponsorship Competency Framework

Essentially the framework's structure (depicted in Figure 8.1) is split into two sections namely:

- Knowledge/Performance Competencies
- Personal Competencies

These will now be elaborated upon:

3.2.1 Project sponsor's Knowledge/Performance Competencies

The project sponsor's knowledge competencies comprise of the sponsor's knowledge in terms of sponsoring projects. These enable the performance competencies, as they are the "demonstrable performance" or outcomes in the execution of their knowledge.

The project sponsor's knowledge and performance competencies are structured as follows:

- Units of competence – These describe, in broad terms, what is expected of project sponsors in particular aspects of their work. Each Unit of Competence corresponds to a Knowledge Area of project sponsorship.

- Competency Clusters – The PMCD Framework has clustered the units of competency into the project management process groups (PMI, 2002:6). However for the purposes of the project sponsor; the author will cluster the Units of Competency according to the 6 phases of the project life-cycle namely: Concept, Development, Implementation, Close-out, Operation and Termination.

- Elements – Each Unit of Competence and Competency Cluster will consist of a number of elements which reflect the competencies that project sponsors are expected to possess.

- Performance Criteria- Each element is described by performance criteria, which specify the outcomes that need to be achieved in order to demonstrate competent performance. These form the basis upon which evidence of competence can be assessed.

- Examples of Assessment Guidelines – These outline the requirements for evaluation and/or assessment of competence in each particular Unit of Competence.

These are collectively grouped into a numbering scheme for the project sponsor knowledge and performance units of competency and are presented in Table 8.1.

Table 8.1: The numbering scheme for the project sponsor Knowledge and Performance Units of Competency.

	Competency Cluster (Project Life-Cycle)											
	Concept		Development		Implementation		Close-Out		Operation		Termination	
Unit of Competency	K	P	K	P	K	P	K	P	K	P	K	P
_.1 Knowledge Area	K.1.1	P.1.1	K.1.2	P.1.2	K.1.3	P.1.3	K.1.4	P.1.4	K.1.5	P.1.5	K.1.6	P.1.6
_.2 Knowledge Area	K.2.1	P.2.1	K.2.2	P.2.2	K.2.3	P.2.3	K.2.4	P.2.4	K.2.5	P.2.5	K.2.6	P.2.6

Table 8.1, which is adapted from the PMCD framework (PMI, 2002:8) is hierarchically organised as follows:

_.# Unit of Competence (Knowledge Area)

_.#.# Competency Cluster (Project Life-Cycle Phase)

_.#.#.# Element (specific to each Competency Cluster)

_.#.#.#.# Performance Criterion (specific to each element)

This is repeated for each Unit of Competence and Competency Cluster. Each hash sign (#) denotes a number where:

- The first # indicates the Knowledge Area number (in this case the number 1 or 2).

- The second # indicates the project life-cycle number (Concept is 1 and Termination is 6).

- The third # indicates the element number within the competency cluster.

- The fourth # indicates the performance criterion number within the element.

Furthermore, "K" represents Knowledge; "P" represents Performance.

The knowledge areas relevant to the project sponsor must therefore be developed because the project manager's nine knowledge areas (which the PMCD framework utilises) are not necessarily applicable to the sponsor.

3.2.2 Project sponsor's Personal Competencies

The same basic structure will also be applied to the Project Sponsor Personal Competencies where separate Clusters also represent the Personal Competencies. Each of these Clusters is grouped into separate Units of Competence where each Unit contains Clusters of related behavioural descriptors (PMI, 2002:8).

Each Cluster is further broken down into one or more Elements reflecting the level of autonomy, drive, or urgency displayed relating to the competency. Performance Criteria are also used to provide descriptions of the behaviour expected around these Elements.

The only significant difference between this dimension and the aforementioned Knowledge/Performance Dimension is that examples of Assessment Guidelines are not provided. Rather, evaluation is performed by assessing whether the project sponsor exhibits the behaviours reflected in the performance criteria of this section.

The Units of Competence and Clusters contained within the Personal Competencies will be elaborated upon later in this chapter.

With the basic structure of the sponsorship framework now established, it is important to apply the role of the project sponsor onto the structure. However, before applying the role to this structure, it is first relevant to determine the knowledge areas the sponsor should have.

Once this has been achieved, it will be possible to determine the performance criteria dimension, which as already stated, is what sponsors are capable of or what they may accomplish while applying their project sponsorship knowledge. The final part to the following section deals specifically with the Personal Competency Dimension.

The application of all the three dimensions (knowledge, performance and personal) now follows.

4. Application of the role of the project sponsor on the structure of the Project Sponsorship framework

4.1 Project Sponsor Knowledge Areas
The project sponsor must have knowledge in the following three areas:

- Business Leadership
- Change Facilitation
- Decision Delegation

This is depicted in Figure 8.2.
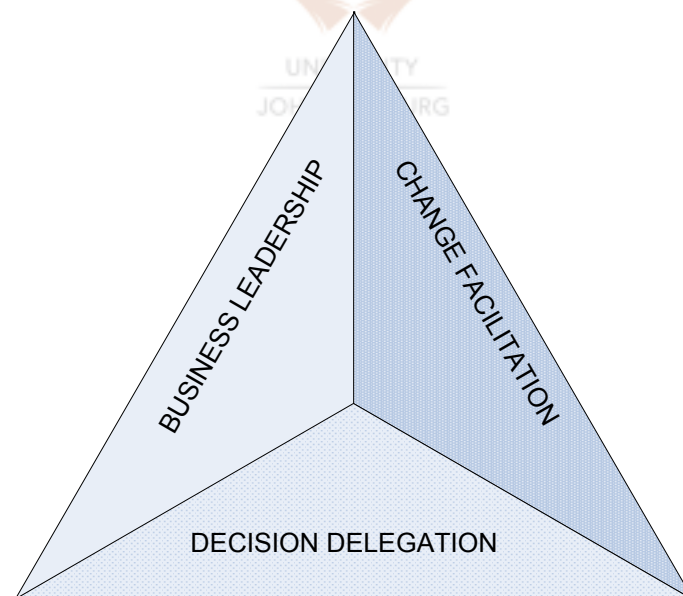
Figure 8.2: Project Sponsorship Knowledge Areas

A motivation for the author's argument in Figure 8.2 now follows:

4.1.1 Business Leadership

As has already been discussed, corporate governance originates from the top of the organisation (Garrat, 2003). Furthermore, its two subsets namely IT and project governance ensure the internal control and strategic alignment of all project-related activities (Leganza, 2003:2; Schoeniger, 2003:2). Therefore, as these activities are initiated by the Board of Directors and executive leadership team, all the organisation's projects must be business-led (business-driven).

Business-led project management increases the likelihood of business success by ensuring that visibility, accountability and control over business change activities are in place (Buttrick, 2003a:1). These are all core elements of corporate, IT and project governance.

Therefore all senior and executive managers must be business leaders who ensure focus and commitment to a common purpose and vision in an organisation. This applies to the project sponsor as well, who must ensure that project participants are similarly focused and committed to business success (Knutson, 2005:1).

Therefore, the author deduces from this, that sponsors must have a considerable understanding and knowledge in leading the project and they must ensure that its intended benefits translate into overall business success. As such, business leadership will constitute the first knowledge area for the project sponsor.

4.1.2 Change Facilitation

All senior and executive managers must be leaders of change within the organisation (Buttrick, 2003a:1). This is very important because, and as already stated, projects create varying degrees of change and it is important that those in leadership positions require adequate knowledge on how to facilitate this change.

However, most of these senior and executive managers (despite strongly supporting major projects) fail to take proper steps to communicate change to

and must take active measures to ensure that change initiatives are conducted as smoothly as possible (Prosci, 2005:1 para.1).

The author previously stated that sponsors form the linchpin between the project manager and the executives. By providing this essential link, the organisation will obtain beneficial change by implementing the project (Cooke-Davis, 2005:2).

Therefore, the author concludes that the sponsor must have the knowledge of the manner in which change should be facilitated within the affected department or division, so that the project's implementation and delivery is effected as smooth as possible. Change facilitation will therefore, constitute the second knowledge area.

4.1.3 Decision Delegation

One of the most common and serious mistakes project managers make is that they compensate for an inadequate sponsor by making major project decisions such as scope, objectives, risk management, quality expectations, and in many scenarios, business cases on their own (Thomsett, 2002:290).

Furthermore, project managers are often unable to gain sufficient insight into sponsors' intentions merely because sponsors will not take the time to communicate with managers and avoid answering "tricky" questions (Buttrick, 2004a:1).

On many occasions, time and financial resources are utilised without the understanding of the project manager and team. Consequently, their frustrations grow if they do not see a necessity for decisions that have been made such as additional work that is required on their part (Koch & Schmid, 2004:6).

It is therefore essential that the sponsor is to effectively communicate and delegate decisions to the project team so they are fully aware of what the sponsor's intentions are. The sponsor must also be able to convert the

requests for decisions by the project manager into action by being able to respond and delegate to an immediate project need.

Therefore, the author concludes that being able to delegate decisions is the third project sponsor knowledge area.

These knowledge areas are supported by Buttrick (2003b:1) who states that an effective and efficient project sponsor's role can be broken down into three separate elements which are:

- The sponsor's role as a business leader
- The sponsor's role as a change agent
- The sponsor's role as a decision maker

Therefore, with these three elements in mind, it is possible to deduce that they collectively form part of the project sponsor's knowledge areas. This also supports the author's previous assumption from Chapter 6 Figure 6.1, that the project sponsor has three forms of relationships in the organisation, namely vertical-up, vertical-down and horizontal.

This adaptation of the author's original diagram is depicted in Figure 8.3.
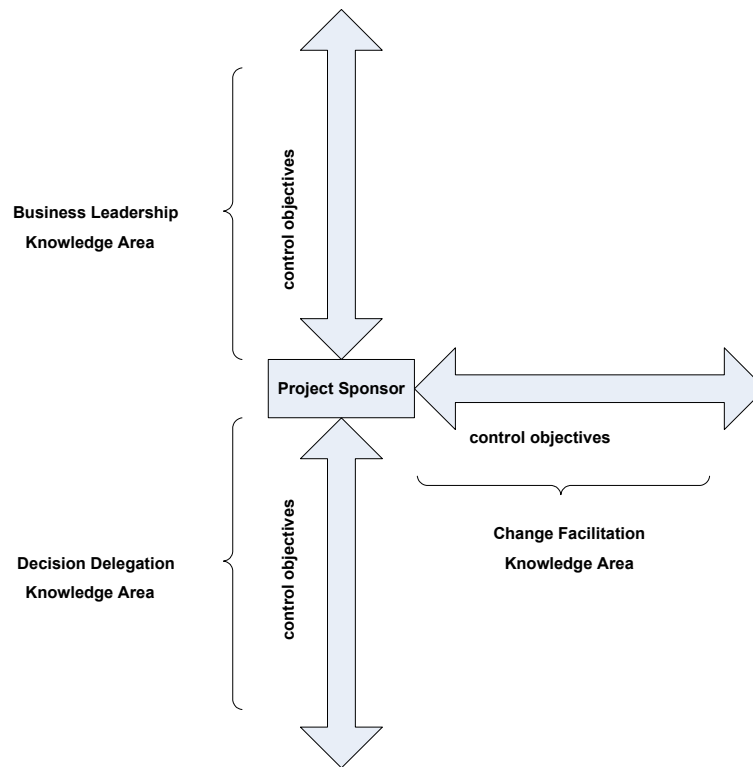
Figure 8.3: Adaptation of the project sponsor's relationship with the rest of the organisation based on the three knowledge areas

As Figure 8.3 depicts, the three relationship categories are now supported by the three project sponsor knowledge areas.

As they are considered business leaders, sponsors must be able to communicate the business benefits and necessity of conducting the project. This originates from the vertical-up relationship that the sponsor has with the executive leadership team, which will be the authorising body for the project.

In order to better facilitate the required change that projects bring, sponsors must be able to co-operate with representatives from key stakeholders who all form part of the horizontal relationship.

Finally, the sponsor must be able to delegate the necessary decisions to the project manager and project team. This forms part of the vertical-down relationship.

These knowledge areas therefore validate the author's original assumption regarding the relationship categories involved in sponsoring projects.

Furthermore, the numbering scheme for the Project Sponsor Knowledge and Performance Units of Competency can now be completed. This is presented in Table 8.2 where "K" denotes Knowledge and "P" denotes Performance.

Table 8.2: The completed numbering scheme for the Project Sponsor Knowledge and Performance Units of Competency.

Competency Cluster											
Concept		Development		Implementation		Close-Out		Operation		Termination	
Unit of Competency	K	P	K	P	K	P	K	P	K	P	K	P
K	P	K	P	K	P	K	P	K	P	K	P
_.1 Business Leadership	K.1.1	P.1.1	K.1.2	P.1.2	K.1.3	P.1.3	K.1.4	P.1.4	K.1.5	P.1.5	K.1.6	P.1.6
_.2 Change Facilitation	K.2.1	P.2.1	K.2.2	P.2.2	K.2.3	P.2.3	K.2.4	P.2.4	K.2.5	P.2.5	K.2.6	P.2.6
_.3 Decision Delegation	K.3.1	P.3.1	K.3.2	P.3.2	K.3.3	P.3.3	K.3.4	P.3.4	K.3.5	P.3.5	K.3.6	P.3.6

With the knowledge areas in place, it is now important to develop the second dimension, namely the performance competencies which are inherently linked to the knowledge areas. This is presented in the following section.

4.2 Project Sponsor Knowledge/Performance Competencies

The previous chapters relating to the project sponsor introduced and elaborated upon, in detail, which specific control objectives were relevant to project sponsors, and how they could all be successfully measured.

The performance dimension will therefore be structured around these fifteen control objectives and their measures, as they will provide an indication as to whether project sponsors have performed their duties based on the corporate governance framework.

The PMCD framework expresses this section in tabular format. A similar example is depicted in Table 8.3.

**Table 8.3: An example of the tabular format used to express the
Knowledge/Performance Competencies of the project sponsor (PMI, 2002:14)**

_.# Unit of Competency – Knowledge Area #	
_#.# Competency Cluster: Project Life-cycle Phase	
Elements	Performance Criteria
_#.#.# Relevant element pertaining to project life-cycle phase.	.# Perform or act upon relevant element pertaining to project life-cycle phase.
Examples of Assessment Guidelines	
Knowledge Competencies Demonstrate a knowledge and understanding of: - The inputs, tools and/or techniques and/or outputs to specific knowledge criteria. **Performance Competencies** Demonstrate an ability to develop and understand: - Specific performance criteria based on aforementioned knowledge competencies.	
Satisfies Measure for Control Objective	
• PSCO #	

As depicted in Table 8.3, each knowledge area and its performance criteria are expressed using the same format wherein each table pertains to a different Unit of Competence, along with their associated Competency Clusters. Each of the Competency Clusters is further broken down into pertinent Elements and Performance Criteria. Each table also utilises the numbering scheme that was detailed in Table 8.2.

However, for research purposes the author has further indicated which of the control objectives' measures (presented in the previous chapter) are satisfied in each Knowledge/Performance Competency break-down. This emphasises the importance of the sponsor's competency in relation to both project management and project governance.

The tables for each knowledge area (Unit of Competency) are all depicted in Appendix A. It is to be expected that not all competency clusters (project life-cycle phases) will be successfully addressed. This is particularly true for the last two phases of the project life-cycle (operation and termination) which collectively form the benefits realisation stage.

As has already been stated, this stage is relatively poorly understood and as such has not been sufficiently addressed by COBIT and the APM's guide to the governance of project management.

4.3 Project Sponsor Personal Competencies

It is particularly difficult in this research study to determine the Units of Personal Competency that are required for the project sponsor. However, the PMCD framework (PMI, 2002:8 – 9) provides six Units of Personal Competency and Clusters that are analysed to determine if they are of relevance for the project sponsor.

The Units of Personal Competence are:

1. Achievement and Action
2. Helping and Human Service
3. Impact and Influence
4. Managerial
5. Cognitive
6. Personal Effectiveness

Each will now be elaborated on in detail.

4.3.1 Unit of Competence 1: Achievement and Action

The competency clusters for this unit of competence are:

1. Achievement and Orientation - This cluster relates to the level of work achieved by the worker or when there is a concern regarding competing against a standard of excellence (PMI, 2002:58).

   This cluster will apply to the project sponsor - working with integrity and professionalism (which are elements in this cluster) are crucial aspects for all lines of work, regardless of whether someone is a project sponsor or not.

2. Concern for Order, Quality and Accuracy - This reflects an underlying drive to reduce uncertainty in the surrounding environment (PMI, 2002:58).

   The cluster should also apply to the project sponsor - providing accurate and truthful information (which is an element in this cluster) is a crucial aspect in project governance and mandated in King II and

SOX. Therefore, sponsor must disclose accurate project forecasts to internal auditors and the authorising body that approve the project.

3. Initiative - This addresses the preference for taking action. It is doing more than is required or expected in the position or performing tasks that no one has requested in order to improve or enhance project results and avoid problems. It also addresses detecting or creating new opportunities (PMI, 2002:59).

This cluster should also apply to the project sponsor as elements within this cluster such as accepting accountability for the project's outcome (realisation of benefits); seeking new opportunities as well as striving for best practice are all applicable to the role of the project sponsor.

4. Information Seeking - This reflects an underlying curiosity or desire to gain knowledge about things, people or issues. It implies making an effort to seek more information and not to accept situations at face value (PMI, 2002:59).

This cluster should also apply to project sponsors, as they must ensure that information used to sponsor projects (such as progress reports) is complete and accurate. This is a crucial aspect with regards to project sponsorship.

4.3.2 Unit of Competence 2: Helping and Human Service
The competency clusters for this unit of competence are:

1. Customer Service Orientation - This implies a desire to assist or serve others and meet their needs. It means focusing efforts on discovering and meeting the customer or client's needs (PMI, 2002:60).

This applies to the project sponsor because the sponsor acts on behalf of the authorising body inside the project. Although the sponsor is the customer or client to the project manager, the authorising body (with whom the sponsor has a vertical-up relationship) also has a large role to play regarding overall project success.

Therefore the sponsor must see the authorising body as a client or customer, and as such will have to ensure that its needs (such as regular project status updates) are continually met.

2. Interpersonal Understanding - This implies the desire to understand other people. It is the ability to hear accurately and understand the unspoken or partly expressed thoughts, feelings and concerns of others (PMI, 2002:60).

   This also applies to the project sponsor because its elements such as striving to understand all project stakeholders (thoughts, feelings and concerns) as well as listening and responding to others are important aspects when facilitating change.

4.3.3 Unit of Competence 3: Impact and Influence
The competency clusters for this unit of competence are:

1. Impact and Influence - This occurs when there is an intention to persuade, convince, influence, or impress others in order to get them to support the speaker's agenda or to have a specific and significant impact or effect on others (PMI, 2002:61).

   It is argued that this should also apply to the project sponsor as elements such as taking appropriate action to influence others (essentially the key stakeholders) is a crucial aspect in facilitating the required change after the project has been delivered.

2. Organisational Awareness - This aspect refers to the individual's ability to understand the power relationships in the organisation. It also includes the ability to identify the decision-makers and the individuals who can influence them (PMI, 2002:61).

   It is argued that this should also apply to the project sponsor as it is particularly important for the sponsor to be aware of the relevant stakeholders that sit on the project steering committee.

The sponsor must therefore ensure that those with the highest possible decision making authority (within the affected organisational units) are placed on the steering committee so that it will be easier to facilitate change.

3. Relationship Building - This entails working to build or maintain positive relationships or networks of contacts with people who are, or might someday be, useful in achieving work-related goals (PMI, 2002:61).

   The author argues that this should also apply to the project sponsor as it is important for the sponsor to establish and maintain a relationship with all relevant project stakeholders from the three relationship categories (which have already been elaborated upon in previous chapters).

4.3.4 Unit of Competence 4: Managerial

The competency clusters for this unit of competence are:

1. Teamwork and Cooperation - This implies a genuine intention to work cooperatively with others, to be part of a team or to work together (as opposed to working separately or competitively (PMI, 2002:62).

   The author argues that this cluster should not form part of the sponsor's personal competency because the sponsor (within a project environment) does not work in a team. The members of the steering committee and other relevant stakeholders gather for meetings at regular intervals but they do not function as a team.

   Furthermore, elements within this cluster such as team-building activities and moulding core stakeholders into a team are do not fall within the scope of the sponsor's direct responsibility and are particularly applicable to the project manager.

2. Developing Others - This occurs when there is intent to teach or to foster the development of one or several other people. The essence of

this competency lies in the developmental intent and effect rather than in a formal role (PMI, 2002:62)

The author argues that this cluster also not form part of the project sponsor's personal competency because it is not within the project sponsor's scope to develop project members (project managers and their team). As already stated, an element such as the supportive project management office (introduced in Chapter 5) can provide such capabilities to the project team.

3. Team Leadership - This entails taking on the role as a leader of a team or other group. It implies a desire to lead others (PMI, 2002:63).

   Just as in the case with teamwork and cooperation, the sponsor does not work within a team during the project life-cycle. There is a peer to peer relationship amongst steering committee members and as such, the sponsor will not need team leadership as a personal competency.

4. Directiveness - Assertiveness and Use of Positional Power Cluster: This is applicable when individuals have the intention to make others comply with their wishes. Directive behaviour has a theme or tone of "telling people what to do" (PMI, 2002:63).

   The author argues that this should form part of the sponsor's personal competency. As already stated, sponsors delegate decisions to the project manager using their organisational authority. As such, they will use assertiveness when necessary and use their positional power to sponsor the project in its entirety.

4.3.5 Unit of Competence 5: Cognitive
The competency clusters for this unit of competence are:
1. Analytical Thinking - This entails working through a situation by dismantling it into smaller pieces, or tracing the implications of a situation in a step-by-step in an informal way (PMI, 2002:64).

The author argues that this should form part of the sponsor's personal competency as it is particularly important for the sponsor to understand (at a suitable level) all relevant issues associated with the project. Furthermore, the sponsor (in thinking analytically) will be able to facilitate solutions across all relevant issues related to the project.

5. Conceptual Thinking - This entails working through a situation or problem by putting the pieces together and seeing the "larger picture" (PMI, 2002:64).

   The author argues that this also form part of the project sponsor's competency as it is important for the sponsor to see the project in a holistic way. This means that in order for the sponsor to effectively realise the benefits that were specified in the business case, the sponsor should have a full comprehension of all complexities, risks and issues that will affect the business benefits in the future.

4.3.6 Unit of Competence 6: Personal Effectiveness

The competency clusters for this unit of competence are:

1. Self-Control - This is the ability to keep emotions under control and restrain negative actions when tempted or when faced with opposition from others, or when working under conditions of stress (PMI, 2002:65).

   The author argues that this should form part of the sponsor's personal competency as it is particularly important for sponsors to remain calm and in control of their emotions whilst making very important project-related decisions.

2. Self-Confidence - This is a person's belief in being capable to accomplish a task. This includes his expression of confidence in the ability to deal with increasingly challenging circumstances when reaching decisions or forming opinions, and in handling failures constructively (PMI, 2002:65).

It is particularly important for sponsors to have confidence in their abilities to make decisions because the project manager and team will "feed" off this confidence and in turn, they will be confident that the direction they are being steered towards is the correct one.

3. Flexibility - This is the ability to adapt to and work efficiently with a variety of situations, individuals, or groups. It is the ability to understand and appreciate different and opposing perspectives on an issue, to adapt an approach as the requirements of a situation change, and to change or easily accept changes in one's own organisation or job requirements (PMI, 2002:65).

The author argues that this should also form part of the sponsor's personal competency. It is particularly important for the sponsor to be flexible with regard to changing circumstances regarding the project. Furthermore, it is important for the sponsor to adapt to this change as quickly as possible such that any intended benefits that will materialise in the long run are not compromised.

4. Organisational Commitment - This is the individual's ability and willingness to align their own behaviour with the needs, priorities, and goals of the organisation and to act in ways that promote organisational goals or meet organisational needs (PMI, 2002:65).

The author argues that this should also form part of the sponsor's personal competency. It is important for the sponsor to demonstrate the ability to align the project's business case such that its benefits have a positive impact on the organisation's objectives and strategic goals. Therefore by demonstrating a commitment to the project, the sponsor will be able to align the project's initiatives to organisational strategy and thus promote the organisation.

Therefore with the author arguing for and against certain competencies and clusters, these will be the Units of Personal Competency and Clusters relevant to the project sponsor:

Unit of Competence 1: Achievement and Action

1. Achievement Orientation
2. Concern for Order, Quality and Accuracy
3. Initiative
4. Information Seeking

Unit of Competence 2: Helping and Human Service

1. Customer Service Orientation
2. Interpersonal Understanding

Unit of Competence 3: Impact and Influence

1. Impact and Influence
2. Organisational Awareness
3. Relationship Building

Unit of Competence 4: Managerial

1. Directiveness: Assertiveness and Use of Positional Power

Unit of Competence 5: Cognitive

1. Analytical Thinking
2. Cognitive Thinking

Unit of Competence 6: Personal Effectiveness

1. Self-Control
2. Self-Confidence
3. Flexibility
4. Organisational Commitment

Further to this, the PMCD framework also expresses each of these Units of Competence and their Clusters in tabular format. An example is depicted in Table 8.4.

Table 8.4: An example of the tabular format used to express the Personal Competencies of the project sponsor (PMI, 2002:11)

Unit of Competency # – Unit of Personal Competency	
Competency Cluster # : Personal Competency Cluster	
Elements	Performance Criteria
#.# Relevant element pertaining to personal competency cluster.	.# Description of the expected behaviour around the element.

As depicted in Table 8.4, each table expresses the personal competency using the same format wherein each table pertains to a different Unit of Competence, along with their associated Competency Clusters. Each of the Competency Clusters is further broken down into pertinent Elements and Performance Criteria.

The tables for each Unit of Competency are all depicted in Appendix B.

With role of the project sponsor successfully applied to the structure of the competency framework, it possible to graphically represent the framework in its entirety.

5. The Lechtman Project Sponsorship Competency Framework
A graphic representation of the sponsorship competency framework is depicted in Figure 8.4.
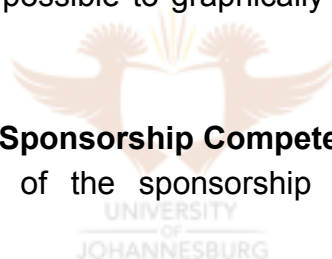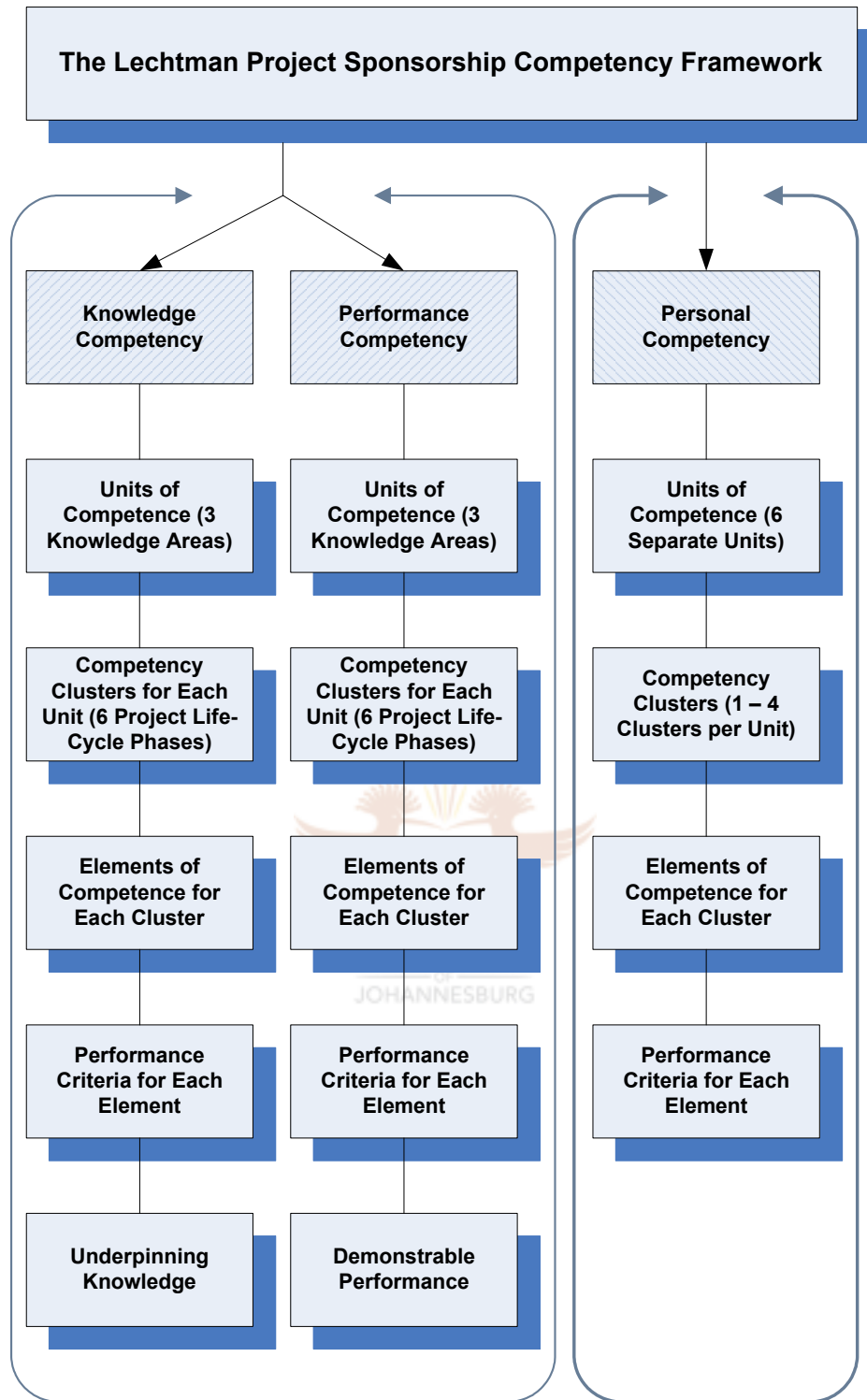
Figure 8.4: The Lechtman Project Sponsorship Competency framework

As can be seen from Figure 8.4, the project sponsor's competency (adapted from the PMCD framework) is divided into two main sections, which are the Knowledge/Performance Competencies and the Personal Competencies.

The framework encompasses all that has been researched in terms of the role of the IT project sponsor from a governance perspective and should be sufficient to measure the sponsor's competency.

This, therefore, provides a tangible measure to Project Sponsor Control Objective 1 (PSCO 1) which addresses the competency of the project sponsor.

Furthermore, it also provides means for the sponsor to fulfil the required measures for each of the other control objectives because the tables in Appendix A were specific in terms of which control objectives' measures would be satisfied.

6. Research Value

From this chapter and its related appendices, it has been shown that a considerable amount of time and effort is required at each phase and stage of the project life-cycle for individuals to sufficiently demonstrate that they are competent in sponsoring IT projects.

This is also the first attempt to create a project sponsorship framework in a well-structured manner.

7. Conclusion

This chapter sought to devise a holistic project sponsorship competency framework that would provide an organisational benchmark to assess whether an individual is appropriately suited for the role of sponsoring an IT project.

The objectives were met as follows:

The first objective sought to investigate whether any competency frameworks that specifically address sponsoring projects exist. The investigation resulted in no such framework for sponsors, and, as such, the author determined that one of a generic nature had to be developed. However, three frameworks that addressed the competency of project managers were discovered.

The second objective was the structure of the competency framework. It was demonstrated that all three project management competency frameworks (in

addition to a framework that assessed architectural competency) structured their frameworks around three dimensions, namely Knowledge Competencies, Performance Competencies and Personal Competencies.

From this the author concluded that the project sponsorship competency framework should be similarly structured and as such utilised the PMCD Framework's structure which was created by the Project Management Institute.

Two of these dimensions, Knowledge and Performance are interrelated and as such the author combined them both into one section of the competency framework. The Personal Competencies were placed into the second section.

The third section therefore applied the role of the sponsor (which was derived from the governance framework) onto the competency framework's structure. It was shown that the sponsor requires three knowledge areas, namely Business Leadership, Change Facilitation and Decision Delegation.

The statistics presented on project success in the United States, United Kingdom and South Africa, all pointed to factors such as top management support, clear business objectives, and linking IT initiatives with strategy to improve the success rates of projects.

It should now be clear that the project sponsor is the main provider of all these factors and that an effective, efficient and competent IT project sponsor is of paramount importance in order for an IT project (from conception to termination) to be a success in terms of the benefits it promises to provide.

The sponsor provides overall direction and decisions to project managers regarding expectations of the project team as a whole in terms of the delivery of the intended benefits set out in the business case.

All projects create organisational change; as such, the sponsor is in charge of overseeing this aspect during the project's implementation and it is therefore incumbent on him to dismantle barriers that hinder project success. By doing

so, sponsors are able to adequately align all stakeholder interests with project success.

Sponsors are importantly in charge of realising the promised benefits after the project is delivered. They must ensure that proper reviews occur during the benefits realisation stage that effectively monitor whether these benefits are indeed being realised.

With the successful creation of the project sponsorship competency framework organisations can now successfully assess whether individuals are suited to the role of sponsoring IT projects.

A considerable amount of time and effort is required for individuals to familiarise themselves with the knowledge required to sponsor IT projects. It is also important for individuals to demonstrate that they are capable of acting upon this knowledge via the specific performance criteria.

Chapter 9

Conclusion

"*Never regard study as a duty, but as the enviable opportunity to learn to know the liberating influence of beauty in the realm of the spirit for your own personal joy and to the profit of the community to which your later work belongs.*"

Albert Einstein (1879 – 1955)

1. Introduction

This chapter serves as the final chapter in this research study. Its goal is to prove that the two research goals and their objectives set at the beginning of this study were in fact achieved by utilising a structured and logical approach.

The chapter begins with a review of the research problem and reviews the research goals and objectives, while providing an explanation of how the research objectives were achieved. This is followed by an evaluation of the developed solutions to highlight their advantages and limitations regarding their ability to solve the research problem.

This evaluation is followed by a discussion regarding topics for further research that are a result of this study. The chapter concludes with a final word from the author and takes account of the lessons learnt in conducting this research.

2. Revisiting the problem

2.1 The Research Goals

The research problem was to provide individuals in top management (senior or executive) with a mechanism, via a governance framework, that allows them to actively support the IT project management method in their organisation, as well as better align all IT project initiatives with organisational strategy.

By providing such a framework, top management would be given a list of activities they had to perform that would sufficiently demonstrate that they were effective, efficient and competent in their ability to sponsor IT projects.

This problem is particularly relevant in today's IT project environment, especially as the Boards of Directors of commercial organisations are being compelled to take their responsibilities, to shareholders and society seriously, and to manage the inherent risks in their organisations.

This sudden need to align shareholder interests with the organisational direction was brought about as a result of large corporate scandals around the world. These scandals resulted in acts of legislation in the United States (Sarbanes-Oxley Act) as well as a corporate governance standard in South Africa (The King Report). These documents have particular relevance to IT project management and, as such, make top management accountable for their conduct in their organisation's portfolio of projects.

Therefore the first goal of this research study was the creation of a holistic corporate governance framework that encompassed the dual roles of information technology and project management.

The second goal was the creation of a holistic project sponsorship competency framework, based on the aforementioned framework that would provide IT project sponsors with a detailed set of activities and measures that would sufficiently demonstrate the effectiveness and efficiency of this extremely important position in project management.

The research objectives were therefore:

2.2 Objective 1 - The State of IT project management

Chapter 2's goal was to provide the necessary background knowledge in project management, as well as to provide detailed statistics on the state of IT project management around the world. These statistics were necessary because they provided a means to identify the problem.

This chapter served to form the basis for the research study. Apart from definitions and an introduction of essential terms and concepts, it was seen that project management is not static, but an evolving discipline whose whole is greater than the sum of its parts.

Furthermore, the detailed statistics presented factors that continue to plague IT projects. This painted a clearer picture on the state of IT project management in various countries, and showed just how much effort is required to improve IT project success rates.

Of particular relevance to these statistics was the fact that a lack of executive (top-management) support in IT project management is still prevalent. Furthermore, it was shown that by having support from your executives (via sponsorship) as well as having clear business objectives, IT projects would result in being more successful and profitable to organisations.

These statistics therefore proved the original hypothesis that top management support was still considerably lacking in IT project management and that a governance framework encompassing the dual roles of information technology and project management had to be developed.

2.2 Objective 2 - Corporate governance

Chapter 3's goal was to devise a high-level corporate governance framework that encompassed the role of information technology and project management in corporate governance.

This chapter therefore served to introduce the concept of corporate governance and its relevance with respect to IT and the project management profession. This allowed a top-down approach to be followed by introducing essential terms and concepts relevant to overall corporate governance.

The high-level framework that was developed (as a result of legislation enacted in the United States and South Africa) depicts the relationship between corporate governance, IT and project management. This framework contains a combination of two frameworks. One framework will be specific for IT governance, whilst the other will be specific for project governance.

A few questions arose from this high-level framework that needed answering in the subsequent chapters. Firstly, was there a need for a dedicated

individual to oversee the project governance framework? Who had ultimate authority over the corporation's projects and specifically, IT projects?

Of further relevance to this research study was to whom the IT project sponsor should report when seeking approval for a business case or seeking additional funds for a project? Furthermore, what mechanisms should exist within this framework to facilitate greater internal control as well as align projects with overall corporate strategy? All these questions were answered in the relevant chapters.

Therefore, with the high-level governance framework now developed, it was essential to expand on the two forms of governance introduced. The first expansion of this framework was to look at the role of IT governance.

2.3 Objective 3 – IT governance

Chapter 4's goal was to present a holistic view of IT governance. Essential terms and concepts were defined as well as a detailed discussion on the importance of IT governance in the organisation.

The role and purpose of the chief information officer was presented, supported by a research study. The introduction of the term "IT governance committees" and the roles they play in an organisation were supplied. Furthermore, COBIT was presented as the over-arching IT governance framework that facilitates alignment and internal control of IT functions in an organisation.

COBIT was then placed into the high-level governance framework developed in the previous chapter together with a project governance framework (to be incorporated in the following chapter). This presented a clearer picture of what the detailed corporate governance framework mentioned in the goal of the study will look like in its totality.

2.4 Objective 4 – Project governance

Chapter 5's goal was to present a holistic view of project governance and to develop a generic project governance framework. Essential terms and

concepts were defined as well as a detailed discussion on the importance of project governance in the organisation.

It was shown that project governance is not a subset of IT governance but of overall corporate governance, which, as pointed out, is a factor many literature studies state erroneously.

The concept of a project management office was introduced and it was demonstrated that it can be used as an effective project governance force. The chapter on corporate governance left a question with regard to whether there would be someone who would oversee project governance. This question was answered when the concepts of a chief project officer and the three levels of project governance committees were introduced.

It was also shown that CIOs (chief information officers) could not align IT project initiatives with organisational strategy on their own. As such, the CIO and the CPO (chief project officer) collectively formed part of the authorising body for projects that would formulate IT projects based on the IT strategy of the organisations.

Furthermore, a generic project governance framework was devised that would work together with the COBIT IT governance framework. This is the first attempt at devising such a framework and is designed to provide organisations with an effective mechanism to govern their overall project management activities, from strategic down to project level.

This new project governance framework is based on the guide to the governance of project management developed by the Association for Project Management in the United Kingdom. The author designed this framework in such a way that it can co-exist with COBIT and thus complete the second half of the corporate governance framework.

As such, the first goal of this research study was reached when both these frameworks (COBIT and PG) were placed together. This is depicted in Figure 9.1

Corporate Governance Framework
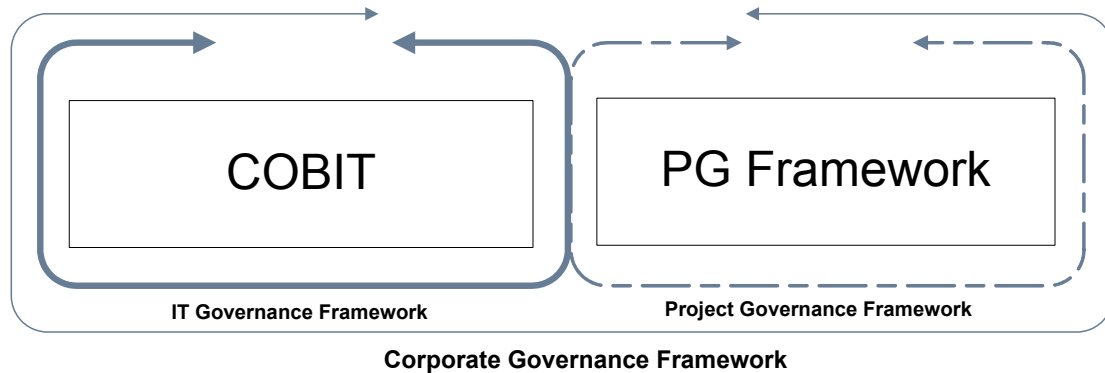
Figure 9.1: First research goal: The corporate governance framework encompassing COBIT and the PG framework.

With this framework in mind (Figure 9.1), it was then possible to focus on the role of the IT project sponsor. The remaining objectives therefore focused on this position within the project-oriented organisation.

2.5 Objective 5 – The IT project sponsor

Chapter 6's goal was to present an introductory view of a project sponsor and to position this person within a project-oriented organisation from a governance perspective.

The first wide-ranging definition was presented that depicted the positioning of this person within the organisation. This definition brought together elements from sponsors' roles and responsibilities, provided from various sources.

It was also shown that the sponsor has relationships with various role players in the organisation. In addition to this, it was shown that the project life-cycle, which was presented in Chapter 6, did not properly reflect the role of the project sponsor after the project had been completed.

As such, an extension to the life-cycle was added which reflected the benefits realisation stage of a project, within which, the sponsor plays a direct and active role. This now adds two additional phases (operation and termination) that were not earlier introduced and, as such, had to be further elaborated upon in subsequent chapters.

Finally, the control objectives derived from the governance framework were presented. It was shown that the project sponsor has many requirements, from a governance perspective, to fulfil in order to ensure overall project success. These control objectives originally came from the COBIT and PG frameworks which is depicted in Figure 9.2
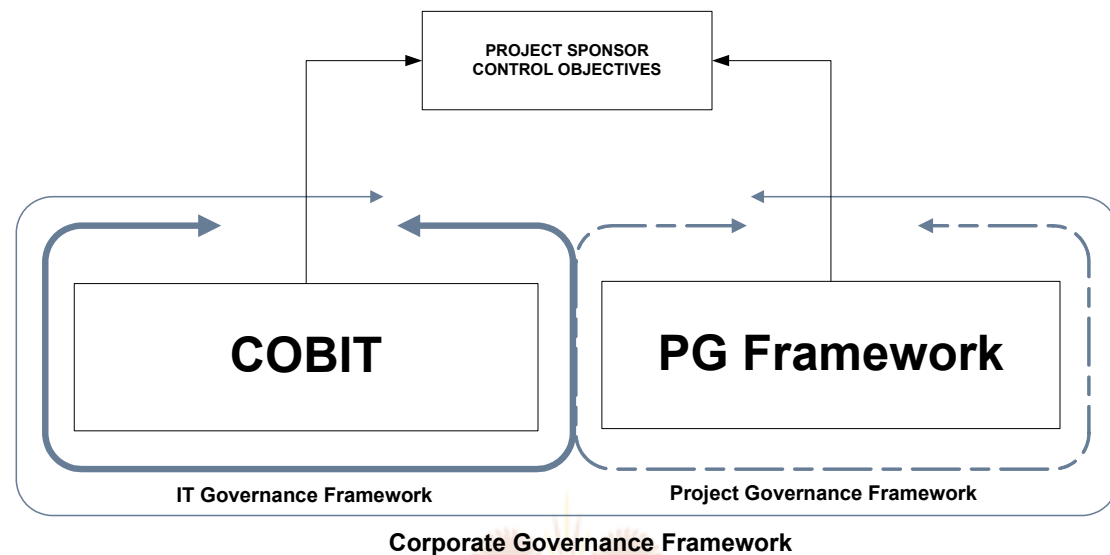
Figure 9.2: Derivation of project sponsor control objectives from COBIT and PG frameworks.

The control objectives from these two frameworks (as depicted in Figure 9.2) were critically analysed and only those which were of particular relevance to the project sponsor were utilised in the remainder of the research study.

Questions were raised regarding how these control objectives map onto the project life-cycle, and how they relate to the relationship categories. This was answered in the following chapter.

2.6 Objective 6 – The role of the IT project sponsor from a governance perspective

Chapter 7's goal was to establish a comprehensive set of measures in order to allow the project sponsor to be compliant with IT and project governance.

In this chapter it was shown that the project sponsor was not merely a Figurehead role, but is in a position that is fundamentally accountable for the project's success and realisation of its benefits.

Furthermore, it is important (as was seen from the mappings of the objectives on the project life-cycle) for theorists and practitioners to devise additional and more specific IT and project control objectives that address the very important stage of benefits realisation (which was added in the previous chapter).

Finally, all of the control objectives derived from the governance framework were given tangible measures in order to determine how the sponsor can be compliant with IT and project governance. This supplies the sponsor with a more comprehensive understanding of what is required of this position before, during, and after the project's implementation.

It is these control objectives, their mappings and their measures that provide a backdrop to the second research goal which was the competency framework. Therefore, this competency framework focuses on what sponsors should do in order to successfully fulfil these control objectives at the relevant stages and phases of the new project life-cycle. This was depicted in the following chapter.

It was then possible to reach the second research goal and develop the project sponsorship competency framework (which was developed in Chapter 8).

This provided a competency framework specifically addressing the role of the IT project sponsor. It is also, more importantly, provides a competency framework that links the concepts of corporate, IT and project governance to the competencies of a specific individual.

This is because the knowledge/performance and personal competencies of the IT project sponsor are directly linked to the control objectives and their relevant measures. This is depicted in Figure 9.3.
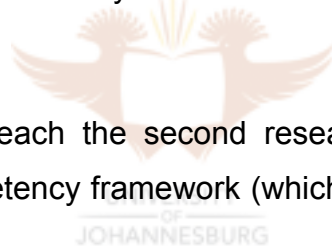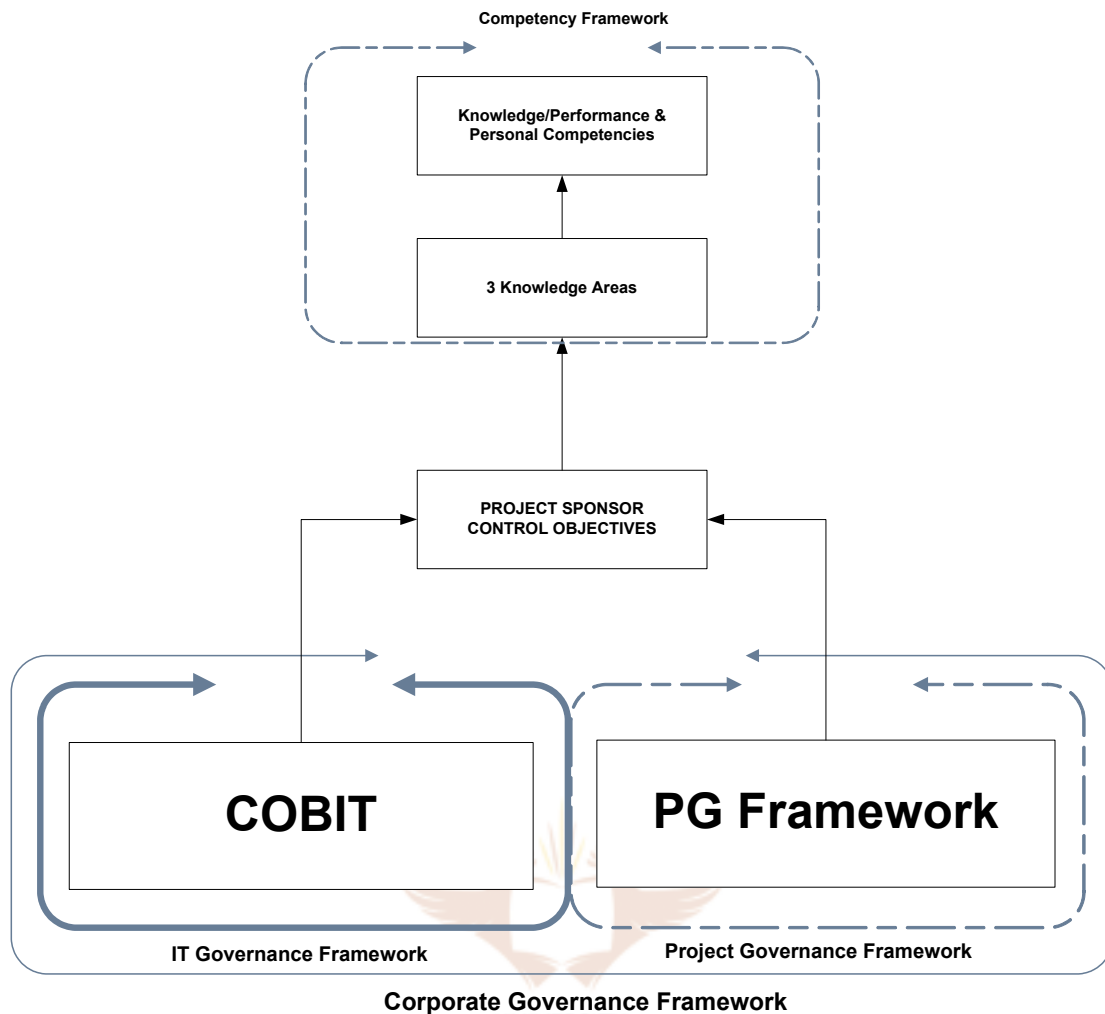
Figure 9.3: The direct link between Knowledge/Performance and Personal Competencies and the Project Sponsor Control Objectives

In addition to the link between the Knowledge/Performance and Personal Competencies of the Sponsor and the relevant control objectives (as depicted in Figure 9.3), there are three important areas relating to the sponsoring of projects which the sponsor must take cognisance of.

These three knowledge areas are also linked to the control objectives and detail what is required on the part of sponsors for them to sufficiently demonstrate that they are competent at different phases of the project life-cycle.

Therefore, the final goal of this research study was achieved with the creation of the Lechtman Project Sponsorship Competency Framework. The two

deliverables (goals) can now be presented together. This is depicted in Figure 9.4.
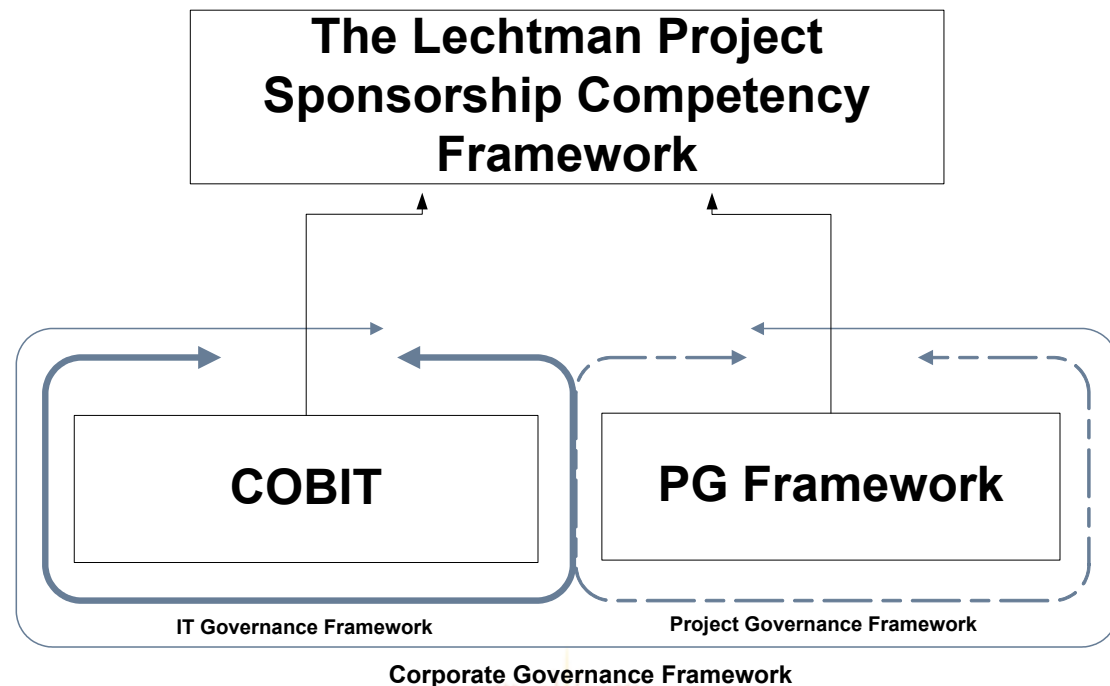
Figure 9.4: Second research goal: The Project Sponsorship Competency framework

As depicted in Figure 9.4, The Lechtman Project Sponsorship Framework is derived from the control objectives that were introduced in the corporate governance framework that encompassed IT governance (in the form of COBIT) and project governance (in the form of the PG framework).

Therefore, the successful completion of all seven research objectives resulted in both research goals being achieved. An evaluation of the developed solution is provided in the next section.

3. Evaluating the solution

Although the governance framework and project sponsorship competency framework have served to fulfil the ultimate aim of this research study, they do not represent a "silver bullet" solution for improving the state of IT project management around the world.

However, both frameworks do have their advantages, which will now be discussed.

3.1 Advantages

3.1.1 Based on current literature and modern approaches to governance

The governance framework is based on the latest edition of COBIT, as well as the guide to the governance of project management by the APM (which itself is a recently published document).

Therefore, by having a framework that incorporates the latest literature on IT and project governance, organisations can implement it knowing that they are in line with current trends and approaches to the governance of information technology project management.

This also means that organisations can build on this framework and not discard any approaches they may have towards governing IT projects.

3.1.2 Provide senior management and executives with detailed activities

The control objectives outlined in the governance and sponsorship competency framework provide senior management and executives with a detailed set of activities and measures that need to be completed in order for them to sufficiently demonstrate that the project sponsorship component is effective and efficient.

Organisations can therefore assess and appraise their top managers against these activities should they ever be in the position to sponsor IT projects.

3.1.3 Incorporates modern approaches to project management

The introduction of the chief project officer into project governance coupled with the three forms of the project management office, provide organisations with additional human resources to improve their overall project management capability.

Furthermore, these elements were shown to be effective governance forces and thus provide a link between possessing effective project governance structures and increasing overall project management capability in the organisation.

This also facilitates the alignment of all IT project initiatives with the organisations strategic direction.

3.1.4 Clarifies and sufficiently defines the role of the IT project sponsor

With the provision of detailed control objectives, their measures as well as the project sponsorship competency framework - it can be said that the role of the sponsor is now clarified and sufficiently contextualised within the organisation.

This therefore enables organisations to create a career path for business-line managers as well as facilitate the creation of certification training programmes for project sponsors.

3.2 Limitations

3.2.1 Lack of empirical evidence

Although both frameworks (governance and project sponsorship competency) are based on current approaches to corporate, IT and project governance they have not been tested in a real-world scenario and thus their effectiveness has not been sufficiently validated.

3.2.2 Change in project sponsor over the course of the project life-cycle

A change in the project sponsor over the course of the project life-cycle has not been taken into consideration in this research study. This may lead to new project sponsors terminating a project that they were not initially involved with.

3.3.3 Reluctance for individuals to become project sponsors

Those who are highly-placed within the organisation may be reluctant to sponsor IT projects despite being given a detailed road map of how this should be implemented. This is as a result of the question of accountability which now arises with the sponsoring of IT projects.

Individuals who do not have the sufficient organisational authority to provide the support required in sponsoring IT projects may be nominated and, as a result, projects may fail.

4. Research Value

This research study has successfully formed the link between IT project management and corporate governance. By providing such a link,

organisations that utilise the project management method must acquaint themselves with the requirements in order to align all project-related activities with shareholder interest.

Although still voluntary, there are plans to legislate corporate governance in South Africa. This will bring South Africa in line with the United States of America and it is therefore imperative that those at the top of organisations take heed of the recommendations set out in this research study and begin implementing the various governance frameworks.

It was demonstrated that IT governance and project governance are both subsets of overall corporate governance. Furthermore, it was discussed that it is important for those who use projects to implement IT strategy, to work with specialist individuals in the organisation who have a detailed understanding of the project management culture. This will facilitate in better returns on IT projects and greater internal control.

The project life-cycle was also shown to involve more than just the feasibility and implementation of a project. The additional characteristic of the life-cycle, namely benefits realisation, strongly suggests that organisations can no longer merely stop at the close-out phase, but must be able to "harvest the benefits" that the project was originally intended for.

The role of the project sponsor is now better understood and the training and assessment of such an individual will promote a stronger culture of responsibility and accountability in the organisation for the IT projects they implement.

This research study has therefore provided a means to facilitate an improvement in overall IT project management capability through the use of an effective and holistic corporate governance framework and a project sponsorship competency framework.

5. Future Research

The process of researching the stated problem has brought about a number of areas that can be investigated further as separate research topics.

5.1 A project governance Standard

The project governance framework developed in this research study, incorporated all the elements from the APM's guide to the governance of project management. The author had to reconfigure these elements into the same structure utilised by COBIT in order for the two frameworks to be comparable and complementary.

However, whilst COBIT addresses 34 individual IT processes the PG framework only addresses 4. As such, future research is required to identify additional processes relevant to project governance.

5.2 Benefits Realisation

There is a definite need for future research regarding this new and very important stage of the project life-cycle. If project sponsors are to perform their duties effectively and efficiently from conception to termination, it is important to introduce activities specific to the operation and termination phase such that sponsors are able to realise fully the benefits as well as facilitate in the decommissioning of the system.

5.3 Project sponsor Personal Competencies

As already stated, the personal competencies required on the part of the project sponsor were derived from a competency framework that addressed project management. As such, it is important for researchers to delve into this specific topic and to determine if there are indeed personal competencies that are specific to the project sponsor.

6. Final word

This is the first research study conducted by the author. As such, an immense amount of knowledge has been gained regarding the approach and processes involved in performing research of this calibre. This has brought about a new found admiration for the intellectual effort, persistence and mental fortitude required to produce quality research

Through performing this research, the author has hoped to gain numerous skills such as the ability to critically evaluate and analyse research material, articulate abstract thoughts, writing research reports in a logical and

structured manner with the correct use of language, and to look past superficial ideas and concepts regarding problem solving. These skills will prove invaluable for further research.

In conclusion, executives and senior management can no longer plead ignorance to the role project management plays in their organisations. They are now held accountable for the funds they invest in IT projects and must demonstrate a sufficient amount of effectiveness, efficiency and competence in their ability to align organisational direction with the interests of their shareholders.

As such, it is imperative that in today's turbulent corporate environment, that top management develop sufficient skills and knowledge in sponsoring IT projects such that shareholder value is created and progress towards a successful future is attained.

Appendix A

Project Sponsorship Knowledge/Performance Competencies

A1 Units of Competence: Business Leadership

A1.1 Business Leadership: Concept

Table A1.1: Business Leadership: Concept

_.1 Unit of Competency – Business Leadership	
_1.1 Competency Cluster: Concept	
Elements	Performance Criteria
_1.1.1 Perform an initial Project Feasibility Study and Analysis	.1 Set scope of initial project review or formal/informal audit that evaluates historical information (trend analysis) for projects involving similar products and services. .2 Perform high-level assessment of the organisational resources for the project. .3 Perform high-level risk assessment. .4 Conduct benefits realisation plan. .5 Provide all initial project financial forecasts to internal auditors.
Examples of Assessment Guidelines	
Knowledge Competencies Demonstrate a knowledge and understanding of: • The inputs to project feasibility studies/statements • The tools and techniques utilised for initiating and appraising projects • The outputs of project feasibility studies/statements **Performance Competencies** Demonstrate an ability to develop and understand: • The Project Feasibility Study/Statement • Initial Project Financial Forecasts • The Business Case (containing cost benefit analysis and benefits realisation plan) • High-level risk assessments	
Satisfies Measure for Control Objective	
• PSCO 2 • PSCO 7 • PSCO 8 • PSCO 13 • PSCO 15	

A1.2 Business Leadership: Development

Table A1.2: Business Leadership: Development

_.1 Unit of Competency – Business Leadership	
_1.2 Competency Cluster: Development	
Elements	Performance Criteria
_1.2.1 Formal recognition as chair of steering committee	.1 Sign formal document confirming appointment as chair.
_1.2.2 Formal recognition of the project's existence	.1 Sign project charter.
_1.2.3 Develop Risk Management Plan	.1 Together with the project manager, develop the process by which risk identification and quantification will be maintained.
Examples of Assessment Guidelines	

Knowledge Competencies

Demonstrate a knowledge and understanding of:

- The inputs to risk management planning
- The tools and techniques utilised for developing risk management plans
- Procedures in chairing steering committee meetings
- The contents of the project charter
- The outputs of risk management planning

Performance Competencies

Demonstrate an ability to develop and understand:

- The roles and responsibilities that come with chairing a project steering committee
- Risk Management Plans
- The project charter

Satisfies Measure for Control Objective

- PSCO 2
- PSCO10
- PSCO14
- PSCO15

A1.3 Business Leadership: Implementation

Table A1.3: Business Leadership: Implementation

_.1 Unit of Competency – Business Leadership	
_1.3 Competency Cluster: Implementation	
Elements	Performance Criteria
_1.3.1 Communication of clear success criteria to project manager and team	.1 Provide formal documentation to the project manager and team that details what is expected of them during project implementation.
_1.3.2 Provision of continuous project forecasts to internal auditors	.1 Provide internal auditors with continuous project forecasts utilising earned value management.
_1.3.3 Request for, and provide access to resources and skills	.1 Formal request and provision of skills and resources to the project manager and team.
Examples of Assessment Guidelines	

Knowledge Competencies

Demonstrate a knowledge and understanding of:

- The inputs to project forecasts
- The tools and techniques utilised for:
    - Communicating clear success criteria to the project manager and team
    - Providing continuous project forecasts to internal auditors and requesting
- Procedures for accessing resources and skills
- The outputs of project forecasts

Performance Competencies

Demonstrate an ability to develop and understand:

- Formal documentation of success criteria
- Project forecasts
- Policies for accessing and providing resources and skills

Satisfies Measure for Control Objective

- PSCO 2
- PSCO 5
- PSCO 12
- PSCO 13

A1.4 Business Leadership: Close-Out

Table A1.4: Business Leadership: Close-Out

_.1 Unit of Competency – Business Leadership	
_1.4 Competency Cluster: Close-Out	
Elements	Performance Criteria
None	**None**
Examples of Assessment Guidelines	
• **None**	
Satisfies Measure for Control Objective	
• **None**	

A1.5 Business Leadership: Operation

Table A1.5: Business Leadership: Operation

_.1 Unit of Competency – Business Leadership	
_1.5 Competency Cluster: Operation	
Elements	Performance Criteria
_1.5.1 Benefits realisation monitoring	.1 Perform benefits realisation monitoring on a quarterly basis.
Examples of Assessment Guidelines	
Knowledge Competencies Demonstrate a knowledge and understanding of: • The inputs to project benefits realisation monitoring • The tools and techniques utilised for monitoring benefits realisation • The outputs of project benefits realisation monitoring **Performance Competencies** Demonstrate an ability to develop and understand: • Benefits realisation quarterly reports	
Satisfies Measure for Control Objective	
• PSCO 2 • PSCO 9	

A1.6 Business Leadership: Termination

Table A1.6: Business Leadership: Termination

_.1 Unit of Competency – Business Leadership	
_1.6 Competency Cluster: Termination	
Elements	Performance Criteria
None	**None**
Examples of Assessment Guidelines	
• **None**	
Satisfies Measure for Control Objective	
• **None**	

A.2 Unit of Competence: Change Facilitation

A2.1 Change Facilitation: Concept

Table A2.1: Change Facilitation: Concept

_.2 Unit of Competency – Change Facilitation	
_2.1 Competency Cluster: Concept	
Elements	Performance Criteria
_2.1.1 Meetings with projects authorising body during concept phase	.1 Document and recognise the required change that needs to be implemented within the affected functional division.
_2.1.2 Functional/Divisional Change Management planning	.1 Creation of functional/divisional change management plan that needs to be approved and contained within the business case.
Examples of Assessment Guidelines	
Knowledge Competencies Demonstrate a knowledge and understanding of: • The inputs to change management planning • The tools and techniques utilised for the creation of change management plans • The outputs of change management planning **Performance Competencies** Demonstrate an ability to develop and understand: • Functional/divisional change management plans	
Satisfies Measure for Control Objective	
• PSCO 2 • PSCO 11	

A2.2 Change Facilitation: Development

Table A2.2: Change Facilitation: Development

_.2 Unit of Competency – Change Facilitation	
_2.2 Competency Cluster: Development	
Elements	Performance Criteria
_2.2.1 Formal identification, appointment and documentation of other steering committee members	.1 To formally appoint and document fellow members of the steering committee by identifying key and relevant project stakeholders.
Examples of Assessment Guidelines	
Knowledge Competencies Demonstrate a knowledge and understanding of: - How to identify relevant stakeholders for the steering committee **Performance Competencies** Demonstrate an ability to develop and understand: - Processes to facilitate the identification, appointment and documentation of steering committee members	
Satisfies Measure for Control Objective	
- PSCO 2 - PSCO 10	

A2.3 Change Facilitation: Implementation

Table A2.3: Change Facilitation: Implementation

_.2 Unit of Competency – Change Facilitation	
_2.3 Competency Cluster: Implementation	
Elements	Performance Criteria
_2.3.1 Meetings with steering committee during implementation phase	.1 To formally communicate and document what is required from fellow steering committee members to facilitate change during implementation based on functional/divisional change management plan.
Examples of Assessment Guidelines	
Knowledge Competencies Demonstrate a knowledge and understanding of: - Documenting required change during implementation - The tools and techniques utilised to facilitate change during implementation **Performance Competencies** Demonstrate an ability to develop and understand: - Processes to facilitate the change based on change management plan	
Satisfies Measure for Control Objective	
- PSCO 2 - PSCO 11	

A2.4 Change Facilitation: Close-Out

Table A2.4: Change Facilitation: Close-Out

_.2 Unit of Competency – Change Facilitation	
_2.4 Competency Cluster: Close-Out	
Elements	Performance Criteria
_2.4.1 Meetings with steering committee during close-out	.1 To formally communicate and document to fellow steering committee meetings that project close-out has occurred and system hand-over from the project team is imminent.
Examples of Assessment Guidelines	
Knowledge Competencies Demonstrate a knowledge and understanding of: • The inputs to project close-out • The tools and techniques utilised to facilitate system hand-over to stakeholders • The outputs of project close-out **Performance Competencies** Demonstrate an ability to develop and understand: • Processes to facilitate the hand-over of the system from the project team to the relevant stakeholders	
Satisfies Measure for Control Objective	
• PSCO 2 • PSCO 11	

A2.5 Change Facilitation: Operation

Table A2.5: Change Facilitation: Operation

_.2 Unit of Competency – Change Facilitation	
_2.5 Competency Cluster: Operation	
Elements	Performance Criteria
None	**None**
Examples of Assessment Guidelines	
• **None**	
Satisfies Measure for Control Objective	
• **None**	

A2.6 Change Facilitation: Termination

Table A2.6: Change Facilitation: Termination

_.2 Unit of Competency – Change Facilitation	
_2.6 Competency Cluster: Close-Out	
Elements	Performance Criteria
None	**None**
Examples of Assessment Guidelines	
• **None**	
Satisfies Measure for Control Objective	
• **None**	

A3 Unit of Competence: Decision Delegation

A3.1 Decision Delegation: Concept

Table A3.1: Decision Delegation: Concept

_.3 Unit of Competency – Decision Delegation	
_3.1 Competency Cluster: Concept	
Elements	Performance Criteria
None	**None**
Examples of Assessment Guidelines	
• **None**	
Satisfies Measure for Control Objective	
• **None**	

A3.2 Decision Delegation: Development

Table A3.2: Decision Delegation: Development

_.3 Unit of Competency – Decision Delegation	
_3.2 Competency Cluster: Development	
Elements	Performance Criteria
_3.2.1 Formally assigning project delivery to project manager	.1 To formally assign and document responsibility for project delivery to the project manager and team.
Examples of Assessment Guidelines	

Knowledge Competencies
Demonstrate a knowledge and understanding of:
  • The tools and techniques utilised to communicate and document assignment of delivery to manager
Performance Competencies
Demonstrate an ability to develop and understand:
  • Processes that assign responsibility and document project delivery to project manager	

Satisfies Measure for Control Objective	
• PSCO 2 • PSCO 4	

A3.3 Decision Delegation: Implementation

Table A3.3: Decision Delegation: Implementation

_.3 Unit of Competency – Change Facilitation	
_3.3 Competency Cluster: Implementation	
Elements	Performance Criteria
_3.3.1 Formal review and acceptance of phase-end and stage-end reports	.1 To formally review and accept reports at the end of stages and phases in which the project manager and team are involved.
_3.3.2 Formal review and acceptance of change request forms	.1 To formally review and accept change request forms in a timely fashion.
_3.3.3 Formal review and acceptance of decision request forms	_1. To formally review and accept decision request forms in a timely fashion.
_3.3.4 Formal review and sign-off for deliverables and milestones	_1. To formally review and sign-off for deliverables and milestones presented at steering committee meetings.
_3.3.5 Regular status reports through utilisation of databases	_1. To remain sufficiently aware of project status through the utilisation of databases.
_3.3.6 Meetings with project manager	_1. To hold regular, informal meetings with the project manager to remain sufficiently aware of the project status.
Examples of Assessment Guidelines	

Knowledge Competencies
Demonstrate a knowledge and understanding of:
• The inputs to:
o Phase-end reports
o Stage-end reports
o Change request forms
o Decision request forms
o Deliverables and milestones
• The tools and techniques utilised to remain sufficiently aware of project status via databases
Performance Competencies
Demonstrate an ability to understand:
• Phase-end and stage-end reports
• Reviewing change request and decision request reports in a timely fashion so as to not unnecessarily delay project implementation
• Deliverables and milestones
• Methods to access project databases
• Methods for informally communicating with the project manager to remain sufficiently aware of project status
Satisfies Measure for Control Objective
• PSCO 2
• PSCO 3
• PSCO 4

A3.4 Decision Delegation: Close-Out

Table A3.4: Decision Delegation: Close-Out

_.3 Unit of Competency – Decision Delegation	
_3.4 Competency Cluster: Close-Out	
Elements	Performance Criteria
_3.4.1 Formal review, acceptance and sign-off on project implementation (project sign-off)	.1 Perform review, acceptance and sign-off on overall project delivery in project closure document.
_3.4.2 Documented trend analysis	.1 To formally instruct the project manager to document project results for trend analysis.
Examples of Assessment Guidelines	
Knowledge Competencies	
Demonstrate a knowledge and understanding of:	
• The inputs to project closure and trend analysis.	
• The tools and techniques used to appraise project managers on success criteria	
• The outputs to project closure and trend analysis	
Performance Competencies	
Demonstrate an ability to develop and understand:	
• When projects should be appropriately closed and ready for handover.	
• Why trend analysis is important and why this task should be delegated to the project manager.	
Satisfies Measure for Control Objective	
• PSCO 2	
• PSCO 6	

A3.5 Decision Delegation: Operation

Table A3.5: Decision Delegation: Operation

_.3 Unit of Competency – Decision Delegation	
_3.5 Competency Cluster: Operation	
Elements	Performance Criteria
_3.5.1 Formal review, acceptance and sign-off on Benefits realisation reports	.1 Perform review, acceptance and sign-off on benefits realisation reports.
Examples of Assessment Guidelines	
Knowledge Competencies Demonstrate a knowledge and understanding of: • The inputs to project benefits realisation reports • The outputs of project benefits realisation reports **Performance Competencies** Demonstrate an ability to develop and understand: • Financial indicators during operation	
Satisfies Measure for Control Objective	
• PSCO 2 • PSCO 9	

A3.6 Decision Delegation: Termination

Table A3.6: Decision Delegation: Termination

_.3 Unit of Competency – Decision Delegation	
_3.6 Competency Cluster: Termination	
Elements	Elements
None	**None**
Examples of Assessment Guidelines	
• **None**	
Satisfies Measure for Control Objective	
• **None**	

Appendix B

Project Sponsorship Personal Competencies

These tables are based on the PMCD Framework's (PMI, 2002) personal competencies and have in most cases been adapted to suit the role of the project sponsor.

Although this is not a comprehensive list of personal competencies, it is sufficient for the purposes of the Lechtman Project Sponsorship Framework.

Table B1: Unit of Competency 1 - Achievement and Action.

Unit of Competency 1 – Achievement and Action	
Competency Cluster 1: Achievement Orientation	
Elements	Performance Criteria
1.1.1 Operates with Intensity to Achieve Project Goals	.1 Focuses on task(s) and standards of excellence set by project authorising body. .2 Strives to do job well, reaching goals set by project authorising body. .3 Controls project's business risk proactively
1.1.2 Motivates project manager in a positive way	.1 Drives increased effectiveness of the project team.
1.1.3 Operates with individual integrity and personal professionalism	.1 Adheres to all legal requirements .2 Works within a recognised set of ethical standards .3 Discloses to all stakeholders any possible conflict of interest. .4 Neither offers nor accepts inappropriate payments or any other items for personal gain. .5 Maintains and respects confidentiality of sensitive information.
Competency Cluster 2: Concern for Order, Quality and Accuracy	
1.2.1 Sponsors projects in an ordered, accurate way	.1 Checks to ensure the accuracy of data provided by others and to ensure that correct processes are followed. .2 Works with relevant project stakeholders to clarify issues, expectations and data requirements.
1.2.2 Provides accurate and truthful information	.1 Provides accurate information for project forecasts including estimates, actually and expected results and risks to stakeholders.
Competency Cluster 3: Initiative	
1.3.1 Takes initiative when required	.1 Shows persistence in own actions by taking direct action to address problems. .2 Addresses current opportunities or problems by taking positive actions to capitalise on opportunities or address present problems. .3 Acts quickly and decisively in a crisis where the norm is to wait, "study" and hope problem will resolve itself.
1.3.2 Takes accountability for overall project success	.1 Takes accountability for realisation of benefits.

1.3.3 Seeks new opportunities	.1 Looks for opportunities for one's own organisation.
	.2 Seizes relevant opportunities as they emerge.
	.3 Consolidates opportunities.
1.3.4 Strives for best practice	.1 Enhances own knowledge in developing relevant project documents such as business cases, risk assessments and project forecasts.
Competency Cluster 4: Information Seeking	
1.4.1 Ensures information used to sponsor project is complete and accurate	.1 Questions those closest to the problem when others might ignore these people.
	.2 Asks probing questions to get at the root cause of a situation or problem.
	.3 Calls on or contacts others, who are not personally involved, to get their perspectives, background information or experience. (This is often through personal networking).
	.4 Makes a systematic effort over a limited period of time to obtain needed data or feedback.
	.5 Seeks out appropriate Subject-Matter Experts for their knowledge.
	.6 Demonstrates persistence in tracking down information. Does not back down in the face of adversity or resistance.

Table B2: Unit of Competency 2 – Helping and Human Service

Unit of Competency 2 – Helping and Human Service	
Competency Cluster 1: Customer Service Orientation	
Elements	Performance Criteria
2.1.1 Represents the authorising body inside the project	.1 Follows through on authorising body inquiries, requests and complaints.
	.2 Maintains clear communications with authorising body regarding mutual expectations.
	.3 Monitors authorising body satisfaction and distributes helpful information to it.
	.4 Makes concrete attempts to add value to authorising body.
	.5 Takes accountability for authorising body satisfaction.
	.6 Provides as much service as possible before passing responsibility to another person.
	.7 Remains engaged to ensure that the authorising body's needs are met.
	.8 Balances competing stakeholder interests striving for fair resolution.
2.1.2 Takes initiatives to provide excellent service	.1 Takes initiative to resolve authorising body concerns.
	.2 Engages the authorising body proactively; takes positive action to ensure that needs are met.
Competency Cluster 2: Interpersonal Understanding	
2.2.1 Strives to understand all project stakeholders' thoughts, feelings and concerns	.1 Strives to understand both the present emotions and explicit content of communications from project

	stakeholders.
	.2 Strives to understand underlying problems, and the reasons for someone's ongoing or long-term feelings, behaviours, or concerns. Objectively presents a balanced view of someone's specific strengths and weaknesses.
2.2.2 Listens and responds to others	.1 Picks up clues to others' feelings or meanings, and uses this understanding to explain others' past behaviours, understand current behaviours, and anticipate future behaviours. .2 Listens actively.

Table B3: Unit of Competency 3 – Impact and Influence

Unit of Competency 3 – Impact and Influence	
Competency Cluster 1: Impact and Influence	
Elements	Performance Criteria
3.1.1 Takes appropriate actions to influence others	.1 Takes multiple step actions to persuade, including careful preparation of data, or provides two or more different options in a presentation or discussion. .2 Adapts presentation or discussion to better fit the environment or setting of the presentation or meeting. .3 Uses experts or third parties to influence or persuade others to support one's actions, or to have a specific impact on the actions of other stakeholders involved in the situation.
3.1.2 Influences across projects and organisations	.1 Models desired behaviour to influence all project stakeholders .2 Uses data and/or personal confidence in business cases to positively influence key project stakeholders. .3 Strives to establish integrity within the project, the organisation and externally.
3.1.3 Understands and influences steering committee member	.1 Takes time to learn what motivates performance in each steering committee member. .2 Rewards performance according to each committee member's value system. .3 Communicates the strategic value of the project to the steering committee and project manager.
Competency Cluster 2: Organisational Awareness	
3.2.1 Understands the organisation	.1 Understands both the formal and informal structure and hierarchy of an organisation, including the "chain of command", key actors and decision-makers, and uses this understanding to influence support to accomplish realisation of benefits. .2 Understands the climate and culture of the organisation and recognises the unspoken organisational constraints – what is and is not possible at certain times or in certain positions.
3.2.2 Understands the project	.1 Understands all business issues relating to the

	project, the steering committee and other stakeholders in the organisation.
Competency Cluster 3: Organisational Awareness	
3.3.1 Builds and maintains suitable relationships with project stakeholders	.1 Maintains formal working relationships; most contacts are work-related – largely confined to work-related matters but not necessarily formal in tone, style or structure. .2 Extends some contacts to informal or casual relationships at work.
3.3.2 Establishes and maintains relationships at the right level inside and outside the organisation	.1 Maintains a network of relationships, which extends through all levels of the organisation. .2 Navigates quickly through network to gain support to move project forward.

Table B4: Unit of Competency 4 – Managerial

Unit of Competency 4 – Managerial	
Competency Cluster 1: Directiveness: Assertiveness and Use of Positional Power	
Elements	Performance Criteria
4.1.1 Uses assertiveness when necessary	.1 Speaks assertively, firmly saying, "No" to unreasonable requests, or setting limits for others' behaviour. .2 Demands high performance, firmly setting standards for performance or quality. .3 Insists on compliance with procedures and policies.

Table B5: Unit of Competency 5 – Cognitive

Unit of Competency 5 – Cognitive	
Competency Cluster 1: Analytical Thinking	
Elements	Performance Criteria
5.1.1 Understands at a suitable level all issues associated with the project	.1 Applies basic analytical techniques, such as breaking problems down into simple lists of activities, analysing relationships among a few parts of a problem or situation, or making simple causal links (A causes B) and pro-and-con decisions. .2 Sets priorities for activities in order of importance. .3 Makes appropriate plans or analysis, systematically breaking down a complex problem or process into component parts. Uses several techniques to break apart complex problems to reach a solution; or makes long chains of causal connections. .4 Understands how actions taken on the project may impact other areas of the project, other projects in the organisation or other organisational operations.
5.1.2 Facilitates solutions across all issues related to the project	.1 Provides the framework so that solutions to problems or concerns brought to the attention by the project manager and other stakeholders are addressed.
Competency Cluster 2: Conceptual Thinking	
5.2.1 Sees the project in a holistic way	.1 Observes discrepancies, trends, and interrelationships in data, or sees crucial differences between current situation and past situations.

	.2 Applies complex concepts such as root-cause analysis, or applies knowledge of past discrepancies, trends and relationships to look at different situations. .3 Applies or modifies complex learned concepts or methods appropriately. .4 Simplifies complexities by pulling together ideas, issues and observations into a single concept or a clear presentation.

Table B6: Unit of Competency 6 – Personal Effectiveness

Unit of Competency 6 – Personal Effectiveness	
Competency Cluster 1: Self-Control	
Elements	Performance Criteria
6.1.1 Maintains self-control	.1 Responds calmly – feels strong emotions, such as anger or extreme frustration, but controls these emotions and calmly continues discussions or other processes. .2 Uses stress-management techniques to control response, prevent burnout, and deal with ongoing stress, thus managing stress effectively.
Competency Cluster 2: Self-Confidence	
6.2.1 Creates an environment of confidence	.1 Sees self as competent, comparing oneself or one's own abilities favourably with others and their abilities. .2 Sees self as causal agent, prime mover, catalyst, or originator, stating confidence in one's own judgement. .3 Develops an element of trust and confidentiality
6.2.2 Accepts failure positively	.1 Accepts responsibility; admits failures or shortcomings in a specific, non-global manner e.g. "I misjudged the situation." .2 Learns from own mistakes, analysing own performance to understand failures and to improve future performance.
Competency Cluster 3: Flexibility	
6.3.1 Changes to meet the needs of the project.	.1 Flexibly applies rules or procedures, depending on the individual situation. Adapts actions to accomplish organisation's larger objectives. .2 Adapts tactics to situation or to other's response, changing own behaviour or approach to suit the situation. .3 Respects personal, ethnic, and cultural differences in order to ensure a collaborative environment.
6.3.2 Changes at the required pace	.1 Changes quickly when necessary
Competency Cluster 4: Organisational Commitment	
6.4.1 Demonstrates commitment to the project	.1 Understands and actively supports project and organisation mission and objectives. .2 Aligns own activities and priorities to meet organisational needs; understands need for cooperation

	to achieve larger organisational objectives. .3 Makes sacrifices when necessary to move project forward.

Appendix C

The article: Sponsoring Projects from a Project Governance Perspective, was submitted for review to the PMI's (Project Management Institute) fourth biennial research conference to be held in Montreal, Canada in 2006.

Sponsoring Projects from a Project Governance Perspective

Abstract

Over the past decade, research conducted for the benefit of project management has pointed to numerous factors that contribute to organisational project success. Support from executives and top management is often cited as an imperative factor, whilst having clear business objectives for conducting projects follows closely behind.

The linchpin between the executive leadership team and project manager is the project sponsor. This role-player is in a position to contribute directly to the aforementioned project success factors. The precise responsibilities of the sponsor, however, remain poorly defined. As a result, it is necessary to provide those who are in this position with a set of activities that would facilitate greater project success.

Further to this, the corporate governance scandals of the past few years and the consequent publication of relevant acts of legislation and corporate governance standards has forced top management to become more interested in how their organisation's portfolio of projects is managed.

This paper focuses on the role and responsibilities of the project sponsor from a project governance perspective. It presents the activities that sponsors need to perform in order to positively increase the project's likelihood of success. These activities have all been derived from relevant project governance literature that has been published by widely-recognised organisations.

The aims of this paper are, therefore, to address both the formal and informal aspects of the role of the project sponsor and to provide guidance to organisations and professional associations in defining the role and responsibilities of the project sponsor within a governance framework.

An exploratory, qualitative approach has been utilised for this paper by first reviewing previous related studies and data and conducting a literature review. Based on these reviews, arguments are constructed to arrive at certain conclusions regarding the role of the project sponsor over the entire project life-cycle.

This approach has been utilised because project governance and its implications for organisational project management are poorly understood relative to other forms of governance. By defining the roles and responsibilities of the project sponsor from a project governance perspective, the foundation is put in place for future quantitative research.

The underlying hypotheses were formulated:

- That executive level support is an important factor in the successful delivery of projects

- That the project sponsor provides a vital link between corporate strategy and its delivery through projects

- That to be effective and efficient, the project sponsor's role and accountabilities should be defined and undertaken within the corporate and project governance frameworks of the organisation

- That the dynamics of the relationships between the corporate executive, project sponsor and programme / project manager(s) is a factor in the successful delivery of projects

- That the definition of the project sponsor role within the governance of project management must be responsive to the organisational context.

The outcome of this research is a set of 15 control objectives each with its associated measures. The control objectives specify what is expected from the project sponsor while the measures specify how to measure compliance.

By defining the role and responsibilities as well as identifying the characteristics of effective project sponsorship it could provide a stepping stone to improving organisational project success rates around the world. It also shows that the project sponsor is not merely a Figurehead role, but is fundamentally accountable for the project's success and realisation of its benefits. By using the proposed control objectives, it is now possible to clearly distinguish between the roles and responsibilities of the project sponsor and project manager as well as measure the performance of the sponsor.

Sponsoring Projects from a Project Governance Perspective

1. Introduction

1.1 Background

Organisations around the world continue to embrace project management as an effective method to implement their strategies. Despite this, projects continue to be plagued by a common set of factors that hamper their impact on organisational success.

Two of these factors, considered predominant by Cuthbertson and Sauer (2003) and the Standish Group International (SGI 1994; SGI 1999; SGI 2001; SGI 2003), are:

- a lack of executive and top management support to influence the processes and progress of projects
- a lack of clear business objectives for conducting projects that have been allocated sizeable budgets

These two factors are particularly relevant in today's corporate environment. The corporate governance scandals of recent times have put considerable pressure on those who head organisations to continually align business activities with the interests of their shareholders and society.

1.2 The Problem

As a result of these corporate scandals, particularly where there is relevance to project management, executives and top management are now forced to be accountable for the performance of their organisation's portfolio of projects (Cooke-Davies 2005, 2). This entails proactive support for the project management method from strategic to project level as well as ensuring that all projects are conducted for the benefit of the organisation.

There is now, therefore, significant focus on the role that project sponsorship plays within project management, which Kerzner (1998, 471) describes as the "umbilical cord between projects and line/senior management". Despite this very important concept, however, the role of the project sponsor is relatively poorly understood (Crawford 2001) and as such it is important to determine a comprehensive set of activities and responsibilities for those who find themselves in such a position.

This is important as there is currently no widely-accepted framework that provides project sponsors with detailed roles and responsibilities, from a project governance perspective or otherwise.

1.3 The Research Process

An exploratory, qualitative approach has been utilised by first reviewing previous related studies and data and conducting a literature review on relevant corporate, project and IT governance documentation.

Based on these reviews, arguments are constructed to arrive at certain conclusions regarding the role of the project sponsor over the duration of the project life-cycle.

The research presented here constitutes basic research with the conclusions being reached using deductive reasoning.

1.4 The Layout

The first section in this paper focuses on the relevance and implications that the recent corporate governance scandals have had on the project management community. This sheds light on what is expected by the Board of Directors and senior executives in terms of governing their overall project management activities due to the fact that both legislation and industry in general now require them to do so.

The second section focuses on two important documents relevant to project governance. The first is a governance standard that provides organisations with a means to govern their IT-project activities. The second is a recently-published document that provides an organisational framework for overall project governance that is not industry specific. From these two documents, it is shown how the activities relevant to project sponsorship are derived.

The third section compares the activities derived from both frameworks to determine if any of them address common topics. They are then consolidated into one set and elaborated upon in greater detail.

2. Implications of corporate governance for project management

The single event credited with bringing the world's attention to corporate governance was the collapse of America's energy giant, Enron – one of the most admired companies in the United States (Paulson 2002, 2). The collapse became a scandal of enormous magnitude and resulted from gross mismanagement and malfeasance on the part of its Board and senior management.

South Africa has had its own share of corporate and organisational downfalls. One of the largest corporate scandals to hit South Africa was the failure of the Masterbond Group of Companies in the early 1990s (Nel 2001, 1). The company, over a number of years, had attracted approximately a billion rand by promising secured and thus seemingly safe investments.

As a result of these scandals, acts of legislation and corporate governance standards were instituted in the United States and South Africa. These are now elaborated upon.

2.1 The Sarbanes-Oxley Act of 2002 – United States

On 30 July 2002 the Sarbanes-Oxley Act was signed into American public law (SOX 2002). This legislation (referred to as SOX for the remainder of this paper) was created to restore investor confidence in American public markets, which were devastated by business scandals and lapses in corporate governance and internal controls (Holmstrom & Kaplan 2003, 1).

Of particular relevance to project management, SOX stresses the importance of management's responsibility "for establishing and maintaining an adequate internal control structure and procedures for financial reporting". This is geared towards the improvement of transparency and accountability of public company governance, accounting and reporting activities (Kahn & Blair 2004, 1).

The sections of SOX that hold particular relevance to project management are summarised in Figure 1(ITGI 2004, 14 – 15; Lassiter 2005, 5).

Section	Sarbanes-Oxley Internal Control Mandates	Relevance
Section 302: Corporate Responsibility for Financial Reports	• CEOs and CFOs certify financial statements. • Improve the transparency and reliability of audited financials. • Disclose any internal fraud. • Disclose deficiencies and corrective actions.	Financial statements relevant to investments in projects must be certified.
Section 404: Management Assessment of Internal Controls	• Internal control report stating that management is responsible for an adequate internal control structure. • A statement identifying the framework used by management to conduct the required assessment of the effectiveness of the company's internal control over financial reporting. • Assessment by management on the effectiveness of the controls. • External auditor attestation to the accuracy of management's assertion that internal controls are in place and are effective.	Requires an unprecedented level of alignment between all project-related activities and business practices and between technology management and financial management.

Figure 1: Sarbanes-Oxley Requirements – Section 302 and Section 404

2.2 The King II report on corporate governance – South Africa

One of the earliest efforts of an emerging economy, such as in the case of South Africa, to establish a publicly defined standard of corporate governance was the King Code of corporate governance (referred to as the King report) in 1994. The difference between this standard and SOX is that it is voluntary as opposed to compulsory (Malherbe & Segal 2001, 49, PWC 2003, 5).

In 2002, the Institute of Directors instigated an update in the King Report of 1994. This new document, the King Report 2002 (King II 2002), referred to for the remainder of this paper as King II, represents a revision and update of the 1994 report in an attempt to align standards of corporate governance in South Africa with those in the rest of the world (PWC 2003, 5).

By embracing the social, environmental and economic aspects of a company's activities, King II expands the scope of good governance further by advocating an integrated approach to corporate governance in the interest of a wide range of stakeholders. In this regard, King II encourages greater activism by shareholders, business and the financial press and relies heavily on disclosure as a regulatory mechanism (PWC 2003, 5).

The sections of King II that hold relevance to project management are summarised in Figure 2.

Section	King II Risk Management Recommendations	Relevance
Section 2, Chapters 1 - 4	• A comprehensive system of control (by means of recognised frameworks) should be established by the Board to ensure that risks are mitigated and that the company's objectives are attained. • Disclosures should also be made about the risk management process.	A generally accepted framework for internal project controls must be implemented by the organisation. This framework must ensure that effective control of projects from conception to delivery is in place. Requires an unprecedented level of alignment between project management and business practices and between technology management and financial management.
	• Risks should be assessed on an ongoing basis, and control activities should be designed to respond to risks throughout the company. • These controls should be monitored by both line management and assurance providers.	Requires information pertaining to projects to be escalated to senior management and executives for them to communicate to the Board on the progress of projects underway.
	• Reports from management to the Board should provide a balanced assessment of the significant risks and the effectiveness of the system of internal control in managing those risks.	Project risk assessments should be communicated to the project authorising body before the project is implemented.

Figure 2: King II Requirements – Section 2 Chapters 1 – 4

As per Figure 2, King II also requires that management (senior executives) selects a framework against which to evaluate their internal controls over financial reporting, and then develops and executes a plan for evaluating, testing, and reporting on the effectiveness of those controls.

From the above it is clear that there is a direct link between project management activities and corporate governance. Project sponsors, serving as the conduit between senior executives and project managers, now become accountable for project success or failure. Project sponsors can no longer afford to be distant from the projects they are sponsoring.

Corporate governance is intended for use by senior management. Several lower-level governance frameworks exist to support corporate governance. The governance frameworks that specifically address project governance are discussed next.

3. Deriving the roles and responsibilities of the project sponsor from project governance frameworks

The previous section highlighted the need for senior executives to implement a framework to control and govern their project management activities. This section elaborates on two such lower-level frameworks.

3.1 Control Objectives for Information and related Technology

Control Objectives for Information and related Technology (COBIT) presents an international and generally accepted IT control framework enabling organisations to implement an IT governance structure throughout the enterprise (Guldentops 2004a, 270, IT Gov 2000).

COBIT, which is now in its third edition, delivers a framework responding to management's need for control and measurability of IT by providing tools to assess and measure the organisation's IT environment against 34 IT processes (ITGI 2000). The main theme of this framework is business orientation which originates from the idea that IT needs to deliver the information that the enterprise needs to achieve its objectives, and these objectives must be managed by a system of naturally grouped processes (Guldentops 2004b, 21).

By promoting process focus and process ownership, COBIT is designed to be employed as a comprehensive guide for management and business process owners. The 34 processes, also known as high-level control objectives, contain 318 detailed objectives. The detailed objectives relevant to IT project management fall under the "Planning and Organisation Domain", namely P010 (Planning and Organisation Objective 10) (ITGI 2000, 7).

The PO10 control objectives do not explicitly state which are applicable for sponsoring a project. Therefore, it is important to determine which of them directly affects the project sponsor and how.

The PO10 control objectives take into consideration aspects such as (ITGI 2000, 60):

- Business management sponsorship for projects
- Programme management
- Project management capabilities
- User involvement
- Task breakdown, milestone definition and phase approvals
- Allocation of responsibilities
- Rigorous tracking of milestones and deliverables
- Cost and manpower budgets, balancing internal and external resources
- Quality assurance plans and methods
- Program and project risk assessments
- Transition from development to operations

The control objectives relevant to the sponsoring of IT projects are depicted in Figure 3:

Section	Control Objective	Relevance
PO10.1	Project Management Framework	This control objective is the "umbrella" objective for all the other objectives within PO10 as it takes into consideration (amongst other things) the allocation of responsibilities, check points and approvals. This is relevant to project sponsors as it is them who assign responsibility for overall project delivery to the project manager and ensure check points and approvals are initiated during each phase and stage of the project's life-cycle.
PO10.2	User Department Participation in Project Initiation	In most cases, the project sponsor inherits the product or service being developed. Because of this, it is important that the sponsor brings additional members or key stakeholders within the affected department, to work with the project manager during project implementation.
PO10.4	Project Definition	This is relevant as it focuses on the project charter. It is important because changes due to poor project definition can be costly and affect the delivery date, which in turn may affect the return on investment.
PO10.5	Project Approval	This control objective takes into consideration senior management's role in reviewing the reports of relevant feasibility studies as a basis for its decision on whether or not to proceed with the project.

		This means that the sponsor should determine whether or not the project is worthwhile undertaking. This is then reviewed by the project authorising body.
PO10.6	Project Phase Approval	This control objective takes into consideration the approval of work in each phase of the project life-cycle before work on the next phase begins. This is relevant because it is a function performed by the project steering committee, which the sponsor chairs.
PO10.7	Project Master Plan	This control objective requires that a project master plan be created that (amongst other things) includes progress measures for the project steering committee (which the sponsor chairs).
PO10.10	Formal Project Risk Management	This is relevant to the project sponsor because the sponsor should be aware of potential business risks which may arise during the project's implementation.
PO10.13	Post-Implementation Review Plan	This control objective takes into consideration a review of whether the project has delivered the planned benefits. This is probably the most crucial part of the sponsor's role as it is the sponsor who will determine whether the project's benefits will be realised in the long-run.

Figure 3: Control objectives relevant to project sponsorship from the COBIT framework

For reasons of brevity, only those relevant to the sponsor are given. As can be seen from Figure 3, there are a number of activities required on the part of the project sponsor provided for in COBIT. The second framework that can be used to derive the roles and responsibilities of the project sponsor is provided by the Association of Project Management (APM) in the United Kingdom.

3.2 The APM's Guide to the Governance of Project Management

The APM published "A Guide to Governance of Project Management" in 2004 (APM 2004). The purpose of this guide is to advise directors and others on how to adopt practices regarding the governance of programme and project management activities. Within this guide, the APM refers to four main components of project governance.
These components are (APM 2004, 5):

- Portfolio direction effectiveness and efficiency
- Project sponsorship effectiveness and efficiency
- Project management effectiveness and efficiency
- Disclosure and reporting

This is the first attempt from a recognised project management professional body to publish a guide to project governance. As such these four components form part of a project governance framework. This is depicted in Figure 4.
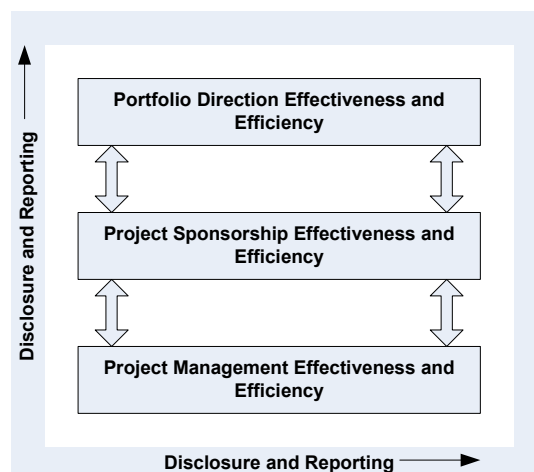

Figure 4: The APM framework

In addition to these four components, the guide includes key questions for each component, which is similar to the approach the COBIT framework has taken in terms of its own control objectives. The activities relevant to the sponsoring of projects are depicted in Figure 5:

Section	Control Objective	Relevance
PS1	Project Sponsor Competency	This is the first indication that the competency of a project sponsor could directly affect the success of a project. As certification of project managers is a generally accepted method to measure competency and in most cases has a direct effect on project management success, the authors argue that in future, project sponsors also receive certification to be able to successfully sponsor projects.
PS2	Project Sponsor Time Management	This is relevant to the sponsor because time should be a set aside to control and direct the project. Koch and Schmid (2004, 5) recommend that the sponsor put regular time windows linked to the project life-cycle into their calendar for communication with the project manager.
PS3	Project Status	This is particularly relevant as the sponsor must be sufficiently aware of the project status in order to make the right decisions to steer the project in the right direction.
PS4	Directions and Decisions	This is relevant as sponsors are required to provide timely directions and decisions to the project manager and other key stakeholders.
PS5	Access to sufficient Resources and Skills	Project sponsors have to ensure that project managers have access to sufficient resources with the right skills to deliver projects.
PS6	Appropriate Project Closeout	This is relevant because the project sponsor must ensure that the project management close-out phase is done correctly. Ultimately, the sponsor has to take ownership of the final deliverable.
PS7	Independent Appraisal of Projects	This is relevant to the sponsor because before a project is implemented, the merits for implementing it should be evaluated. The sponsor would provide the necessary funding for the project and is, therefore, accountable for the spending of this money.
PS8	Project Sponsor Accountability for the Business Case	Before the project can be approved for implementation, it is essential that the project sponsor ensure that the business case (which amongst other things contains calculations for benefits realisation) is in place before the authorising body can allow for the project to continue (Thomsett 2002, 57). The executives (or senior management) place the business case accountability on the shoulders of the sponsor because it is the sponsor who is in charge of ensuring that the project delivered meets everything set out in the document (Edwards 2004, 3)
PS9	Project Sponsor Accountability for Realisation of Benefits	This is relevant to the sponsor because once the project is handed over to the sponsor after completion it is important that he or she ensures that the intended business objectives of implementing the project are attained.
PS10	Project Representation	Project sponsors should adequately represent the project throughout the organisation. The sponsor is the highest representation the project has in the organisation.
PS11	Stakeholder Interests	This is relevant because project sponsors should always ensure that the interests of key stakeholders are aligned with project success which, in turn, should be aligned to business success.
PM1	Clear Success Criteria	This control objective does not form part of the sponsorship component, but it is essential that the sponsor (together with other stakeholders) ensures that the project being undertaken has clear success criteria and that it is measured not only on the success of the project management process, but on its ability to support organisational objectives.
DR1	Project Forecasts	This is particularly relevant as it specifies that the Board (and the executive team) receive timely, relevant and reliable information of project forecasts, including those produced for the business case at project authorisation points. As already stated in PS8, the sponsor owns and maintains the business case and as such this particular control objective is also particularly relevant. The sponsor would, therefore, be required to provide data relevant to this control objective to internal auditors, who would sit in on project steering committee meetings.

Figure 5: Control objectives relevant to project sponsorship from the APM framework

From the above it is clear that there are already attempts to provide a structure within which the project sponsor is expected to act. As COBIT is not intended as a pure project governance framework and the APM's Guide to the Governance of Project Management is only a first attempt, the next section seeks to compare the control objectives from both frameworks to determine whether any similarities exist.

4. Comparison and measures for the control objectives from the two project governance frameworks

The previous section introduced control objectives from two governance frameworks. This section seeks to compare these sets and, if necessary, consolidate them into one set of control objectives to provide the sponsor with a clearer understanding of what is required.

4.1 Comparison of COBIT and APM frameworks' control objectives

The comparison of the control objectives specified in COBIT and those specified in the APM framework are depicted in Figure 6.

COBIT \ APM	PS 1	PS 2	PS 3	PS 4	PS 5	PS 6	PS 7	PS 8	PS 9	PS1 0	PS1 1	PM 1	DR 1
PO10.1				X									
PO10.2											X		
PO10.4	No exact comparison												
PO10.5							X						
PO10.6				X									
PO10.7								X					
PO10.10	No exact comparison												
PO10.13									X				

Figure 6: A comparison of the control objectives relevant to project sponsorship from the APM and COBIT framework.

From Figure 6, we can see that six control objectives from COBIT and the APM framework are similar.

To avoid any potential confusion, a new naming scheme for all the control objectives is devised. Furthermore, devising a new naming scheme also dispels any bias that may arise over which of the two frameworks (COBIT or the APM) are more important. It is essential that both frameworks' control objectives are addressed.

4.2 New Naming Convention

The new naming scheme for the control objectives is called PSCO which stands for Project Sponsor Control Objectives. This, as well as the consolidation of the similar control objectives from the two frameworks, is depicted in Figure 7.

Old Control Objective Name		New Project Sponsor Control Objective (PSCO) Name
APM	**COBIT**	
APM PS1		PSCO 1 – Project Sponsor Competency
APM PS2		PSCO 2 – Project Sponsor Time Management
APM PS3		PSCO 3 – Project Status
APM PS4	COBIT PO10.1 and COBIT PO10.6	PSCO 4 – Directions and Decisions
APM PS5		PSCO 5 – Access to sufficient Resources and Skills
APM PS6		PSCO 6 – Appropriate Project Closeout
APM PS7	COBIT PO10.5	PSCO 7 – Project Appraisal and Approval
APM PS8	COBIT PO10.7	PSCO 8 – Project Sponsor Accountability for the Business Case
APM PS9	COBIT PO10.13	PSCO 9 – Project Sponsor Accountability for Realisation of Benefits

APM PS10		PSCO 10 – Project Representation
APM PS11	COBIT PO10.2	PSCO 11 – Stakeholder Interests
APM PM1		PSCO 12 – Clear Success Criteria
APM DR1		PSCO 13 – Project Forecasts
	COBIT 10.4	PSCO 14 – Project Definition
	COBIT 10.10	PSCO 15 – Formal Project Risk Management

Figure 7: The New Naming Convention for the Project Sponsor's Control Objectives

As Figure 7 shows, the consolidated control objectives/activities from the APM and COBIT frameworks have now been given a new naming convention. There are, therefore, fifteen control objectives that the project sponsor has to meet to effectively and efficiently ensure that the project is a success from conception to termination.

The premise of having control objectives is that each control objective must have measures to quantify their effectiveness. It can only be determined whether or not the objective has been met if the control objective can be quantified (ITGI 2000, 15).

A major limitation to both governance frameworks is that neither explicitly states what measures are needed for compliance. To satisfy the Board of Directors and senior executives that the sponsorship component is sound and contributes as much as possible to overall project success, therefore, it is necessary to interpret how each control objective could be successfully measured. A deductive reasoning approach was used for this purpose.

With this in mind, it is important to motivate why some of the control objectives were consolidated into one control objective, as well as provide specific measures for each.

4.3.1 PSCO 1 – Project Sponsor Competency

Description

This control objective focuses on sponsors' ability to perform their required duties as specified by the PSCOs.

Measure

A competency framework similar in structure to that of the PMCD framework (Project Management Competency Development) framework (PMI 2002) can be used as a measure for this control objective. This means that the sponsor should have specific knowledge areas relevant to sponsoring projects which result in key performance criteria. These knowledge/performance criteria, in addition to personal competencies, can be assessed and used as a means to certify the sponsor.

4.3.2 PSCO 2 – Project Sponsor Time Management

Description

This is not to be confused with the project manager's time management which is a knowledge area contained in the PMBoK.

The sponsor should, however, set aside dedicated time to sponsor a project. This should be more frequent at the beginning of a project (Bushell 2004, Koch & Schmid 2004, 5), less during the implementation phase, and extremely active in the benefits realisation phase (which occurs after project close-out) (Bushell 2004).

Measure

This objective is particularly difficult to quantify as the time a sponsor should devote to a project varies from organisation to organisation and from project to project, and as such is subjective in nature.

For purposes of measurement, however, the project sponsor should spend approximately 5% of the project manager's total time during the duration of the project, with more at critical stages, according to D. Shannon (personal communication, 8 September 2005). If, for instance, the project manager spends 40 hours on a project during a particular week, then the sponsor should have spent at least eight hours.

4.3.3 PSCO 3 – Project Status

Description

This control objective ensures that the project sponsor is sufficiently aware of the project status at all times.

Measure

Müller (2003, 21) states that monthly communication in the form of monthly reports or face-to-face meetings is the method of communication most often recommended.

Further to this, the Prince2 methodology (CCTA 1999) recommends that at a minimum, the reporting frequency between the project manager and the project sponsor be during the end of a stage (in the form of a stage end report), at the end of a phase (in the form of a mid-stage report) and during project closure (in the form of a project closure report).

Project sponsors can also access databases that may store project status information.

The documented minutes of these meetings with the project manager and access logs into project databases will provide measures for this control objective.

4.3.4 PSCO 4 – Directions and Decisions (COBIT PO10.1 and APM PS4)
Description
Without the project sponsor providing direction, the project team will be faced with making a decision for themselves. This may be one that suits them well, but not necessarily the sponsor and the company (Buttrick 2004, 21)

This control objective, therefore, checks if sponsors provide clear and timely directions.

Motivation for consolidation
COBIT's PO10.1 Project Management Framework contains a requirement that the allocation of responsibilities be conducted by the project steering committee. This is when the sponsor assigns project delivery to the project manager. This correlates to the APM framework's PS4 control objective which asks if sponsors provide clear and timely directions and decisions.
The authors argue that since assigning delivery to the project manager is an important decision which is made by the sponsor, then these two control objectives should be consolidated into one.
COBIT's PO10.6 Project Phase Approval takes into consideration the fact that work accomplished in each phase of the project life-cycle has to be approved before work on the next phase begins.
The authors argue that since the sponsor is in charge of the business case and has to ensure that the project being implemented will deliver its benefits, that this be consolidated with the directions and decisions control objective in the APM framework (APM PS4). The sponsor, together with the steering committee will, therefore, decide whether or not any additional work is required in the phase before work begins in the next phase.
Measure

Firstly, the project sponsor will assign overall project delivery to the project manager. This does not mean that the project manager is directly appointed by the sponsor. This, instead, is an agreement between the sponsor and project manager formally initiating their relationship. An example is a project charter or Project Initiation Document (PID).

Secondly, during the course of the project, the sponsor will be receiving various requests from the project manager in the form of decision requests which entails asking for certain decisions to be made on the direction of the project. In addition to this, requests to make changes to the scope and/or deliverables will also be made in the form of change requests (Knutson 2005, 2).

The request form must contain the date of the request and a time limit for when the decision must be made by the sponsor. After this is done, the request forms are archived for auditing purposes. All of these specific instructions should be contained with a project policy document.

Furthermore, the sponsor is expected to approve the work accomplished in each phase of the project life-cycle before work on the next phase begins. This should be in the form of approving the aforementioned status reports. The sponsor should also sign off on the deliverables and milestones achieved by the project team.

Once the project has reached the benefits realisation stage (after project close-out), which falls out of the scope of the project manager's responsibility, then the sponsor should direct those affected by the project's delivery on how best to realise its benefits. During the course of this stage, quarterly reviews are recommended to monitor and measure the benefits realised (Thomsett 2002, 273).

The minutes of these meetings should also be archived and the sponsor should sign off on these reports.

4.3.5 PSCO 5 – Access to sufficient resources and skills

Description

This control objective focuses on the sponsor's role in providing access to sufficient resources and skills to the project manager and team. The project manager often requires resources and skills beyond the project team that they are managing. This may be in the form of quality consultants, professional risk services and other external sources.

Should the project manager not be able to access resources and skills from within the organisation, then the project sponsor may be called upon to assist the manager in obtaining them. The sponsor is someone in a position to politically and financially back the project, which is effectively the "organisational project champion".

Measure

Sponsors must be able to do as much as possible to ensure that project managers have access to adequate resources and skills. The authors, therefore, argue that the sponsor should be mandated to approve formal requests by the project manager for specific and additional resources, and that this also be contained within a specific project policy document.

Once the project manager has made this formal request, sponsors will be able to prove that a request for the provision of these resources and skills was made.

4.3.6 PSCO 6 – Appropriate Project Closeout

Description

This particular control objective focuses on the sponsor ensuring that the project is appropriately closed before taking ownership of it.

Measure

The project manager would typically compile a final status report which summarises approved changes made to the project plan. This is distributed to all stakeholders (including the sponsor) and others who have received status reports throughout the project's implementation. This should be signed off by the project sponsor.

A growing practice today is for organisations to ensure constructive variance and trend analysis of time, cost, scope and quality for their projects. As such, it is worthwhile for the project sponsor to ensure that the project manager documents all of this data for future reference (ASAPM 2003, 2). This should be forecasted into the project's budget as it is not something the project manager can necessarily budget for after the project has started.

Once all this has been done, the sponsor should then sign off a project closure document formally closing the project (Schwalbe 2004, 635).

4.3.7 PSCO 7 - Project Appraisal and Approval (COBIT PO10.5 and APM PS7)

Description

This control objective focuses on the sponsor's duties in appraising a project before it is conducted as well as finally approving its completion.

It is essential that if serious doubts arise about the value of the project to the company, or about its chances for success then the sponsor has the responsibility to notify the project's authorising body (Knutson 2005, 2, Watson 2004, 2).

Motivation for consolidation

COBIT's PO10.5 Project Approval ensures that for each project the organisation's senior management reviews feasibility reports and other studies as a basis for deciding whether or not to proceed with the project.
This is similar to the APM framework's PS7 control objective which states that independent appraisal should be conducted for projects before proceeding with them. These two control objectives can, therefore, also be consolidated into one.

Measure

A special review, such as an informal or a formal audit, should be conducted and documented. The scope of such a review would be set by the sponsor (Shannon 2005). It is this documented review process that provides a measure for this specific control objective.

4.3.8 PSCO 8 – Project Sponsor Accountability for the Business Case (COBIT PO10.7 and APM PS8)
Description
This control objective places the accountability for the business case on the project sponsor's shoulders. Should the project fail, the sponsor would be held personally liable for any losses suffered.

Motivation for consolidation

COBIT's PO10.7 Project Master Plan contains all the elements that are contained within a business case (Turbitt 2005, 2). These elements include statements of scope, objectives, required resources and methods for monitoring time and costs.

The authors argue, therefore, that since both of these control objectives address the same issues that they also be consolidated into one control objective under the sponsor's accountability for owning and maintaining the business case which is APM's PS8 control objective.
Measure

Sponsors should ensure that all financial calculations are correct and that any financial indicators that appear skewed should be corrected or they themselves might be liable for any fraud that may arise as a result of these calculations.

The sponsors should then sign the business case formally agreeing to its contents and accepting accountability.

4.3.9 PSCO 9 – Project Sponsor Accountability for Realisation of Benefits (COBIT PO10.13 and APM PS9)

Description

This control objective allocates accountability for realising the benefits of the project, after its completion, to the project sponsor. It should also form part of the performance appraisal of the sponsor and be linked to a reward or bonus scheme in the event that the benefits are indeed realised.

Motivation for consolidation

COBIT's PO10.13 Post-Implementation Review Plan takes into consideration a review of whether the project has delivered its planned benefits. This is similar to the APM's PS9 control objective which specifies that the project sponsor take accountability for the realisation of benefits for the project.
Measure

Depending on the nature of the project and the benefits that must be realised, there should be a series of benefit review points at which the progress of the realisation process can be monitored and evaluated. As already stated, the recommended frequency of such reviews is quarterly (Thomsett 2002, 273) and the sponsor should sign off on these reports, which provide measures for this specific control objective.

A policy should, therefore, be in place stating that the realisations of benefits should be a factor in appraising sponsors' performance as heads of their functional divisions.

PSCO 10 – Project Representation

Description

This control objective primarily focuses on the fact that the sponsor is seen as being the chairman of the project steering committee according to J. Slocombe (personal communication, 15 September 2005).

Measure

Formal recognition should be given for this role and should be documented as such. Furthermore, the sponsor has to choose the members of the project steering committee and should therefore formally document who these members are. This could form part of the sponsor's job description and the sponsor should, therefore, be appraised on the ability to effectively chair the steering committee.

4.3.11 PSCO 11 – Stakeholder interests (COBIT PO10.2 and APM PS11)

Description

The implementation of most projects can bring about a change in the business process with wide-ranging implications on job profiles and functional relationships between workers, supervisors and managers. The sponsor's role in this is crucial because poor change management is often cited as a significant barrier to organisational project success and the realisation of project benefits (Khaitan 2003, 1).

The sponsor must, therefore, assume responsibility to drive organisational change management whilst the project is being implemented (Knutson 2005, 2) and ensure that all stakeholder interests are aligned with project success.

Motivation for consolidation

COBIT's PO10.2 User Department Participation in Project Initiation which takes into consideration the participation by the affected user department's management. Since the project sponsor inherits the product or service being developed, it is important that the sponsor bring additional members or key stakeholders within the affected department, to work with the project manager during project implementation.
This correlates with the APM framework's PS11 control objective which states that the sponsor should ensure that interests from key project stakeholders, who include those affected by the implemented project, are aligned with project success. These two control objectives can, therefore, also be consolidated into one.

Measure

From this, the authors infer that an organisational change management plan should be developed by the sponsor to effectively quantify and manage the change throughout the affected department or division that might arise as a result of the project's successful implementation.

The project sponsor should also hold regular meetings with all affected stakeholders. The minutes for these meetings should, in addition to the organisational change management plan, provide a measure to show that the sponsor has kept all stakeholders abreast of the project status and of what is required of them in their respective roles.

4.3.12 PSCO 12 – Clear success criteria

Description

This control objective specifies that projects should have clear success criteria which are to be used for decision-making. The sponsor should, therefore, communicate clear and quantifiable success criteria (such as the quadruple constraint) to the project manager and team to ensure that they understand what they should do to successfully complete the project.

This should facilitate greater benefits realisation for the sponsor as the project that has been delivered should be able to have all of its outcomes positively realised based on these criteria.

Measure

Formal documented communication of clear success criteria to project team ensuring they are sufficiently aware of what is expected of them.

4.3.13 PSCO 13 – Project forecasts

Description

As already stated estimated benefits and costs of the project during the creation of the business case involve financial calculations. As such, the internal auditors that monitor controls must be satisfied that methods for these calculations have been correctly utilised. This control objective, therefore, ensures the timely delivery of these financial metrics.

Measure

The project sponsor should provide the internal auditors with forecasts for them to eventually give to the external auditors who will need this information during their audit.

Regular forecasts are also applicable during the project's implementation which provides the internal auditors with an indication of whether the project was on course according to the original forecasts

provided to them. Earned value is the recommended method of control that Prince2 and many other methodologies utilise (Müller 2003, 20).

4.3.14 PSCO 14 – Project definition

Description

This control objective takes into consideration the creation of a clear written statement defining the nature and scope of the project before work on the project begins.

Measure

The project definition is essentially the project charter (Schwalbe 2004, 153) or Project Initiation Document (PID). The importance of having such a document is that changes due to poor project definition can be costly and affect the delivery date which in turn may affect the return on investment. The sponsor is, therefore, required to sign this document.

4.3.15 PSCO 15 – Formal Project Risk Management

Description

The project sponsor is particularly interested in business risks and issues that may arise should the project fail to deliver according to aspects set out in the business case. As such, this control objective focuses on ensuring that the project has a proper risk management programme which includes risk management plans and assessments. This is also a main requirement from a corporate governance point of view.

Measures

An initial risk assessment should be conducted by the sponsor that informs the authorising body of any potential risks that might occur during the project's execution (Thomsett 2002, 57). This risk assessment should be reviewed and signed by the project sponsor.

The project sponsor and manager should then develop a risk programme to identify and control business risks in projects that have the potential to cause unwanted change and ultimately a significant deviation from the projected benefits set out in the business case.

This programme or plan should specify the frequency for risk reporting by project managers whilst sponsors must be satisfied that this programme addresses all relevant aspects that allows them to communicate these risks and issues to the authorising body, who may decide to terminate the project before additional funds are wasted unnecessarily.

The above fifteen control objectives have been derived from two existing governance frameworks. The list is by no means complete as several more control objectives could be added. The expansion of the list is the next phase of this research project.

5. Conclusion

This paper sought to present a detailed set of activities derived from two existing governance frameworks that would facilitate in the formal definition of the project sponsor's role and responsibilities in the organisation. This is important because the position of project sponsor is relatively poorly understood and a formal definition for this role within the context of project governance is essential in the new corporate environment.

Based on this paper, it can be seen that the project sponsor is not merely a Figurehead role, but is fundamentally accountable for the project's success and realisation of its benefits. All of the relevant control objectives derived from the governance framework are given tangible measures to determine how the sponsor can be compliant with project governance, which gives the sponsor a better idea of what is required of this position before, during, and after the project's implementation.

The main benefit of this paper is that the project sponsor can now be formally recognised as a key role-player within project management. Another benefit is that there now exists a clear distinction between the roles and responsibilities of the project sponsor and project manager. The performance of projects sponsors can now also be measured, because a set of measurement criteria exists. The set of criteria now links projects to corporate governance which means that organisations have a structured way of measuring and ensuring compliance.

The activities derived from the two governance frameworks in addition to their measures have provided a solid theoretical foundation for future quantitative research. It will be particularly interesting to

determine whether project sponsors are cognisant of what is required of them from a project governance perspective. Furthermore, it will also be interesting to determine whether performing the aforementioned activities and satisfying the measures for all the control objectives has a direct influence on overall project success.

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