

AN INVESTIGATION INTO THE GOVERNANCE OF INFORMATION TECHNOLOGY PROJECTS IN SOUTH AFRICA

Dr Carl Marnewick¹ and Prof. Les Labuschagne²

¹Department of Business Information Technology, University of Johannesburg, South Africa
PO Box 524, Auckland Park, 2006, Johannesburg
Tel: 011 559 1216
Fax: 011 559 1239
Email: cmarnewick@uj.ac.za

²School of Computing, University of South Africa, South Africa
PO Box 392, UNISA, 0003, Pretoria
Tel: 012 429 6368
Fax: 012 429 6845
Email: LLabus@unisa.ac.za

Abstract

Information technology (IT) projects are often perceived as adding little or no organisational value despite substantial investments being made. The non-adoption of governance principles might contribute to this perception as unfeasible projects are often approved and initiated without proper discourse. To test this statement, 16 semi-structured interviews were conducted to understand current practice. This article reports on the investigation of IT projects in South African organisations to determine whether generally accepted governance principles were applied in the project domain. The main trend that emerged as a result of the investigation is that adherence to governance principles is a myth and that it does not guide decision-making for IT projects. Using the findings of the investigation, a conclusion is drawn that the majority of the organisations do have corporate governance in place but that they do not comply with IT and IT project governance.

1. Introduction

Organisations should adhere to information technology (IT) governance practices. The purpose of these practices is to “ensure that the enterprise’s IT sustains and extends the organisation’s strategies and objectives” (IT Governance Institute, 2007:5). IT governance best practices should, in turn, govern the implementation of IT-related projects.

In 2008 the IT Governance Institute (ITGI) commissioned PricewaterhouseCoopers to conduct a global survey on IT governance. According to this report, “good IT governance practices are known and applied, but not universally” (IT Governance Institute, 2008). It is currently not clear to what degree IT governance is adopted by South African organisations. It is also not clear to what degree IT project governance is guided by IT governance within the South African context. No guidance was provided previously by the King Code of Governance for South Africa (King 2) to South African organisations in relation to IT governance (Institute of Directors Southern Africa, 2002). This situation changed when the King Code of Governance for South Africa (hereafter referred to as King 3) was released in September 2009 (Institute of Directors Southern Africa, 2009). As all publicly listed companies are expected to comply with the King 3 code, it has become important to understand the degree to which corporate governance principles are applied within the IT project environment within a South African context. Literature suggests that IT projects are often not completed within the defined time and costing and do not add value to the organisation (Marnewick & Labuschagne, 2008). Previous research in the field of project governance focused on the public sector and, according to Crawford and Helm (2009), it is also a relatively new research area. This became apparent when it was established that only a handful of articles relating to project management governance have been published recently and none in the field of information technology (Williams et al., 2009).

The question can be asked whether project governance encompasses IT projects. The implication is that specific attention needs to be given to the management of IT projects. The research on which this article is based aimed to add to the current body of knowledge in respect of IT project governance. There is currently not enough research being done in the field of IT project governance and the research on which the article is based started to address this need. The belief is that if proper

IT project governance is not addressed, the situation will not improve regarding the perception that IT projects are always late, over budget and do not add value (Schwalbe, 2010).

To address this issue, we need to determine the relation between corporate governance, IT governance and project governance. According to Muller (2009), “governance provides a framework for ethical decision making and managerial action within an organisation that is based on transparency, accountability and defined roles”.

Corporate governance can be defined as the establishment of structures and processes, with appropriate checks and balances that enable directors to discharge their legal responsibilities (Institute of Directors Southern Africa, 2009).

IT governance is the responsibility of executives and the board of directors, and consists of the leadership, organisational structures and processes that ensure that the enterprise’s IT sustains and extends the organisation’s strategies and objectives (Moeller, 2008).

In literature the terms ‘project governance’ and ‘project management governance’ are often used interchangeably. For the purposes of this article, project governance is defined as the structure through which the objectives of the project are set, as well as the means to attain these objectives and to monitor the performance against these objectives (Turner, 2006).

Project governance should take place within the larger concept of corporate governance. The research also looked into comparing the findings from the literature survey (theory) with the actual practice found in organisations to determine whether gaps do exist and, if so, to recommend improvements. Sixteen semi-structured interviews were conducted to begin to understand the notion of IT governance and IT project governance. It was a relatively small study but the objective was to find initial results. A definitive conclusion cannot be drawn from these interviews, but they provided some interesting pointers for further research. The research also provided a baseline of the current status of IT governance and IT project governance within a South African context. Based on these preliminary results, further research will be conducted. In this article the literature review highlighting the relation between corporate, IT and IT project governance is discussed, the semi-structured interviews are analysed and some conclusions are drawn.

2. Literature review

The worldwide economic downturn has impacted the way organisations operate. For many organisations, survival has become the main strategic objective. According to the Institute of Directors Southern Africa (2009:9), sustainability “is the primary moral and economic imperative of the 21st century”. One of the main objectives of corporate governance is therefore to ensure the sustainability of organisations through what would be considered best practice.

The achievement of best practice in sustainability and integrated reporting is only possible if the leadership of an organisation embraces the notion of integrated sustainability performance and reporting (Moeller, 2008; Institute of Directors Southern Africa, 2009). The 56 countries in the Commonwealth, including South Africa, and the 27 states in the European Union have opted for a code of principles and practices on a ‘comply or explain’ basis, in addition to certain governance issues that are legislated (Institute of Directors Southern Africa, 2009).

Corporate governance can also be seen as a means for socio-economic development (Sapovadia, 2006). Corporate governance was a major concern in the Asian and Pacific region, especially in the aftermath of the 1997 Asian financial crisis. The size and frequency of recent corporate governance debacles show that poor governance is not only a formidable hurdle to surmount, but also that it is at the forefront of economic development issues. Accordingly, it will be helpful to investors, the media and other stakeholders to be armed with the corporate governance analytical principles, skills and tools that will enable them to distinguish between companies that comply with legislation either superficially or cosmetically (Asian Development Bank, 2003). South Africa has benefited enormously from its listed companies following good governance principles and practices, as was evidenced by the significant capital inflows into South Africa before the global financial crisis of 2008 (Institute of Directors Southern Africa, 2009).

One of the main changes between the King 2 and the King 3 reports is the latter’s inclusion of IT governance. In most organisations, IT has become an integral part of the business and is fundamental to support, sustain and grow the business (Holtsnider & Jaffe, 2006; Rezanian & Lingham, 2009). Not only is IT an operational enabler for an organisation, it is also an important

strategic asset to create opportunities and to gain competitive advantage (Crawford et al., 2006; Milosevic & Srivannaboon, 2006; Institute of Directors Southern Africa, 2009).

Chapter 5 of the King Code of Governance for South Africa 2009 deals with the governance of IT. The chapter is based on seven principles (Institute of Directors Southern Africa, 2009):

1. The board should be responsible for IT governance.
2. IT should be aligned with the performance and sustainability objectives of the company.
3. The board should delegate to management the responsibility for the implementation of an IT governance framework.
4. The board should monitor and evaluate significant IT investments and expenditure.
5. IT should form an integral part of the company's risk management.
6. The board should ensure that information assets are managed effectively.
7. A risk committee and audit committee should assist the board in carrying out its IT responsibilities.

Of particular interest is principle 4, which refers to IT investments. IT investments are made within the organisation through IT projects (Ward & Daniel, 2008; Chen et al., 2009). These investments or initiatives must be guided by the organisational vision and objectives (Cooke-Davies et al., 2009). Principle 4 refers to three practices, one of which is of particular interest (Institute of Directors Southern Africa, 2009):

- *The board should oversee the value delivery of IT and monitor the return on investment from significant IT projects.*

This particular practice suggests that there is a link between IT governance and IT projects, and therefore to the management of IT-related projects and programmes.

Chapter 6 of King 3 refers to compliance with laws, rules, codes and standards and states that the board should delegate to management the implementation of an effective compliance framework and processes (Institute of Directors Southern Africa, 2002). This implies that the responsibility of IT governance should be delegated to the management of the IT division, while project governance would be delegated to the body or people responsible for the management of the projects, programmes and portfolios (Aubry et al., 2009; Perry, 2009). The *2008 IT Governance Global Status*

Report published by the ITGI supports this by stating the following: “Although championship for IT governance within the enterprise comes from the C-level, in daily practice IT governance is still very much a CIO/IT director issue” (IT Governance Institute, 2008).

The same report also states that “there is still substantial room for improvement in alignment between IT governance and corporate governance – as well as for IT strategy and business strategy”. International guidelines for IT governance have been developed through organisations such as ITGI (Control Objectives for Information and related Technology (COBIT) and Val IT) (IT Governance Institute, 2007; Davis, 2008), the International Organisation for Standardisation (ISO) authorities (for example ISO38500) (Feltus et al., n.d.) and various other organisations such as Information Systems Audit and Control Association (ISACA) and Open Compliance & Ethics Group (OCEG). ISO38500 is the first international standard that provides guidelines for corporate governance of IT.

One of the strongest practices available to assist an organisation in determining whether IT supports the vision and strategies of an organisation is COBIT (Malik, 2001; Mingay & Bittinger, 2002; IT Governance Institute, 2007). Organisations that deploy COBIT find that the clarity and simplicity it brings to an organisation is highly valuable. The COBIT framework can be used to explain how IT processes can deliver information needed by the organisation to achieve its objectives (IT Governance Institute, 2007; IT Governance Institute, 2009a).

COBIT is an IT governance control framework as well as a maturity model and its purpose is to ensure that IT resources are aligned with the organisational vision and strategies. However, COBIT does not include specific processes and tasks because it is a control framework rather than a process framework (Mingay & Bittinger, 2002, IT Governance Institute, 2009a). COBIT focuses on *what* organisations need to do and not *how* they need to do it (Moeller, 2008; IT Governance Institute, 2009b). The ‘how it should be done’ is determined by the various project management practice standards and best practices (Project Management Institute, 2005, 2006, 2007a, 2007b).

COBIT dedicates one process (PO10 – Manage Projects) to project management and the purpose of this process is to ensure the correct prioritisation and co-ordination of all projects (IT Governance Institute, 2007).

Figure 1 illustrates the relationship between corporate governance, IT governance and IT project governance.

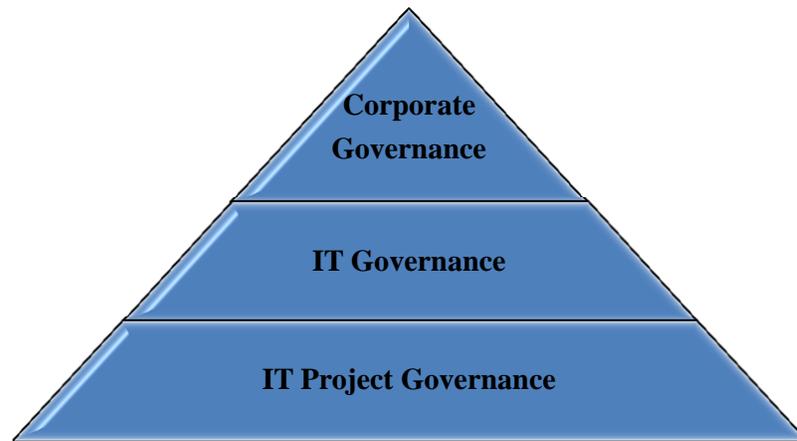


Figure 1: Relationship between corporate, IT and IT project governance

The implication is that IT project governance is deduced from the principles of corporate governance and that IT governance provides the link between corporate and IT project governance. Both corporate and IT governance have legislation or best practices such as the Sarbanes-Oxley Act (SOX) (Moeller, 2008), King 3 (Institute of Directors Southern Africa, 2009) or COBIT (IT Governance Institute, 2007).

There is currently little or no guidance on project governance or for that matter IT project governance. This phenomenon is illustrated as follows:

- The *Guide to the Project Management Body of Knowledge* (PMBOK® Guide) of the Project Management Institute (PMI) refers to project governance as providing a comprehensive and consistent method of controlling the project to ensure its success (Project Management Institute, 2008a). The governance of a project should be aligned within the larger context of the organisation. The PMBoK® Guide does not provide any additional information on how to ensure that project governance is aligned with IT and corporate governance.
- The Association for Project Management (APM) published a *Guide to Governance of Project Management* in 2004 (Association for Project Management, 2004). The purpose

of this guide is to influence directors and others to adopt excellent practices regarding the governance of programme and project management activities. This involves the alignment of the directors' interests with the programme and project teams and wider stakeholders. Eleven principles are identified and the guide provides questions that organisations have to answer regarding these principles.

- The APM Body of Knowledge (APMBoK®) points out that project governance is concerned with those areas of corporate governance that are specifically related to project activities (Association for Project Management, 2006). It highlights that project governance ensures project alignment with the organisational objectives. This is then also applicable to IT projects that need to be aligned with the organisational objectives.
- A *Guidebook of Project & Program Management for Enterprise Innovation* by the Project Management Association of Japan does not mention project management governance at all (Ohara, 2005).

Based on this survey of the authoritarian guides and standards discussed, it can be concluded that both corporate governance and IT governance have formal frameworks but that there is a lack of guidance regarding project governance and by implication, IT project governance. Based on this finding and the lack of international guidelines for project governance, this article investigates the practices of governance of IT projects in the South African context.

3. Research methodology

A qualitative research methodology was followed to seek illumination and understanding through extrapolation of the findings at hand. This methodology was selected in favour of a quantitative methodology as the researchers wanted to gain an in-depth understanding of the practice (Creswell, 2003; Bell, 2007).

Semi-structured interviews were chosen as the research method as they allow the researcher to fully understand the subjects' experiences as well as to learn more about the reasons for subjects' answers to the questions posted (Cunningham, 2008). The advantages of the interview research method are that it provides a broad range and depth of information, the researcher develops a

relationship with the interviewees and the researcher can be flexible during the interview itself (Kwok & Ku, 2008).

The following process was applied by the researchers to gather the necessary information:

In the first instance, an extensive literature survey was conducted to determine the best practices involved in corporate, IT and project governance. In the second instance, a semi-structured interview guide was developed based on the findings of the literature survey that focused on three aspects:

1. The interviewee's role and responsibilities within the organisation.

- The purpose of this aspect was to determine whether the interviewee's job description was in line with the literature to ensure that the appropriate interviewee had been targeted. It also had to determine whether the interviewee responded to the various questions from an authoritative perspective, based on the length of employment within the position itself, as well as within the organisation.

2. The notion of corporate governance and project governance within the organisation. The following questions formed part of this section:

- Briefly explain how corporate governance is practised in your organisation. The purpose of this question was to determine the interviewee's knowledge and exposure to the organisation's adherence to any governance legislation or best practices.
- Briefly explain how IT governance is practised in your organisation. The purpose of this question was to determine the interviewee's knowledge of and exposure to the organisation's adherence to any IT best practices.
- Briefly explain how portfolio, programme and project governance are practised in your organisation. The purpose was to determine whether project governance was practised and how it related to corporate governance.
- Explain the structure (not process) that is used to decide which projects should be approved and funded/resourced. The purpose was to determine the decision-making structures that were in place regarding project governance.

- What are the responsibilities of this structure? The purpose was to determine if this was a decision-making structure that took accountability for the consequences of its decisions.
 - Explain the composition of this structure. The purpose was to determine the level of authority this structure had in the organisation.
3. The summation of the business strategies of the organisation as well as the perception of the interviewee regarding organisational success.
- The aim of this section was to determine the interviewee's perception of organisational success. Perception was based on personal belief rather than on factual evidence. The section also focused on additional information that the interviewee felt would provide context to the interview.

The third instance in the research process was to identify IT programme and project managers as well as chief information officers (CIOs) of organisations that could participate in interviews. The inclusion of CIOs was prompted by the fact that they are often responsible for IT governance and that IT-related projects are classified within the domain of the CIO.

The project managers and CIOs were identified through two processes:

1. Targeting large organisations and requesting a list of IT project managers employed by them. The identified IT project managers were then contacted directly and invited to participate in the research. The main criterion used to identify potential organisations was that the organisations had to be listed on the Johannesburg Stock Exchange (JSE) Limited. The rationale was that these organisations were more likely than non-listed organisations to adhere to best practices and industry standards.
2. Collaborating with Project Management South Africa (PMSA), a professional body for project, programme and portfolio managers in South Africa, to identify members who had IT programme or project management responsibilities. PMSA then invited these individuals on behalf of the researchers to participate in the research.

In both cases participation was voluntary and formal permission was obtained from participants to use the results of the interviews for the study. Assurance was given that all results would be treated as confidential and that anonymity would be ensured.

All interviews were conducted by the two researchers. Researcher One conducted the interviews while Researcher Two recorded the interviews using a digital voice recorder and also took additional notes.

All interviews were then transcribed directly from the digital voice recordings. The researchers checked the transcripts for accuracy and correctness by comparing them to the digital voice recordings and the notes that were taken. The trustworthiness of the data was increased through this process. The transcripts were then sent back to the interviewees to verify that the transcription was an accurate and authentic copy of what was said in the interview. Interviewees were given the opportunity to change or remove anything with which they did not feel comfortable.

The verified transcriptions were made anonymous and then loaded into a Computer-Assisted Qualitative Data Analysis (CAQDAS) software package to analyse the interviews and any supporting documentation (Lewins & Silver, 2008). The CAQDAS package that was used was ATLAS.ti version 6. Most of the CAQDAS packages provide the same functionality, and usage is based on the personal preferences of the researchers (Rettie et al., 2008).

The CAQDAS package enables researchers to code the transcriptions for analysis purposes. Coding allows them to test the relationship between issues, concepts and themes and to develop broader or higher order categories (Lewins & Silver, 2008). It also facilitates the development of a detailed understanding of the phenomena which the data is seen to be presenting (Atherton & Elsmore, 2007). Coding is influenced by various factors, for example the research aims, the kind of data as well as the depth of the analysis (Lewins & Silver, 2008). The researchers used open coding to prevent bias towards any predefined areas of interest. These predefined areas of interest are normally guided by a literature survey (Mangan et al., 2004; Atherton & Elsmore, 2007). In this study, the literature survey guided the composition of the interview guide, and the open coding provided a richness that was not possible through imposed coding.

Sixteen interviews were conducted in the preliminary stage and the industry representation of the interviewees included the banking sector, ICT sector, mobile telecommunications sector as well as representation from private organisations.

The following section focuses on the analysis of the data, which is discussed in the context of each of the questions. It should be noted that the verbatim answers of the interviewees are presented in *italics*.

4. Analysis of data

The interviewees were from a wide variety of organisations ranging from the banking environment, mobile telecommunications environment, agricultural as well as petrochemical industries. They had a wealth of experience in their respective organisations where some had been employed for 19 years. The average duration of employment was 7 years. Most of the interviewees were programme managers (60%) and others described themselves as CIOs or portfolio managers.

Question 2.1 dealt with the interviewee's knowledge of legislation or practices governing the organisation. The answers varied but the notion was that most of the interviewees knew that there was corporate governance in the organisation. All the financial institutions complied with Basel II mainly because it is a regulatory compliance. It seems as if organisations in South Africa adopt the King 2 report on corporate governance. One interviewee mentioned that "*the King 2 report is the basis for our corporate governance*"¹. Another interviewee mentioned that his organisation complied with the Sarbanes-Oxley (SOX) Act as the organisation had a dual listing on the South African as well as the New York stock exchanges.

Three of the interviewees mentioned that they did not know whether they were following any governance principles or not. One interviewee summarised this by saying: "*No, we are not. So I think from a governance point of view we are lacking. There's no drive, no stock compliancy or anything.*"

In relation to IT governance (Question 2.2), only four interviewees mentioned that they had something in place. These interviewees all mentioned COBIT but then also mentioned Information Technology Infrastructure Library (ITIL). ITIL is not seen as a governance tool per se, but rather provides a systematic and professional approach to the management of IT service provision (Kumbakara, 2008).

¹ Please note that all responses from interviewees are quoted verbatim. The reason for language errors is that English was a second language for some of the interviewees.

The following indications can be drawn from the interviews:

- Organisations adhere to governance principles if this is required by legislation, such as Basel II and SOX. Where compliance is not enforced, organisations do not necessarily adhere to corporate governance principles, as illustrated by interviewees from three organisations that did not adhere to corporate governance. This is the intention of King 3 where governance is adopted on a “comply or explain” basis (Institute of Directors Southern Africa, 2009).
- Organisations do not comply fully with COBIT. Most of the interviewees indicated that their organisations were working towards COBIT compliance although there was no set date for achieving this.

Questions 2.3 and 2.4 focused on how project governance was practised within the context of corporate and IT governance. The literature review does not provide any suggestions or evidence on the structure that should be followed for project governance. This implies that organisations follow their own initiative in this regard. They implement various structures and committees in the absence of formal guidelines.

The committee that was mentioned the most at executive level was the executive committee. The composition of the executive committee differed from organisation to organisation, but there was a general trend that they comprised *“the CEOs of each business unit, and [were] chaired by the CEO or COO”*. This is supported by an interviewee who stated that *“Exco is almost a mix of operational and strategic committees”*. This committee also met with varying frequency, ranging from weekly to once a month. One interviewee reported: *“we sit literally every week which is quite unusual for businesses where the Exco have normally monthly or bi-monthly meetings.”*

The majority of organisations surveyed had project-related steering committees in place that *“report to the executive committee and take the feedback from Steerco into Exco then”*. The executive committee sometimes reported to the board of the organisation where the purpose was to *“report every quarter on the status of the high priority projects”*. The board members comprised *“people across the board from development, finance and can actually advise in terms of the direction the organisation is going. They can give direction in terms of what is happening and what are the*

recommendations or mandate that the organisation needs to change or to request the returns". One interviewee summarised this as *"you have sort of a three-tier system"*. Although the general notion is to refer to a project steering committee, there were organisations that referred to it as *"a POW (Programme of Work Committee)"* or *"we have our strategic management committees"*.

One of the 16 interviewees indicated that apart from the project steering committees, the organisation also had a programme management committee. The purpose of this committee was to *"determine how these individual projects hang together, are we on track, that kind of stuff"*.

Everyone was in agreement that *"every project has to have a steering committee"*. The members that made up the project steering committee were at *"senior management level"*. The composition of the project steering committee again differed from organisation to organisation but the feeling was that it *"consists of the project owner and the major stakeholders"*.

The project steering committee also met frequently ranging from bi-weekly to once a month. Interviewees stated that *"steering committees are held minimum once a month"* and *"you might have the situation of them meeting fortnightly even"*.

It is apparent that some organisations used the current standards and methodologies to ensure project management governance. Some organisations used the PMBoK® Guide (*"of course the general practice of the PMBOK is totally followed"*) and others the PRINCE2 methodology or some customised version of PRINCE2 (*"we've also got project management framework, but in essence we follow PRINCE2"*). One interviewee even went a step further and explained that *"On just day-to-day governance for the project we have financial accounting which is very strictly adhered to. We have my project schedule which is governance measured. This is what you said was going to happen. This is what is being reflected in reality, justify yourself"*.

An interesting fact that one interviewee mentioned is that they had different project steering committees. The purpose of one steering committee was the normal project management governance explained above, but then the other steering committee focused more on the financial component. *"The most important point is actually that at the steering committee, the finance involvement is not so much. But they are more involved in the investment committee, because they are the ones who approve the budget."*

The following general trends can be extracted from the interviews:

- Organisations do have the structures in place to adhere to project governance. A top-down approach is followed where decisions made by the board are filtered down to the various committees and eventually the project itself.
- The executive committee comprises senior members of the organisation and the role of the executive committee is twofold. Firstly, it acts as the intermediary between the board and the project steering committees. Secondly, it provides guidance on the strategic alignment and prioritisation of projects within the organisation.
- Organisations have steering committees in place that decide on the projects themselves and the kind of projects that must be initiated. Although only one organisation referred to this as a programme steering committee, the other organisations followed the same principles as determined by programme management. The decisions made by this committee are more strategically oriented.
- The project steering committee as such focuses on the actual execution of the project and on whether the project manager is doing the correct things and following the standards and methodologies. The project steering committee therefore fulfils two roles where one role is more at strategic level and the other is more at tactical or execution level.

Questions 2.5 and 2.6 dealt with the responsibilities and composition of the different structures and committees. These are the board, executive committee, programme management steering committee and the project management steering committee.

The role of the board was summarised by an interviewee as “*are we on track with the money as we originally said and are we on track with the delivery, not hands-on items in terms of where we need to be going*”. The board was concerned with whether the time and resources spent on projects actually delivered the strategic intent of the organisation.

One of the roles of the executive committee was to make decisions regarding costing and timing if there was an issue. Another role was more of strategic importance where the executive committee took responsibility for the projects that were initiated, for example: “*it is incumbent on that Exco, the executive committee, to approve that and have gone through the governance of making sure*

that the business case can in fact fly". This was supported by another interviewee who mentioned that *"we either ask the IM EXCO to approve a certain thing which we feel is either tentative enough or important enough and covers the whole field across the group or we notify them"*.

"So all governance are pushed down from that level into the steering committee and then down into different organisations." Based on this statement, it is clear that there is a link between the decisions that the executive committee makes and their implementation through the various steering committees.

The programme management steering committee role was defined as follows: *"there's the programme meeting how these individual projects hang together, are we on track, that kind of stuff"*. The role of the programme steering committee was simply ensuring that the programme itself functions and that all related projects are grouped together.

The project management steering committee fulfilled various roles. One was a more strategic role where *"it provides the strategic guidance of where they want to go with it"*. This strategic role was echoed by another interviewee who stated that *"you can start bringing the correct stakeholders on a management level together and make decisions"*. These decisions included *"the go no-go decision"* where the project management steering committee decided whether a project continued or not (*"Because ultimately they have the power to pull the plug because something's been missed"*). The role of the project management steering committee can be summarised as follows: *"it gives general feedback on where the project is, what the major strategic issues are, what decisions are required. These are minuted and recorded."*

The other role of the project management steering committee was more at the execution level where the focus was on the *"monitoring and reporting of projects"*. This was supported by an interviewee who stated that it *"is more at the progress of the project and to take what you call strategic vision within the project"*. This implies that the projects must follow standards like the PMBoK® Guide to ensure that *"we have processes in place, follow the processes, ensure that it is implemented"*. This monitoring and reporting includes *"track overall progress against the budget if there's any major deviation they would approve those and that sort of thing"*.

Apart from the role of progress reporting, the project management steering committee also

ensured that the project per se was delivering what it was initiated for. According to the interviewees, the following questions were asked by the steering committee: *“Does your business specs trace through all the requirements you are actually delivering? Do you have technical specifications in place? Have they met the minimum standard that the organisation has set for the technical specifications?”* The reporting was an *“ongoing tracking of delivery against the project”*.

Organisations also did audits on the projects and these formed part of the normal audit process within the organisation. *“However in terms of practice we do auditing, all the normal audit practices which take place, its systems audit, financial audit even projects audits and so on. And of course the board is very keen on that”*. An interviewee even attached a numeric value to achievement by indicating that *“there are two internal audits every year. Whether they select all the projects which we have done, and whether it then subscribes to other process. And our target is to meet 80% compliance”*.

The final responsibility and accountability for ensuring that governance was applied rested with the project manager. *“And then it is up to the project manager to apply good governance, that at any point the financials of the project go out of line, what is the impact of that business case? The business case gets reinstated. Now we are reasonable. We do not want to be too intensive. Is there more than a 5% bearing on that business case either way?”* The project manager made use of quality assurance to track governance. Quality assurance is one of the processes of the project management quality knowledge area (Project Management Institute, 2008a). *“The governance is getting track through project quality assurance”* and *“we have project process quality assurance audits conducted on have you got a business taking place”*.

The governance role of the project management steering committee was summarised by one interviewee, who pointed out that *“the task of the project management governance committee was there to make sure that on the execution side, that everything runs smoothly or at the portfolio where we said ‘Are we doing the right thing?’ and here we’re saying ‘Are we doing things right?’, and that’s what they checked, ‘Are we doing things right?’”*.

In relation to the responsibilities of the structures, the trends are as follows:

- Although the majority of interviewees mentioned the importance of the board, they were not sure what the board's role is in project governance. This was especially the case in the larger organisations where there were various levels of authority.
- The executive committee is responsible for delivering projects that are of strategic importance.
- The programme management steering committee is responsible for grouping related projects and tracking these programmes.
- The project management steering committee has a dual role. Firstly, it has a more strategic role to make decisions regarding the continuous strategic alignment of the project and secondly, it ensures that the projects are executed according to the standards and methodologies that the organisation has adopted.
- It is the responsibility of the project manager to ensure that the standards and methodologies are followed. Following these standards ensures project management governance.
- Organisations use several tools and techniques such as audits and quality assurance to determine adherence to the standards and methodologies.

Figure 2 is a graphical representation of levels of reporting that were deduced from the interviews. It indicates the various levels within the organisation and reporting structures.

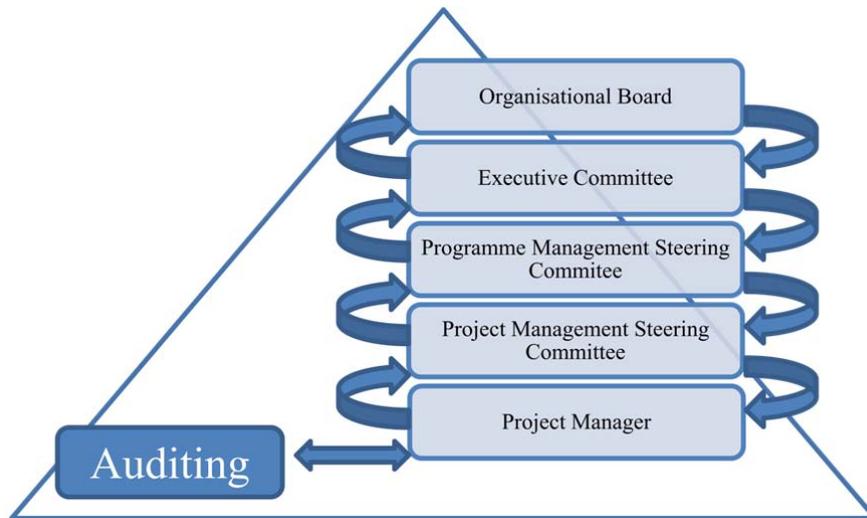


Figure 2: Relationship between organisational committees

The last question dealt with the issue of whether the organisation was successful in the achievement of its strategic objectives. All the interviewees agreed that their respective organisations were successful. Responses ranged from “*Absolutely*” to “*and I can honestly say ja, now we have definitely matured in our project management life cycle and we are definitely making sure that we tie back to business and the long-term strategic goal which is to grow the bank and revenue*”. Some interviewees were, however, more critical and said “*you know, there is always room for improvement*” and “*but I think they could be even more successful*”.

Based on the findings of the questions, Table 1 is a summary of the comparison between the literature (theory) and practice of IT project management governance:

Table 1:
Comparison between literature (theory) and practice

Type of Governance	Literature (Theory)	Practice
Corporate governance	Large organisations are compliant with corporate governance requirements such as SOX and King 2.	The majority of the interviewees were familiar with the concepts of corporate governance and mentioned that their organisations were compliant with King 2/3, SOX or Basel II.
IT governance	Large organisations comply with IT governance requirements such as COBIT.	<ul style="list-style-type: none"> • There is little full compliance with COBIT. • Only two respondents indicated that their organisations complied with COBIT.
IT project management	Projects are seen as vehicles for implementing organisational strategy	<ul style="list-style-type: none"> • The project management steering committees ensure that the right projects

governance	and are therefore subject to the same governance requirements.	are executed, i.e. formal project selection. <ul style="list-style-type: none"> • The project management steering committees ensure that projects are executed according to standards and methodologies.
-------------------	--	---

Improvements that can be made are highlighted in the next section based on the preliminary results as well as some comparative analysis between the interview results.

5. Comparative analysis

The interviewees in the banking sector all adhered to Basel II as it is mandatory. The impression is that organisations only adhere to governance where it is forced. Basel II specifies a measurement and reporting system that incorporates a number of different types of risks where the use of information management systems is an essential component for compliance (Luthy & Forcht, 2006). Basel II impacts IT systems with regard to security, fraud, system failure and service delivery. In an environment where corporate governance is seen as optional, IT and project governance will follow suit. An organisation's approach to corporate governance will determine its success in implementing both IT and project governance.

The second issue that came to light from the interviews is the adoption rate or awareness regarding IT governance and in particular COBIT. Slater (2008) reports that only 25% of 5 555 organisations interviewed had adopted COBIT. Given these facts, then, the South African situation is similar where four of the sixteen interviewees had knowledge of COBIT being used in their organisation. COBIT already makes provision for project governance. The governance of IT projects can only be as good as the environment in which it is carried out.

The third issue that resulted from the literature survey is that there is little or no guidance regarding project governance. The PMI's Standard for Program Management (Project Management Institute, 2008b) refers to programme management governance but the PMBoK® Guide does not refer to project governance. Analysis of the interviews indicates that the project management steering committee often assumes the role of programme management when it makes decisions regarding the alignment of projects and doing the right projects. Project governance is implied by adhering to

standards and methodologies. The issue of project governance needs to be addressed explicitly within the adopted standards. It needs to be further extended to show how it would interact with IT governance frameworks such as COBIT.

All the interviewees confirmed that their respective organisations were successful in achieving their strategic objectives. The implication is that although IT and project governance are limited, it does not have a major effect on the success of the organisation. Further investigation is therefore required to determine the value and impact of IT project governance on the success of the organisation.

6. Conclusion

Various forms of governance were discussed in relation to the hierarchical levels of the organisation. Corporate governance within the South African context was discussed to indicate the progress and importance of the King 3 report. An important addition to King 3 is the inclusion of information technology governance. IT governance was discussed as a subsection of corporate governance. This discussion focused especially on COBIT, which is the de facto standard of IT governance worldwide. The literature could not provide any governance structure for projects and thus leaves a void as far as a “golden thread” between corporate, IT and project governance is concerned.

Semi-structured interviews were conducted to begin to understand the level of IT project governance within a South African context. The results of the interviewees provide an interesting view of the current status where it was determined that the majority of the organisations do have corporate governance in place. This is regardless of whether it is mandatory in the case of Basel II or voluntary in the case of King 2 or 3. The interesting fact is that most organisations do not fully adhere to IT governance requirements. This is a concern, especially if we take into consideration the amount of money that is spent on IT-related projects and the important role that IT plays within an organisation. Although the literature does not provide guidance on IT project governance, organisations do have the structures and processes in place to first of all decide on the right projects

and secondly to execute those projects the right way. These structures are in the form of project management steering committees as well as adherence to the PMBoK® Guide and PRINCE2.

It is important that organisations embrace IT governance in the form of COBIT, if not for the sake of good governance, then at least to improve the quality of the IT-related investments and therefore enhance profits. A second recommendation is that project management and IT project management be addressed within formal standards and methodologies. The issue of IT project governance ought to be debated in an open forum to get rid of the negative view that IT projects currently are subjected to. The formal project management structures within organisations should be formally documented to ensure that they enable directors to discharge their legal responsibilities down to the IT project managers.

As researchers, we start to understand the notion of project governance within organisations. This provides important insight to us as the adherence to governance is a myth. This is a suspicion that has been expected and is of substantial importance. This paper therefore supplies evidence to lead to a much wider survey in SA and other larger countries. It also provides organisations with an opportunity to measure themselves against other organisations as a benchmarking exercise. The intention is to extend this research to the top 100 listed organisations on the JSE Limited. Through the inclusion of IT governance in King 3, organisations could possibly adopt the notion of “comply or explain”.

Despite the fact that organisations do not comply with IT and IT project governance, they still generate profit and are perceived as successes in the world of business.

7. References

- Asian Development Bank. 2003. Corporate Governance Principles for Business Enterprises. Manila, Philippines.
- Association for Project Management. 2004. A Guide to Governance of Project Management. High Wycombe, United Kingdom.
- Association for Project Management. 2006. APM Body of Knowledge. Buckinghamshire.
- Atherton, A. & Elsmore, P. 2007. Structuring qualitative enquiry in management and organisation research: A dialogue on the merits of using software for qualitative data analysis. *Qualitative Research in Organisations and Management: An International Journal*, 2(1):62-77.
- Aubry, M.; Hobbs, B. & Thuillier, D. 2009. The contribution of the project management office to organisational performance. *International Journal of Managing Projects in Business*, 2(1):141-148.
- Bell, J. 2007. *Doing your Research Project: A Guide for First-time Researchers in Education, Health and Social Sciences*. 4th edition. Berkshire: Open University Press.
- Chen, T.; Zhang, J. & Lai, K.-K. 2009. An integrated real options evaluating model for information technology projects under multiple risks. *International Journal of Project Management*, 27(8):776-786.
- Cooke-Davies, T. J.; Crawford, L. H. & Lechler, T. G. 2009. Project management systems: Moving project management from an operational to a strategic discipline. *Project Management Journal*, 40(1):110-123.
- Crawford, L.; Hobbs, B. & Turner, J. R. 2006. Aligning capability with strategy: Categorizing projects to do right projects and to do them right. *Project Management Journal*, 37(2):38-51.
- Crawford, L. H. & Helm, J. 2009. Government and governance: the value of project management in the public sector. *Project Management Journal*, 40, 73:87.
- Creswell, J. W. 2003. *Research Design: Qualitative, Quantitative and Mixed Method Approaches*. London: Sage.
- Cunningham, W. S. 2008. Voices from the field: Practitioner reactions to collaborative research initiatives. *Action Research*, 6(4):373-390.

- Davis, P. T. 2008. *Understanding Val IT*. Available from <http://isaca-ottawa.ca/valit20080211.pdf> (Accessed 2 February 2010).
- Feltus, C., Petit, M. & Ataya, G. n.d. *Definition and Validation of a Business IT Alignment Method for Enterprise Governance Improvement in the Context of Processes Based Organizations*. Available from <http://www.fundp.ac.be/pdf/publications/66716.pdf> (Accessed 15 January 2010).
- Holtznider, B. & Jaffe, B. D. 2006. *IT Manager's Handbook - Getting Your New Job Done*. San Francisco: Morgan Kaufmann.
- Institute of Directors Southern Africa. 2002. *King Report on Corporate Governance for South Africa 2002*. Johannesburg.
- Institute of Directors Southern Africa. 2009. *King Code of Governance for South Africa 2009*. Johannesburg.
- IT Governance Institute. 2007. *COBIT 4.1*. United States of America.
- IT Governance Institute. 2008. *IT Governance Global Status Report – 2008*. United States of America.
- IT Governance Institute. 2009a. *CobiT® User Guide for Service Managers*. United States of America.
- IT Governance Institute. 2009b. *An Executive View of IT Governance*. United States of America.
- Kumbakara, N. 2008. Managed IT services: The role of IT standards. *Information Management & Computer Security*, 16(4):336-359.
- Kwok, J. Y.-C. & Ku, H.-B. 2008. Making habitable space together with female Chinese immigrants to Hong Kong: An interdisciplinary participatory action research project. *Action Research*, 6:261-283.
- Lewins, A. & Silver, C. 2008. *Using Software in Qualitative Research*. London: Sage.
- Luthy, D. & Forcht, K. 2006. Laws and regulations affecting information management and frameworks for assessing compliance. *Information Management & Computer Security*, 14(2):155-166.
- Malik, W. 2001. *COBIT – A Tool for Security Self-assessment*. Available from <http://www.gartner.com> (Accessed 7 October 2009).

- Mangan, J., Lalwani, C. & Gardner, B. 2004. Combining quantitative and qualitative methodologies in logistics research. *International Journal of Physical Distribution & Logistics Management*, 34(7):565-578.
- Marnewick, C. & Labuschagne, L. 2008. *The Substantiation of the Vision-to-Projects (V2P) Framework Through Action Research*. In: ANDREWS, E. J., ed. PMI Research Conference: Defining the future of project management, 13-16 July 2008 2008 Warsaw, Poland. Project Management Institute.
- Milosevic, D. Z. & Srivannaboon, S. 2006. A theoretical framework for aligning project management with business strategy. *Project Management Journal*, 37(3):13.
- Mingay, S. & Bittinger, S. 2002. *Combine COBIT and ITIL for Powerful IT Governance*. Available from <http://www.gartner.com> (Accessed 7 October 2009).
- Moeller, R. R. 2008. *Sarbanes-Oxley Internal Controls: Effective Auditing with AS5, COBIT and ITIL*. Hoboken, New Jersey: John Wiley & Sons.
- Muller, R. 2009. *Project Governance*. London: Gower.
- Ohara, S. 2005. *P2M: A Guidebook of Project & Program Management for Enterprise Innovation*. Project Management Association of Japan.
- Perry, M. P. 2009. *Business Driven PMO Setup: Practical Insights, Techniques and Case Examples for Ensuring Success*. USA: J. Ross.
- Project Management Institute. 2005. *Practice Standard for Earned Value Management*. Newtown Square, Pennsylvania.
- Project Management Institute. 2006. *Practice Standard for Work Breakdown Structures*. 2nd edition. Newtown Square, Pennsylvania.
- Project Management Institute. 2007a. *Practice Standard for Project Configuration Management*. Newtown Square, Pennsylvania.
- Project Management Institute. 2007b. *The Practice Standard for Scheduling*. Newtown Square, Pennsylvania.
- Project Management Institute. 2008a. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*. Newtown Square, Pennsylvania.

- Project Management Institute. 2008b. Standard for Program Management. Newtown Square, Pennsylvania.
- Rettie, R., Robinson, H., Radke, A. & Ye, X. 2008. CAQDAS: A supplementary tool for qualitative market research. *Qualitative Market Research: An International Journal*, 11(1):76-88.
- Rezania, D. & Lingham, T. 2009. Coaching IT project teams: A design toolkit. *International Journal of Managing Projects in Business*, 2(4):577-590.
- Sapovadia, V. 2006. Good Corporate Governance: An Instrument for Wealth Maximisation. SSRN.
- Slater, D. 2008. *Numbers: ITIL, COBIT and More; Who Uses What? Adoption Rates around the World for ITIL and Other Guidelines. From the 2007 Global Information Security Survey.*
Available from
http://www.csoonline.com/article/216935/Numbers_ITIL_COBIT_and_More_Who_Uses_What (Accessed 10 October 2009).
- Schwalbe, K. 2010. *Managing Information Technology Projects*. 6th edition. Canada: Course Technology.
- Turner, J. R. 2006. Towards a theory of project management: The nature of the project governance and project management. *International Journal of Project Management*, 24(2):93-95.
- Von Seggen, M. & Young, N. Y. 2003. The focus group method in libraries: Issues relating to process and data analysis. *Reference Services Review*, 31(3):272-284.
- Ward, J. & Daniel, E. 2008. *Benefits Management: Delivering Value from IS & IT Investment*. West Sussex, England: John Wiley & Sons.
- Williams, T., Klakegg, O. J., Magnussen, O. M. & Glasspool, H. 2009. An investigation of governance frameworks for public projects in Norway and the UK. *International Journal of Project Management* (in press).