

Application of Traditional and Agile Project Management in Consulting Firms.

A Case Study of PricewaterhouseCoopers

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Dedication

This thesis is dedicated to the Almighty God for his goodness and grace that has brought us this far.

Acknowledgements

We would like to appreciate our thesis supervisor, Dr. Andreas Nilsson for his support and encouragement throughout the period of this work. We value the meetings we had, your input and direction. We would also like to acknowledge the benevolence of staff of PricewaterhouseCoopers-Ghana who made themselves available for the interviews. The precious time you gave to us is very much appreciated. We also acknowledge the following for their continued support to us.

Daniel: My wife and first fan, Maame Afua Adjei and the boys – Nana and Papa for her understanding and support throughout my period away from home, the hMensa and Amoah families of UK, the Simpson family of Italy and Ampomah family of Sweden. God bless you all for your encouragement and support. You are the best!

Peter: I am greatly indebted to my family, my parents, brothers and sisters for their moral and materialistic support throughout the years. Your support in both trials and tribulations saw me through the challenge. May our dear Lord be with you always!

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Abstract

Purpose

To study which and how project management methodologies are applied in consulting firms

Approach

The study begins by reviewing literature on Traditional Project Management (TPM) and Agile Project Management (APM) methodologies ending with characteristics of the two methodologies that identify a project as applying one methodology or another. The literature then reviews the nature of consulting firms emphasising on elements such as the professional, professional services and professional service firms before reviewing how projects are implemented in consulting firms. A case study design is adopted and semi-structured interviews were conducted with PricewaterhouseCoopers-Ghana staff. Patterns from the interviews are identified and compared with the characteristics of both Traditional and Agile project management before drawing conclusions on which methodologies are applied and how they are applied. Since APM is presumed to deal with problems of TPM in complex environments, challenges in applying TPM in consulting firms are assessed and the extent to which APM responds to those challenges are also discussed.

Findings

The findings indicate that TPM is applied in consulting firms mainly for structured projects, whilst APM methods are also applied for some structured projects but very much for unstructured and 'executory' projects. APM also deals with some challenges of TPM but those which are organisation related are not solved by applying APM methods.

Research limitation

The limited number of people interviewed for this research is one key issue that limits generalization to all consulting firms. However, it is hoped that this work serves as a basis for further research in this field.

Practical implications

The study shows that whilst TPM will continuously be applied in consulting firms due to the nature of some projects, APM can also be applied to the benefit of consulting projects that are unstructured and 'executory'. Therefore consulting firms do not need to 'force' structure into all projects.

Paper type

Masters Thesis – Research paper

Keywords

Traditional project management, agile project management, consulting firms, professional, professional service, professional service firms

Abbreviations and Acronyms

APM Agile Project Management

APL Agile Project Leadership

CAS Complex Adaptive Systems

CC Corporate Consulting

CPA Certified Public Accountant

IncorTech Incorporating Technology

KIF Knowledge Intensive Firms

LoS Line of Service

PBS Project Breakdown Structure

PM Project Management

PMBOK The Guide to Project Management Body of Knowledge

PMI Project Management Institute

PSC Professional Service Consulting

PSF Professional Service Firm

PwC PricewaterhouseCoopers

RETAIN Database for staff scheduling

TKO Temporary Knowledge Organisation

TPM Traditional Project Management

WBS Work Breakdown Structure

XP eXtreme Programming

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Chapter 1 Introduction

1.1 Background

Many organisations are increasingly moving towards management through projects, which is sometimes called project based organisations (Fernandez and Fernandez, 2009; Sauser *et al*, 2009; Grundy and Brown, 2004; Kerzner, 2003). This is because according to Disterer (2002) and Gareis (2004), projects are said to be 'intensive learning organisational firms' in which companies may achieve success. Project management's abilities to enhance flexibility, remove bureaucracy, make the company more adaptive to change are cited as the major drivers for this paradigm shift (Gomes *et al*, 2008; Lockett *et al*, 2008; Lord, 1993). However, Geraldi (2008) bemoans the 'one size fit all approach' from project management being carried over to organisations. She argues that project management has remained mainly mechanistic in nature with hierarchy, detailed planning, division of work as well as the linear-cause effect still playing a crucial role and thus affecting the organisation's delivery in the case of unforeseen project behaviour due to environmental changes (Hällgren and Wilson, 2008). Geraldi (2008) argues that there is need for organisations to embrace both 'order and chaos' in project management.

Turner (1999) and Boehm (2002) highlight that in traditional project management there are two overall approaches that can be employed to manage a project (i.e. either a plan or process approach). Whilst this traditional approach to project management is found to be useful for projects where the scope is well defined within an environment of no uncertainties and complexities (Chin, 2004), of late it had been fiercely criticised (Atkinson et al, 2006) for making flawed assumptions that the risks and uncertainties are predictable (Alleman, 2008). On the contrary, reality on the ground shows that projects are increasingly becoming more complex (Papke-Shields et al, 2009; Rodrigues and Bowers, 1996) and the business environment is also changing at unprecedented levels (Shenhar, 2004; Nobeoka and Cusumano, 1997; Hauc and Kovač, 2000; Gallo and Gardiner, 2007) making it difficult to predict project behaviour (Fernandez and Fernandez, 2009). Furthermore some customers are not able to clearly specify their requirements (Cadle and Yeates, 2008) leading to vague specifications and possible solutions that are not easy to deal with when using traditional project management approaches (Crawford and Pollack, 2004). The consequence of these difficulties was a more noticeable failure in some Information Technology (IT) projects (Papke-Shields et al, 2009) which precipitated the development new approaches to deal with the situation.

Among these evolving project management approaches is agile project management, which provide diverse benefits to organisations for some projects (Cicmil *et al*, 2006; Owen *et al*, 2006; Chin, 2004; Aguanno, 2004) though others believe it is applicable on all projects (Weinstein, 2009). Agile project management approach employs iterations throughout the project development phases and thus eliminating costly and timely last minute changes that may be necessary in traditional project management where it is mandatory to predetermine the specific requirements (Schuh, 2005). For some projects, the above feat can only be achieved if organisations are able to embrace agile project management methodologies that are context specific and encompass flexibility and adaptation within them (Sharifi and Zhang, 2001; Sharifi and Zhang 2000). This is so because unlike traditional project delivery approaches that rely on costly additional rework, scope and requirement changes during the

progress of the project, agile project management is specifically designed to cater for these unexpected changes through its emphasis on strategic thinking as well as prioritisation on project learning.

The successes realised as a result of adopting agile project management in IT projects resulted in it being transferred to other industries (including consulting firms) to cater for uncertainties and complexities (Griffiths, 2007). The increasing use of project management approaches by consulting firms (IncorTech, 2009) demand that managers are aware of the possible project management alternatives that can be used to enhance the firm's competitiveness under different scenarios. One cannot ignore the potential of agile project management especially after considering The Standish Group research claim of 1995 which showed that agile methodologies increase project success rate (Collyer and Warren, 2009). On the other hand it is also not easy to disregard the formality that traditional project management provides (Cadle and Yeates, 2008; Fitsilis, 2008). Although some scholars (Conforto and Amaral, 2008) are quick to point out that whenever traditional project management fails agile might be more appropriate, Cicmil et al (2006) opine that one should not simply snub traditional project management and embrace agile. They give a more cautious suggestion that it is necessary to classify projects with reference to the anticipated systemic effects that can be aligned to an appropriate management style. Other scholars (Alite and Spasibenko, 2008; Hass, 2007; Geraldi, 2008) also postulate that blending the two approaches may be the best way forward. The provision of this information from IT will be of much relevance to the consulting industry because consultancies operate in different scenarios that demand different project management approaches.

A closer examination of literature shows that there is a lot of scholarly work on the application of traditional and agile project management approaches in manufacturing, construction and Information Technology (IT) companies (Sharifi and Zhang, 2000; Hass, 2007; Weinstein, 2009; IncorTech, 2009), however, not much has been written on their application in consulting firms. Notwithstanding, consulting firms apply project management methodologies in their approach to work (Chang and Birkett, 2004; Bloch, 1999), whether in certain or uncertain conditions. Traditional project management approaches are believed to apply in almost all situations whilst agile tends to support uncertain conditions of work (Chin, 2004). The absence of written information on how to apply traditional and agile project management approaches in consulting firms (Haywood-Farmer and Nollet, 1994) makes it difficult for both start-up and existing businesses in this field (Fernandez and Fernandez, 2009). This study, therefore, seeks to examine the extent to which traditional project management is applied and find out if agile project management methodologies are also being applied in a consulting firm, in particular PricewaterhouseCoopers (PwC), so as to provide the basis for interested consulting firms and academics. PwC was chosen because of their extensive involvement in acquiring, assigning and carrying out projects for various clients all over the world under different demanding conditions. The study adopted an exploratory case study methodology using interviews to gather data and qualitative approach to analyse the data. The study was motivated by the challenge that project management in consulting firms, though similar, seems to take a different format from what is practised in other industries. The research therefore sought to make practical and theoretical recommendations for project management. It is against this background, that this research was formulated with the following research questions and main objective in mind.

1.2 Purpose of Study

The purpose of this thesis was to probe into the knowledge gap that exist in the application of different types of project management approaches in consulting firms under challenging environmental conditions and shed some light on how they are carried out. The study also sought to find out if challenges that consulting firms sometimes face when using the traditional project management approach can be solved through employing agile methods.

1.3 Research Objectives and Questions

The broad objective of this research is to study how and which project management methodologies are being applied in a consulting firm.

Specifically the study will address the following research questions:

- 1. How is traditional project management applied in a consulting firm?
- 2. Is agile project management applied in consulting firms? If so, how is it applied?
- 3. Can agile project management practices be used in consulting firms to solve the challenges from traditional project management?

1.4 Research Benefits

The research output is expected to provide useful knowledge on how consultancies carry out project work and the possible application of agile project management in consulting. It is expected that the study will bring to the fore the challenges that managers in consulting firms face in their effort to implement project management approaches and how they can be solved. Reports on agile methods being more widely used in enterprise environments exist (Fernandez and Fernandez, 2009; Griffiths, 2007), however, even in these situations efforts are still being made to improve the adoption levels. Therefore this research will significantly contribute towards the dissemination of agile methodologies and improve their acceptance levels as well as broadening their application in the field of consulting. It is also anticipated that the results of this research can be a crucial starting point for:

- Providing relevant project management advice to newly emerging consulting firms
- Advice to established consulting firms seeking ways to improve their performance through minimising project management challenges
- Researchers and academics who wish to further their work in the field of consulting and project management.

In addition it is expected that the outcome of this research will encourage senior managers in consulting firms to seriously consider how uncertainties in the world economy (e.g. financial crisis) demand a 'new thinking' on how consulting work is done. This will encourage the adoption of agile project management either as an alternative or a complement to traditional project management at an organisational level that can have a positive impact on final project delivery. Last but not least this research is expected to generate momentum in both academic and industrial circles by providing the basis for opening research avenues into consulting work and project management.

1.5 Limitations of the Study

The thesis study has some limitations that need to be considered before applying the conclusions to any particular situation. First, the study focused on a broad theme of consulting firm, which cannot be studied in full detail considering the timing for the thesis and other resources. The empirical data was therefore collected from a rather narrow perspective using a case study. This limits the scope of our approach and therefore different results may emerge should another approach be used in a similar study. Any generalisation of our results should therefore consider our approach as one of the several methods that can be used in gathering empirical evidence.

Secondly, the case study focused on one particular office of PricewaterhouseCoopers (PwC). Though, the firm is global and have certain processes and procedures standardized, it is worthy to note that different offices are influenced by local market conditions such as legal framework, number of staff, top management strategies, leadership style etc and therefore certain issues raised in this study may be peculiar to the office under study – PwC-Ghana. It is possible that certain factors and issues raised may not prevail in other offices of PricewaterhouseCoopers. The results of the study should therefore be considered relative to the office context and the environment within which the company operates.

Lastly, the study did not also seek to identify all procedures and processes in the firm under consideration and whether they are appropriate or not. Any procedure or process indicated in the study therefore represents that which was relevant to the work and the scope of our research. Recommendations made from the study should not also be construed as expert advice but viewed in light of results from an academic work.

1.6 Synopsis of Chapters

The study has been divided into the following broad chapters:

- Chapter 1: Introduction: This section introduces the study, discusses research objectives and questions as well as relevance of the study.
- Chapter 2: Literature Review: Reviews theoretical background of the study such as traditional project management, agile project management and consulting.
- Chapter 3: Methodology: This section looks at methodology applied in the thesis, research context and the appropriateness of the underlying research philosophy.
- Chapter 4: Discussions and Results: This section discusses the study and gives results from empirical data
- Chapter 5: Recommendations and Conclusions: This section concludes the study whilst making recommendations for future research and on outcome of the study.

The next chapter focuses on literature reviewed in the study.

Chapter 2 Literature review

2.1 Introduction

This chapter serves as a snippet to traditional and agile project management methodologies as well as their application in various industries, including consulting firms. An attempt is made to distinguish traditional from agile project management methodologies. The chapter mainly focuses on the merits and demerits of each project management approach and the possibility of blending them, in an effort to improve results in consulting firms. It also gives background to the development of both traditional and agile project management together with the description of numerous driving forces for their adoption in industry. In view of the existence of abundant literature on traditional project management, this work tried not to overlabour that work and rather focused more on agile project management, which relatively lacks scholarly work. Therefore, for TPM, only areas most relevant to this thesis are discussed whilst APM enjoyed a more extensive coverage. The chapter also comprises of definitions of some key terms that relate to both types of project management. In addition the chapter gives a brief review of project management in consulting firms and its implications for the future.

The ensuing literature is a compilation of the theory associated with the major concepts that can be used to answer the desired research questions. The main theoretical bases were identified as Project Management (PM), Agile project management, Traditional project management, Agile versus Traditional methodologies, Agile project, Consulting, Professional service, management consulting, consulting project etc. These theoretical bases were used as keywords in search of information from a number of sources, among them, the project and general management journals found in EBSCOhost, Emerald Fulltext, Science Direct, ProQuest, Wiley Interscience and the various dedicated project management websites (such as PMToday and Gantthead). Some non-project management journals (such as IEEE Software and IEEE Computer) were also a good source of information. Books, working papers and conference papers also provided rich background information. The literature was categorised into theoretical reviews on traditional project management, agile methodologies and consulting firms.

2.2 Project Management: A strategic business solution or redundancy?

The failure to implement strategies has generated a world-wide momentum for managers to rethink on alternative ways of strategy implementation (Englund and Graham, 1999). At the forefront of these methodologies is a project and programme oriented approach which seems to offer great promise. According to McElroy (1996) by following this approach top management can be assured of a much greater level of success. This is the reason why there is an industrial wave of paradigm shift from traditional strategy implementation techniques to project oriented ones. The growing interest by organizations to implement their chosen strategies through projects can be shown by the holding of a World Congress on Project Management in Vienna in 1990 that had a central theme 'Management by Projects' (Lord, 1993; Hauc and Kovač, 2000).

The potential of project management culminated into its increasing use in new fields (Perminova *et al*, 2008) such as the public sector (Gomes *et al*, 2008) and thus project management is now a central tenet of many firms' business processes (Sauser *et al*, 2009). A

number of successes have been reported by organisations using project management (Papke-Shields *et al*, 2009). In fact Russell-Hodge (1995) postulates that project based management will dominate future business even though history is indicating the other way, with a significant portion of project failures reported elsewhere (Whitty and Maylor, 2009; Sauser *et al*, 2009; Eden *et al*, 2005; Atkinson, 1999), most notably the The Standish Group's Chaos Report (1995) as well as the KPMG report of 2005 which cited 86% of respondents having projects falling short of planned expectations (Papke-Shields *et al*, 2009). Despite these failures Whitty and Maylor (2009) opine that project management is currently fashionable and not a passing fad because of its ability to successfully implement strategies when properly orchestrated. One other reason put forward by Atkinson (1999) for the continued use of PM even if some projects are regarded as failures is that the iron triangle is sometimes seen as a tried and failed criteria for measuring success.

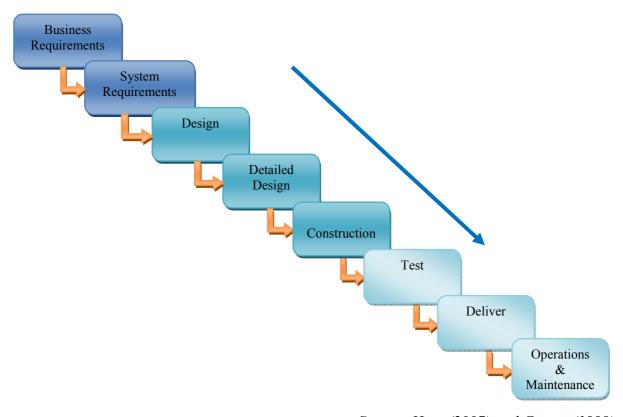
Furthermore the increasing need for instruments to create competitive advantage (Porter, 1985) is compelling some managers to embrace PM as a panacea to this challenge. This is so because according to Shenhar (2004) as well as Munns and Bjeirmi (1996), projects can be regarded as powerful and competitive weapons for unique and complicated assignments. With the emergence of strategic project leadership (Shenhar, 2004), project management is expected to stamp its authority in all sections of management (strategic, operational and human) and thus it will continue to play a key role as a business solution enhancer. However, there are also challenges that act as setbacks to this transition. One of the major challenges stems from the fact that PM is still evolving and is characterised by traditional approaches on one hand and the newly emerging methodologies (such as agile) on the other. This leaves managers in a limbo on which approach to follow. Despite these challenges, results on the ground show that PM will continue to grow as a preferred management solution since in some organisations project success has become embedded in business success (Rodrigues and Bowers, 1996).

2.3 Traditional Project Management: The yielding or unyielding giant?

According to The Project Management Institute (PMI, 2004:8), Traditional project management (TPM) is 'the application of knowledge, skills, tools, and techniques to project activities to meet project requirements.' In this case project management is therefore, given as a complete cycle involving the completion of the following phases: initiating, planning, executing, controlling, and closing under the guidance of the project team. PMI (2004) further stresses that TPM work is concerned with fulfilling the demands for scope, time, cost, risk, and quality within the framework of predetermined stakeholder requirements. Traditional Project Management is thus characterised by well-organised and premeditated planning and control methods that sometimes result in distinct stages of the project life cycle (Hass, 2007; Thomsett, 2002). The increased need to bring formality into project management (Cadle and Yeates, 2008) and control large development projects (Fitsilis, 2008) resulted in the emergence of TPM's distinguishing characteristic of making sure that tasks for the whole project are carried out in this predetermined orderly sequence (Weinstein, 2009; Hass, 2007; Chin, 2004). Although this was seen as a solution on one hand (Cadle and Yeates, 2008), its 'on the shelf approach' (Alleman, 2005) was seen as major failure in the face of a dynamic project management environment (Leybourne, 2009; Cicmil et al, 2006).

TPM is also centred on the premise that circumstances surrounding project events are foreseeable and the tools used to handle them are also predictable, however, past experiences and literature (Hällgren and Wilson, 2008; Hass, 2007; Aguanno, 2004; Yusuf *et al*, 1999) show that this is not always the case due to unanticipated occurrences that can interfere with

those plans. Under such dynamic conditions iterations are always important to cater for the changing environment (Fernandez and Fernandez, 2009). However, scholarly evidence (Chin, 2004) show that iterations are not part of TPM (i.e. once a phase is completed it is assumed that there is no need to reconsider it again). This seems to be in agreement and slight contradiction to Cadle and Yeates (2008) as well as Collyer and Warren (2009) who argue that there is degree of iteration of work and products within a stage but very little between the stages due to the high levels of planning and process control involved. The point here is that although TPM has some iterations they are mainly confined to the stages and hence there is very little benefit to the system as a whole. This approach to project management is widely regarded as stemming from the Waterfall Model (McConnell, 1996; Hass, 2007). This Waterfall Model is illustrated in Figure 2.1 below.



Source: Hass (2007) and Cantor (1998)

Figure 2.1: The Waterfall Model

The waterfall model is such that work is broken down into stages or sections that should be completed before moving to the next one. It can be seen from Figure 2.1 that the waterfall model is synonymous with the TPM approach because it emphasises on viewing each project stage as a stand-alone activity whose completion has a bearing on how and when subsequent stages are commenced (Cadle and Yeates, 2008; Thomsett, 2002). This suits very well the TPM approach if one considers the use of network diagrams, Gantt chart and its emphasis on milestones.

The merits that are put forward for the waterfall model include its simplicity and ease of scheduling in laying out steps for development (Hass, 2007). In addition the waterfall model is adored for its ability to improve quality management through its verification and validation processes (Cadle and Yeates, 2008). It is some these merits that have enabled the waterfall model to become the mainstay of project management. In contrast, Thomsett (2002:137)

argues that the waterfall model is "poorly suited to the chaotic and client-driven business environment of the 21st century" because of its tendency to be rigid. This is further supported by Hass (2007)'s assertion that there is need to adhere to specific requirements when using the waterfall model, however, this falls short because reality shows that projects are not sequential in nature (Collyer and Warren, 2009) and most importantly, in most cases, customers are not able to state all the project requirements during the initial phases of the project life cycle (Cicmil *et al*, 2006).

Another disadvantage of TPM noted by Aguanno (2004) is that any design changes adopted during the testing and development phases of a project have the potential to cause chaos because of the waterfall model's requirement to complete the preceding tasks first. This may lead to project failure on the basis of time delay and quality, which are the essence of a consulting firm's continuous ability to attract clients; hence there is a need for methods that can handle this chaos. Furthermore according to PMI (2004), Eden *et al* (2005) as well as Cui and Olsson (2009) late project changes in TPM are more expensive and have minimal beneficial effect on the resulting project delivery. This demerit of relying on TPM and the changes associated with it is clearly illustrated by the graphical representation suggested by Boehm (1981) and cited by Aguanno (2004), reproduced in Figure 2.2 below. The skyrocketing of cost of changes with time is not desirable with consulting firms because they normally operate on tight budgets and potentially demanding clients (Nelson and Economy, 2008:324-335). This evidence, therefore, compels project managers in consulting firms to look elsewhere for solutions.

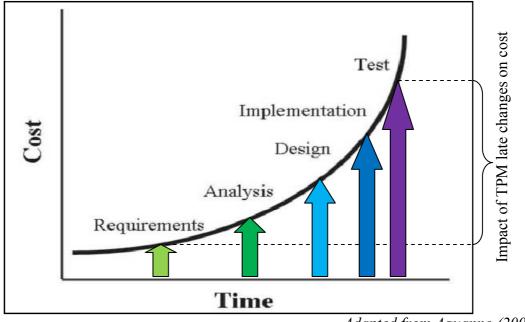


Figure 2.2: Boehm's cost of change curve

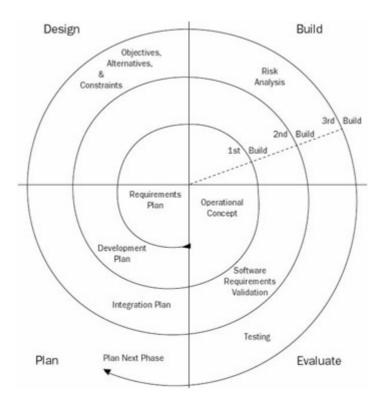
Adapted from Aguanno (2004)

Conversely, one cannot easily dismiss the waterfall model because it has its own unique advantages that make some scholars to strongly argue for its use. For example, Bechtold (1999) postulate that the waterfall methodology is highly effective for projects that are well-understood and characterised by short time spans as well as fixed requirements.

Modification to the Waterfall Model

In recognition of the above-mentioned setbacks, scholars proposed various improvements on the traditional waterfall model (Cantor, 1998). These improvements aimed at reducing the weaknesses of the traditional waterfall model, among other things include the introduction of; overlapping phases (*sashimi*), subprojects and risk reduction within the model (McConnell, 1996). In particular Birrel and Ould's 'b' model was introduced to address the maintenance issue, the 'v' model was developed to show correspondence between the different stages in the project (i.e. addressing the issue of quality assurance) and the incremental (phase delivery) model was created for managing testing and delivery (Cadle and Yeates, 2008). Closely related to the waterfall is the spiral model which was developed to incorporate an evolutionary or iterative approach to project management (Collyer and Warren, 2009).

All these variants of the waterfall model and the spiral model seem to address a number of issues in project management but they are found wanting in one way or another when faced with uncertainties (Cicmil *et al*, 2006). The spiral model shown in figure 2.3 offers more promise in unpredictable environments and is the one more closely related to APM because it caters for objective setting, risk management and planning (Cadle and Yeates, 2008). Its evolutionary or iterative approach to project management suits well projects with uncertain requirements it follows experimental cycles from objective setting, alternative and constraint determination to the final stage where the next iteration is planned. According to Cadle and Yeates (2008) the spiral model modifies the waterfall model by catering for objective setting, planning and risk management within the cycle.



Source: Cadle and Yeates (2008)

Figure 2.3: Boehm's Spiral Model

2.3.1 Elements of TPM used in the study

With the existence of the PMI's PMBOK guide as the basis for all traditional project management, there seems to be a strong agreement among the researchers and practitioners,

as to what constitutes project management (Papke-Shields *et al*, 2009); however, disagreements arise in the way these elements are interpreted in practice (Alleman, 2008).

In the melee of this confusion defenders of the PMBOK guide argue that the bodies of knowledge on which TPM is premised do not recommend a specific method of executing a project (Saladis and Kerzner, 2009), whilst on the other hand those calling for a revision of the PMBOK (Fitsilis, 2008) argue that the guidelines given in these bodies of knowledge sometimes act as methods for project implementation. For instance Alleman (2008) on the Niwot Ridge Consulting website argues that the PMBOK guide describes the various 'components' of a project and how they are related which are taken as examples for recommendation. On the contrary a look at the PMBOK shows that the guide always leave room for different types of project execution methods, especially when one considers their reference to the effect of project environment and the need for iterations in some instances. Nonetheless, the PMBOK's recommendations were taken as a useful basis upon which to establish elements that can be helpful in the identification of TPM presence in consulting firms.

According to PMI (2004) a project can be decomposed into five processes i.e. initiating, planning, executing, monitoring and controlling, and closing. As discussed above almost all scholars agree on these phases but it is on their interpretation that they tend to diverge. In the wake of the recent successes for the Sydney Opera House (that was initially regarded as a failure based on the triple constraints) (Hällgren and Wilson, 2008), this confusion has also extended into the debate on what constitutes project success (Atkinson, 1999). This is so because the PMBOK's success is mainly hinged on the iron triangle (project scope, time and cost) but recent developments show that these are not enough for measuring success (Papke-Shields *et al*, 2009; Shenhar, 2004), one has also to consider dimensions such as business results and preparing for the future (Sauser *et al*, 2009; Saladis and Kerzner, 2009).

The PMBOK also gives nine knowledge areas of project management; these are integration management, scope management, time management, cost management, quality management, human resource management, communication management, risk management and project procurement. Since APM seems to borrow from some of these areas (Frye, 2009), to distinguish TPM from APM, this thesis focused on scope management, time management, communications management and integration management. TPM emphasises the need for having 5 process groups i.e. the initiating process group, planning process group, executing process group, monitoring and controlling process group as well as the closing process group (PMI, 2004). These process groups were used to describe some of the elements of TPM.

The TPM elements that were identified in literature, though not exhaustive include rigid or detailed planning/control procedures, Tasks breakdown and allocation, religious adherences to milestones, employees can be changed easily, Predetermined stakeholder requirements and command and control leadership style. It must be noted that not all the elements need to be present for the type of project management to be regarded as TPM. Each of these elements will be explored in turn.

a) Rigid and detailed planning

TPM stresses on the need to create a detailed plan (Shenhar, 2004) which is important for developing the project budget and schedule (Saladis and Kerzner, 2009). According to PMBOK, once the project plan is in place from the planning process group, it becomes the bases upon which the project will be planned, executed, monitored, controlled and closed.

This brings in the element of rigidity because the plan will be so detailed such that any changes will have to follow a formal procedure (Conforto and Amaral, 2008; Fitsilis, 2008; Schuh, 2005). The executing process group, although they can propose changes they are not empowered to approve them. They have to seek approval from senior management. However, formal procedures of monitoring and control accompanied by a good detailed plan in TPM is sometimes an advantage, for example Saladis and Kerzner (2009) argue that it helps to avoid confusion, scope drift, and scope 'leap' as well as conflict among the stakeholders. Therefore the choice of what type of plan and control procedures to use should merely depend on the context and preference because the conventional methods like APM are sometimes affected by these disadvantages due increased freedom associated with them (Fitsilis, 2008). Rigid and detailed planning also connotes adherence to milesones.

In most cases TPM makes use of a linear execution of activities following detailed plans that were developed in the early stages of the project life cycle (Weinstein, 2009). The monitoring and controlling process group is responsible for measuring progress and identifying variances from the project management plan so that corrective measures can be taken. This according to PMI (2004) as well as Saladis & Kerzner (2009) increases the chances of the project being delivered on time which is a critical delivery requirement. It can also be argued that the setting of milestones helps in keeping project mangers focused. Considering that consulting firms normally operate within tight schedules, then adherence to milestones may be essential to their work. However, this adherence to milestones is also criticised for neglecting the effect of complexities and uncertainties (Schuh, 2005; Owen *et al*, 2006; Conforto and Amaral, 2008). Therefore there are certain instances where adherence to milestones are useful and vice versa.

b) Task breakdown and allocation

TPM uses a deterministic reductionist approach and a detailed documentation of every process (Weinstein, 2009; Rodrigues and Bowers, 1996). It makes use of the project and work breakdown structures, activity definition and sequencing. This is said to be useful for breaking down projects into suitable components, resource allocation as well as defining milestones and decision points (Saladis and Kerzner, 2009). This is something important even for APM. However, it is the degree to which tasks will be broken down that Schuh (2005) is opposed to. In this school of thought lies the argument by Sodhi and Sodhi (2001) that the waterfall model is cumbersome because it involves a number of successive steps which may be detrimental to project delivery in the fast paced world. TPM's task breakdown approach is also criticised for being based on predictability, stable requirements and previous experiences (Fitsilis, 2008; Rodrigues and Bowers, 1996).

c) Employees can be changed

According to Elliot (2008) with TPM employees can be easily changed within the organisation. This may have the advantage of ensuring that replacements are always available and that employees get more acquainted with the organisation's operations. On the contrary it can also be criticised on the basis of possible demoralisation on employees. In addition since employees are seen as organisational 'machine parts' they may lose commitment to the firm's activities. For this reason TPM is sometimes referred to as less people focused (Rodrigues and Bowers, 1996). (Griffiths (2007) argues that it is important to see employees as stakeholders to avoid this problem.

d) Command and control leadership style

In most cases the project manager under TPM is responsible for planning and allocating tasks (Kerzner, 2003). According to Larman (2004) pre-planned rules on team roles and responsibilities, team organisation, relationships and activities are crucial in TPM's project control and leadership approach. This has the advantage of making sure that someone is always accountable for the project and ensuring that control is exercised to keep the project on track (Saladis and Kerzner, 2009). However, this management can also be criticised on the basis of the project manager's limited cooperation and communication with the team and the client during the process that may lead to an oversight and misunderstanding the customer requirements (Tomaszewski and Berander, 2008; Atkinson *et al*, 2006).

Therefore, considering that TPM is still in use even with all the criticisms that it receives together with the effort being put in its modification it seems like TPM will continue to play a significant role in industry because of its merits mentioned above. However, its shortcomings mainly in the face of unpredictable and complex environments call for an alternative solution for those circumstances. Nevertheless, its merits also warrant a lot of consideration before moving to the next solution or possibly trying to augment it with other approaches.

e) Predetermined stakeholder requirements

The initiating process group in TPM (PMBOK) emphasise the need for documenting business needs/requirements before starting the project and by so doing it promotes the predetermination of stakeholder requirements (Leybourne, 2009; Cadle and Yeates, 2008; Hass, 2007) which is not always the case with other project management approaches (Schuh, 2005). It has been criticised for making the scope statement acts as mechanistic point of reference for any changes that are to be formally accepted (Geraldi, 2008; Rodrigues and Bowers, 1996). Thus TPM emphasises that changes can be stabilised or minimised during the initial stages of a project (Alleman, 2008; Conforto and Amaral, 2008) which in reality might not be possible (Steffens et al, 2007; Cicmil et al, 2006). According to Aguanno (2004) this results in a locking down of requirements to form a baseline for the project which can have a retrogressive effect if the environment changes. The difficulty of this approach to project management is exacerbated when customers are not able to clearly elaborate on their requirements (Cadle and Yeates, 2008) and thus making the scope as well as the possible solution vague (Atkinson et al, 2006). While there are a number of arguments against the predetermination of stakeholder requirements, there are also some positive aspects associated with it, for example Papke-Shields et al (2009) opines that it is essential for reducing scope creep. It can also be argued that it helps with the drafting of contracts, reduces risks associated with gold creep and it gives management a challenge to put extra effort to understand the client's requirement. Furthermore, in an effort to support the predetermination of stakeholder requirements, Chatzoglou and Macaulay (1997) argue that there is a need for including human factors (i.e. team members' attitude, client's attitude, project management and project characteristics) in project management, but what is notable here is that all these still lack an important component of unpredictability in project behaviour which can be a challenge in some situations.

2.4 Agile Project Management: A silver bullet or a passing fad?

2.4.1 Definition of APM

There is no unique definition of agile project management because a number of scholars have come up with different proposals for defining the concepts involved. As a basis to understand

APM it is crucial to define agility both from the literal sense and the organisational context. Agility is the ability to act proactively in a dynamic, unpredictable and continuously changing environment (Owen et al, 2006; Orr, 2005) and organizational agility is the ability to be inherently adaptable to changing conditions without having to change (Tang et al., 2004). Many a scholar attempted to define APM from different dimensions. The definitions mainly vary on the basis of the scholar's industrial bias and the level at which the term agile is taken (Owen et al, 2006) but they all exhibit some things in common. For example, Aguanno (2004) describes agile methods as a combination of Extreme Programming, Scrum, Feature-Driven Development, Lean Development, Crystal Methods and APM. The definition is clearly biased towards the information technology (IT) and it adds confusion because it combines lean and agile methods. His thesis in coming up with this definition is that the term agile was chosen on the basis of the ability of these methods to respond to dynamic environments through controllable and flexible approaches. Tomaszewski et al (2008) as well as a number of authors (Conforto and Amaral, 2008; Cicmil et al, 2006; Sanchez and Nagi, 2001) refute this combination on the basis that lean is an approach on its own aimed at reducing the process time by eliminating non-value adding waste whilst agile is more concerned with improving delivery speed by reducing the effect of uncertainties and complexities. A somewhat more general definition from an IT perspective is given by Cadle and Yeates (2008:429) who define APM as the 'various systems development approaches that emphasise flexibility, speed and user involvement in development systems.' On the other hand Highsmith (2004:16) forwarded by Conforto and Amaral (2008) give a general definition of APM as 'a set of values, principles and practices that assist project teams in coming to grips with this challenging environment.' A more comprehensive definition of APM is given by Hass (2007) who defines APM as a highly iterative and incremental process, which demands that developers and project stakeholders get actively involved in 'working together to understand the domain, identify what needs to be built, and prioritise functionality.' However, what is more important to note is that in all circumstances, agile environments exhibit internal and/or external uncertainty that requires some unique expertise and a high level of urgency to minimise the effect of dynamism (Fitsilis, 2008; Alleman, 2005). This is particularly important if one considers the currently prevailing situation and the mounting effect of the financial crisis on organisations. Chin (2004) gives an interesting equation to define the agile project management environment, which is;

$Agile\ PM\ Environment = [Uncertainty + Unique\ Expertise]\ x\ Speed$

To avoid confusion in this thesis our definition of APM derives from the aforementioned definitions and some relevant literature. For instance, according to Augustine and Woodcock (2008) the main responsibilities of the manager in an agile environment are setting the direction, establishing simple and generative rules of the system, encouraging constant feedback, adaptation and collaboration. This they argue that it enables project teams involved with agile implementation to effectively deal with change and look at the organisation from a biological system perspective (i.e. as a fluid and adaptive system inhabited by intelligent people). To complement this Alleman (2005) emphasise that smaller and manageable teams are an important part of agile project management. In addition agile project management acknowledges that intelligent control and self organisation are the central tenets for order establishment (Conforto and Amaral, 2008). In view of the above, agile project management can be defined as a management principle that uses iterative development techniques at regular review points with emphasis on closer collaboration among the client, stakeholders and small autonomous development teams in a flexible way that allows the system to evolve towards the true project requirements at a particular point in time under a specific contextual

environment to completely minimise the effect of complexity, unpredictability as well as uncertainties on final project delivery.

2.4.2 Origins of APM and the theory of Complexity in Projects

The ever-changing business needs, drivers and requirements demand project management approaches that are flexible and adaptable to deliver to the market desired products/services faster and satisfy customer requirements (Macheridis, 2009; Weinstein, 2009; Shenhar, 2004). The failure of traditional project management approaches to meet such demands in all situations led to the evolution of agile project management (Augustine and Woodcock, 2008).

Agile project management (APM) methodologies are increasing becoming popular across different businesses (Macheridis, 2009; Griffiths, 2007; Chin, 2004) and hence there is a need to understand their origin, applicability and implications for the other business industries such as consulting firms. This is particularly important if one considers the successes registered in other industries and the recent efforts as well as a rise in interest by scholars to explore the relevance of agile concepts to construction and manufacturing where its implementation improved project managers' response and effectiveness in an unpredictable environment (Fernandez and Fernandez, 2009; Owen *et al*, 2006).

Although many scholars agree that APM methodologies emerged from software engineering agile frameworks such as eXtreme Programming (XP) and Scrum in the 1990s (Larman, 2004; Boehm, 2006; Cicmil *et al*, 2006; Fitsilis, 2008; Hoda *et al*, 2008; Macheridis, 2009), Aguanno (2004) traces their development to the 1980s when the Japanese automobile manufacturers embraced them in their product development. He mentions that they were initially known as *light weight methods* before the adoption of the term *agile* to show their impact on projects experiencing high levels of change. This stance, however, is somewhat controversial because Aguanno combines both lean and agile. According to Augustine and Woodcock (2008) APM principles and practices are hinged on the 'new science' theory of complex adaptive systems (CAS). This complexity theory is derived from the 'chaos theory' which is defined as the study of how order and patterns arise from apparently disordered systems (Elliot, 2008). It is more concerned with understanding how complex behaviour and structures emerge from simple underlying rules as observed in the flocking of birds and ant colonies (Augustine *et al*, 2005; Fernandez and Fernandez, 2009).

Complex adaptive systems are such that each ant colony follows simple rules and behaviour at the localised level whilst a collective emergent behaviour is exhibited at the macro-level from their individual actions (Augustine *et al*, 2005). According to Larman (2004) APM teams are viewed as CAS because they deal with a chaotic system that manifests itself as the project progresses due to the uncertainties surrounding the future. Since consultancies do not exist in a vacuum, it may be argued that they also sometimes face unpredictable and uncertain situations and their accompanying challenges of (1) planning for uncertain outcomes, (2) balancing flexibility with reliability and accountability, (3) balancing decision quality against decision speed and (4) timing scope freeze during rapid change as espoused by Collyer and Warren (2009). Therefore under certain conditions teams from consulting firms may need APM skills from CAS to survive.

Augustine *et al* (2005) state that CAS have a self-organizing ability and are capable of adapting to environmental changes even though their behaviour is not governed by any central regulation. Since CAS encourages interaction among the sub-parts and/or between the

environment and the system to establish an adaptive behaviour, its application to project governance through APM may eliminate some of the weaknesses associated with traditional project management due to its flexibility and context specific approaches to management. It is interesting to note that a complex global behaviour in CAS is a result of simple, local rules that guide the interaction between the semi-autonomous building blocks (Augustine and Woodcock, 2008). Elliot (2008) postulate that if this concept is applied to project governance, it will create more time for project managers to concentrate on more pertinent issues rather than controlling because agents will be semi-autonomous (i.e. requiring minimum control). However, it can be argued that the potential generalisability of such findings has its own pitfalls and is a subject of debate because according to Bryman and Bell (2007) non-human behaviour in these species does not apply equally to humans and the findings should be treated only as unique to that particular species. This is supported by Leybourne (2009) who suggests that only some elements of CAS are applicable to APM. Therefore it may be necessary to adopt such generalisations with the necessary caution that they deserve.

2.4.3 The Underlying APM Values

According to Griffiths (2007), the popularity of agile methodologies in other industries started around 2002 and therefore the methodologies are still evolving. Since APM is a culmination of a set of principles and concepts from the software industry (Chin, 2004; Conforto and Amaral, 2008), the information on its application in some industries is still limited. In light of this it can be gleaned that for successful APM adoption in other industries it is important to understand its values since they are the basis upon which its principles are derived (Alleman, 2005). The original APM values as agreed at the Agile Manifesto declaration of 2001 are shown in Appendix 1. It can be seen that some of these values were more biased towards software development approaches because the declaration was initially meant for that industry (Fitsilis, 2008). Over the years, however, with the success of APM in IT (Owen et al, 2006) its popularity in other industries increased (Griffiths, 2007) resulting in the evolution of these values. In order to illustrate this evolution Table 2.1 gives the original APM values from the agile manifesto (Larman, 2004) and the comparative values from Alleman (2005) as well as Conforto and Amaral (2008). It must be noted that the table simply states the values as stated by the authors and not necessarily in the way in which they are related.

Table 2.1: Comparison of APM values as stated by various Authors

	Agile Manifesto Larman (2004)	Alleman (2005)	Conforto and Amaral (2008)
ment	Individuals and interactions over processes and tools	Feedback (i.e. Continuous feedback is essential for sustenance).	Encourage exploration
Manage ues	Working software over comprehensive documentation		Deliver customer value
Agile Project Management Values	Customer collaboration over contract negotiation	Humility (i.e. acknowledging contribution from client and team members)	Employ iterative feature delivery
Agile	Responding to change over following a plan	Communication (i.e. Continuous communication among stakeholders is crucial).	Build adaptive teams

Agile Manifesto Larman (2004)	Alleman (2005)	Conforto and Amaral (2008)
	Simplicity (i.e. using the simplest possible solution to identify the critical success factors). So that all iterations must add some value to the process.	Simplify
	Courage required for decision making during changes	Champion technical excellence

Summarized by authors

It can be seen from this table that the APM values are being expanded depending on the various views of the author. However, it is interesting to note that this development has been largely beneficial for different industries to understand the reasoning behind agile in their own context (Owen *et al*, 2006). In any case the expanded values still reflect the original agile values and thus they can be taken as the refinement of the agile manifesto over the years. Although these changes may be beneficial to APM expansion and the industries concerned, the question that remains is to what extent these changes will go before they start deviating from the original ideas encompassed within the Agile Manifesto as practised in the IT industry.

2.4.4 Agile Project Management Principles

APM is based on the twelve principles that were formulated at the Agile Manifesto Declaration of 2001 given in Appendix 1. Just like the agile values above it must be noted that some of the principles given in the original declaration are more inclined towards software development. Consequently a number of authors give different principles depending on their point of focus. For example Fitsilis (2008) and Larman (2004) give only five principles i.e. embrace change, focus on customer value, deliver part of functionality incrementally, collaborate and, reflect and learn continuously. Whilst Alleman (2005) gives 10 principles which among other things include simplicity, embrace change, enabling the next effort (ensuring that the team is strengthened through learning), incremental change, maximising stakeholder value, rapid feedback, deliver and manage with purpose. It is interesting to note that although these principles might look different in a way, they are all similar because they emphasise one and the same thing drawn from the agile manifesto. However, it must also be noted that some things that are listed as principles by other authors are listed as practices by others. For instance Alleman (2005) lists travel light/light touch and manage with purpose/vision as principles whilst Augustine et al (2005) and Elliot (2008) take them as practices. Nevertheless the reflection from these principles suggest that APM is people oriented, customer focused, less bureaucratic, iterative development focused, delivery driven, and acknowledges change as well as collaboration (Larman, 2004; Hewson, 2006; Conforto and Amaral, 2008).

2.4.5 Agile Project Management's Problem Solving Approach

Agile Project Management's Problem Solving Approach mainly focuses on short and incremental iterative development of projects (Sauer and Reich, 2009; Larman, 2004) while at the same taking into cognisance the phases of TPM (Hewson, 2006). The agile project management technique incorporates part of the spiral model (Cadle and Yeates, 2008).

However it differs from the spiral model because it emphasises on collaboration and iterations that are conducted over a short period of time (i.e. mainly weeks and not months) (Schuh, 2005). This iterative nature of APM makes it suitable for projects that are carried out during conditions of uncertainty and rapidly changing complex environments (Alleman, 2005; Hewson, 2006). This approach is best illustrated in Figures 2.4 and 2.5 below. In figure 2.3 the prioritised list consists of a list of requirements or features ranked according to their value as per client's needs. In APM only a few of these ranked requirements are selected for development at each stage. Just like in TPM, the subset of selected requirements is then analysed, developed, tested and evaluated during a short, fixed period of iteration. In addition risk assessment is also carried out in stage 4 to minimise the effect of anticipated risks in the given activity and thus making this process more robust.

Meetings with stakeholders and project teams for feedback on the incremental progress are a regular feature in APM approach to problem solving. In addition lessons learnt and recommendations for future are gathered in these meetings and used to improve the next iteration. Thus APM approach is such that "instead of trying to develop the whole system in one go, the system is divided into a number of iterations each adding some functionality or perhaps improved performance to its predecessors" (Cadle and Yeates:79). One important feature of APM is that there is continuous collaboration between consultant and the client during the progress of the project which enhances more understanding of both the business and technical requirements for the development of subsequent iterations. The benefits of such an approach are well documented, for example Owen *et al* (2006) and Macheredis (2009) claim that APM results in improved managerial and personnel skills, responsiveness, speed, flexibility, quality and predictability. In addition it may also be argued that by achieving these benefits the organisation may also have downstream gains through cost minimisation, short time delivery that helps them to deal with more clients and increased customer satisfaction that results in good customer retention.

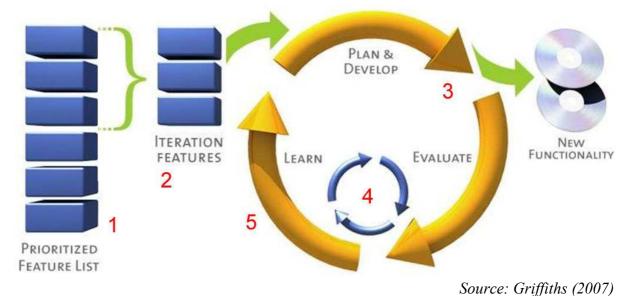


Figure 2.4: Agile Control and Execution Processes

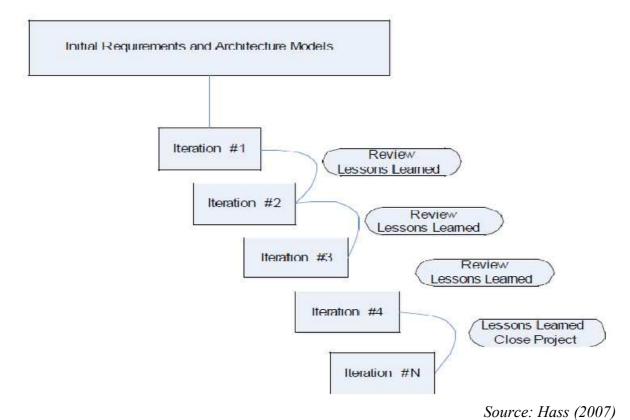


Figure 2.5: The APM Lifecycle Model

The problem solving approach employed by agile is described as humanistic in nature (Griffiths, 2007; Augustine and Woodcock, 2008). This makes it more appropriate for application in consulting firms because of the highly skilled workers, uncertainties and the high stakes involved in most of these organisations. It is described as humanistic in nature because of the following characteristics which are somewhat loosely or strongly exhibited in some consulting firms.

- It takes into consideration the valuable skills of employees and their contribution to project teams
- Employees are considered to be valuable stakeholders
- Autonomous teams are an integral part of the problem solving methods (i.e. the power of numbers).
- It takes uncertainty into consideration by reducing the number of advanced planning
- It also stresses on the organisation's ability to adapt to the changing environment.

Just like TPM, agile project management is not immune to criticism. For instance, according to Fitsilis (2008) APM methodologies are not complete when analysed from the traditional project management perspective because some of its processes (such as communications management and project integration management) are either vague or absent. Some of APM's demerits that have been put forward include loss of titles due to flattening of organisational hierarchies, possible organisational crisis due to increased visibility of people, possible budgeting problems due to short timeframes involved, difficulties in project kickoff due to vague plans, too demanding because of too much client involvement and potential loss of privacy (Highsmith, 2008). Therefore it is necessary when making a choice for one to weigh its benefits against the disadvantages associated in relation to the circumstances and project type.

2.4.6 Agile Project Management Practices

In addition to the values, principles and the problem solving approach it was also necessary to determine the agile practices in order to be able to distinguish APM from TPM in this thesis. It must be noted that scholars attach different names to these practices, for example some call them elements (Hass, 2007; Cadle and Yeates, 2008), whilst others like Alleman (2005), Elliot (2008) as well as Augustine and Woodcock (2008) call them practices. Yet in some circles they are also referred to as characteristics (Owen *et al*, 2006; Hewson, 2006). Each of these practices is viewed in turn.

Attitude to change

Many scholars subscribe to the fact that APM acknowledges the importance of change (Griffths, 2007; Hewson, 2006). Cadle and Yeates (2008) mention that with APM, changes are seen as reversible and important part of learning. Thus change is incorporated within the project itself since requirements are said to evolve over time (Alleman, 2005). Although these changes are considered to be unavoidable (Owen *et al*, 2006) and important for quality delivery (Conforto and Amaral, 2008), some scholars argue that uncontrolled change result in scope creep and scope drift that can have a negative impact on the costs involved (Saladis and Kerzner, 2009) in the project. Nevertheless, those arguing for APM contend that plans are speculative about the future hence there is a need to continuously check/test and change them where necessary so as to remain on course (Conforto and Amaral, 2008).

Management Style/Leadership

Elliott (2008) describes leadership in APM as the one that elevates the project manager from being an operational controller type into someone who keeps the spotlight on the vision, who inspires the team, who promotes teamwork and collaboration, who champions the project and removes obstacles to progress. Augustine and Woodcock (2008) also discuss the role of an agile project manager and suggest the character of an adaptive visionary leader instead of an uninspired taskmaster. Hass (2007) and Hewson (2006) also emphasise the need for collaboration rather than command and control. While traditional leadership calls for governing and commanding, the new agile approach is to empower a 'self-directed team' with supporting leadership. Augustine and Woodcock (2008) argue that empowered teams exhibit a sense of shared leadership and tend to deliver better performance. In APM, the leader adds value by providing direction and facilitation (Cicmil *et al*, 2006; Hoda *et al*, 2008). In contrast to TPM, too much control and involvement of the project manger may adversely affect team operations and the overall project success (Fernandez and Fernandez, 2009).

Figure 2.6 below clearly illustrates agile leadership and the difference between the traditional way of managing projects, where the team follows the strict and direct orders of supervisors through fixed hierarchy; as opposed to an agile environment where leaders support the team. The outcome is a productive, friendly and interactive teamwork environment that delivers the desired project value in a short period of time. However, due to resistance to change faced, when trying to implement APM, it is necessary that success stories in similar organisations are brought to light so that other firms may follow. According to Weaver (2007), most senior managers responsible for managing the delivery of an organisation's portfolio of projects and programmes do not understand project management and in most cases they try to maintain a traditional 'command and control' approach, which is inappropriate. It is therefore necessary

to ensure that information on new project management approaches is made available as alternative options to avoid such pitfalls when implementing APM.



Source: Choppin (1997), forwarded by Orr (2005)

Figure 2.6: Agile Leadership Behaviour

In some instances, the shift from TPM to APM is therefore mandatory considering the benefits that are associated with leadership style and the wise statement from Antoine Saint-Exupéry which says "If you want to build a ship, don't drum up people to collect wood and don't assign them tasks and work, but rather teach them to long for the endless immensity of the sea" (Griffiths, 2006). Therefore, consulting firms must not be left behind in adopting this new thinking especially now that the element of project predictability is being rendered useless by economic challenges.

Team Dynamics

APM promotes the use of small, multi-skilled autonomous teams (Owen et al, 2006; Elliot, 2008; Weinstein, 2009), with effective communication and openness/transparency as well as a shared accountability (Hewson, 2006; Hass, 2007; Augustine and Woodcock, 2008). According to Fernandez and Fernandez (2009) as well as Hass (2007), these teams should be co-located (with customer/end-user) and high-performing to improve interaction, coordination and communication. He also emphasise the need for adaptive control which stresses the need for all team members to continuously adapt through project learning from iterations. It might be argued that co-location is not always possible because of the costs involved especially with consulting firms that deal with global and regional customers. The teams are also said to be self-organising, self-disciplined, self-directed and self-managed (Hoda et al, 2008, Hewson, 2006), and according to Owen et al (2006) they are more productive than TPM organised teams. Cadle and Yeates (2008) emphasise that success depends on the empowerment of client and team members to make decisions without having to obtain an explicit approval from senior managers. However, some scholars argue that autonomous teams can act as a threat to traditional management style (Augustine and Woodcock, 2008) and thus leading to conflicts. It may also be argued that small teams, though effective can be a source of problem if the members become too specialised. On the other hand, Owen et al (2006) opines that a horizontal team-based structure encourage communication among the members by eliminating bureaucracy. This type of team structure

may be useful in professional service firms because in most cases all the team members will be highly skilled and thus they can make valuable contribution at any level.

Approach to Risk

APM acknowledges the existence of risks and that the risks can be shared with every project stakeholder (Owen *et al*, 2006). Unlike TPM which assumes risks for the whole project beforehand, APM deals with risks as they arise (ibid). According to APM advocates, this has the advantage of dealing with real risks rather than probably dealing with non-existent risks as in the case of TPM (Schuh, 2005). Notwithstanding, according to Saladis and Kerzner (2009) being prepared for risks is better than doing things blindly. On the other hand, Owen *et al* (2006) and Schuh (2005) argue that TPM's approach to risk may give a false impression that a risk is under control when in reality it is not.

Development Approach

As discussed in section 2.4.5 above, unlike TPM which relies on the plan and delivery milestones, APM development approach is based on short delivery iterations accompanied by continuous learning (Sauer and Reich, 2009). *Feature-driven development* which is concerned with making sure that the team focuses on one feature at a time to reduce complexity is thus an important aspect of APM (Hass, 2007). Exploration and adaptation also play a key role in the development of these iterations. *Collaborative development* which emphasises on collaboration among all team members to deliver results, getting feedback, learning and implementing the lessons learnt in subsequent iterations (i.e. continuous improvement) is also another practice given by Hass (2007).

Quality Approach

The quality approach with APM is such that continuous feedback and acknowledgement of changing customer perceptions are regarded as essential for quality delivery (Owen *et al*, 2006; Larman, 2004). To ensure quality, all products/services are reviewed for their fitness to business, instead of adherence to any specified requirements because they vary with time under APM (Cadle and Yeates, 2008). The aim is to provide a working product or service to satisfy the customer. Thus, test driven development, which is concerned with developing test plans at the time of defining requirements especially when customers are not sure of what they want, is followed to ensure completeness, accuracy and testability of the requirements through reviews (Hass, 2007).

Customer Involvement

APM stresses the need for continuous customer involvement and revision of the specifications as the project progresses (Highsmith, 2008; Schuh, 2005). This is said to improve customer satisfaction and requirements capture (Larman, 2004). It may also be argued that customer involvement enlighten the work of the organisation through bringing on board people who understand their system. In addition, it may also result in knowledge diffusion between organisations through collaborative teams. However, increased client involvement may have a detrimental effect on the independence of consulting firms (Highsmith, 2008).

Value Delivery

According to Owen *et al* (2006), APM is more centred on delivering value; as perceived by the customer at an early stage. This is achieved by following an incremental delivery approach that makes use of 'timeboxes' (i.e. completing part of the scope within a short time frame (Cadle and Yeates, 2008). Hass (2007) call this a *move from Cost to Revenue focus*

which emphasises on prioritising features based on value. As noted earlier, this has a tendency to improve customer satisfaction and product/service quality, however, it can also be criticised on the basis of scope creep and scope drift. Since in most cases, consulting firms tend to interact with clients at a particular point in time, it may be easier for them to achieve this practice. The possible challenge comes from balancing customer demands with the tight schedule they operate in.

Attitude to Learning

APM emphasises team learning during the progress of the project through reviews at each iteration (Conforto and Amaral, 2008; Sauer and Reich, 2009). Project learning is facilitated through teams holding a lessons learned session after each iteration (Larman, 2004; Hass, 2007) and promoting transparency (open access to information) (Augustine *et al*, 2005). Schuh (2005) argues that this approach to project management results in more knowledgeable team members who are capable of explaining what really transpired, unlike in TPM. For professional service firms this may be a useful tool for knowledge generation and creativity since team members are usually highly skilled.

Nature of Planning

APM relies on continuous development of an adaptive plan in an iterative way (Owen *et al*, 2006; Larman, 2004). In addition, according to Schuh (2005), the plan can be either client driven or risk driven or both. It is also important to note that iterations play an important role during the incremental development of a plan (Larman, 2004). The merits of this APM approach to planning are the probable mitigation of risks, a working plan and having a useful plan that teams can refer to for feedback after the iterations or on closing the project (Schuh, 2005). On the contrary, this type of planning may also be criticised for being vague (Fitsilis, 2008) because the plans are not detailed (Owen *et al*, 2006; Rodrigues and Bowers, 1996). While it may have some significant benefits, continuous planning may present serious challenges in consulting firms because they tend to base their fees on fully developed plans.

In summary, APM exploits a combination of staff's ability to manage complexity, interaction and goal oriented approaches. For this thesis the elements above, were categorised in relation to planning, iterations, teams, leadership and client involvement which were identified as key for distinguishing APM and TPM. Therefore each of the above elements was incorporated in one way or another under these subheadings.

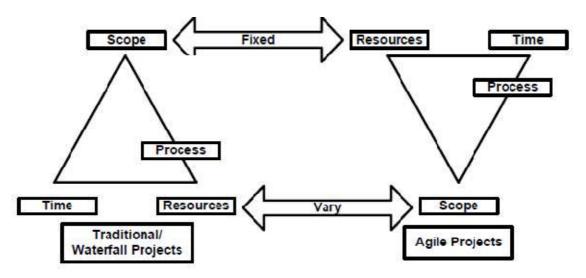
2.5 Traditional versus Agile Project Management: Which Path to follow?

There is a strong debate among advocates from both APM and TPM with regard to which path to follow. While some scholars regard the two as antagonistic (Alleman, 2005; Augustine and Woodcock, 2008) a significant number of them (Frye, 2009; Cicmil *et al*, 2006; Geraldi, 2008) argue that the two are not mutually exclusive but complementary. As noted in the literature above both approaches is suited to different scenarios. This is supported by an analysis by Sauser *et al* (2009) who concluded that projects are different and they demand different ways of management. To fully understand the differences between the two it might be necessary to look at their origins again.

The principles from engineering (e.g. construction) and defence industries played a crucial role during the development of TPM methodologies (Augustine and Woodcock, 2008). This resulted in the bias towards predictability, deterministic and reductionist approaches that gave partial solution to the problem of project scheduling (Weaver, 2007). The TPM methodologies had been use for a long time and their success in certain industry is

highlighted by various scholars (Papke-Shields *et al*, 2009, Whitty and Maylor, 2009; Grundy and Brown, 2004; Kerzner, 2003). It is also regarded as the source of the once sought for formality in project management (Cadle and Yeates, 2008). However, challenges arose from projects that were characterised by uncertainties and unpredictability (Cicmil *et al*, 2006; Alleman, 2005). This led to problems because of its rigid nature and the adoption of process compliance for controlling projects which had an adverse effect on the project manager's motivation especially in IT industry where massive failures were recorded (Owen *et al*, 2006). The increasing pressure to deliver with speed quality IT products in a dynamic and rapidly changing global market coerced IT professionals to develop APM methodologies (Fitsilis, 2008). Thus unlike TPM, the aim of agile is to have a small scope, rapid delivery at high rate (Collyer and Warren, 2009) and it puts more emphasis on communication rather than a process or plan (Macheredis, 2009). Therefore the two differ in scope.

Figure 2.6 below (Cockburn, 2003) forwarded by Owen *et al* (2006) illustrates the conceptual difference between TPM and APM practices where the famous 'iron triangle' is turned upside-down. It can be seen that unlike traditional project management which stresses on fixing the scope, APM considers functionality of the project environment that affects the scope to be variable while project resources (time and people) are fixed. Whilst TPM is suitable for stable conditions it is also necessary for project managers operating in unpredictable environments to consider the dynamic and iterative development based on agile methodologies where visionary leadership, continuous learning and customer value are considered essential within the constraints of time and budget (Fernandez and Fernandez, 2009; Owen *et al.*, 2006). This fresh approach to project management is drawing the interest of modern scholars and it is found particularly relevant to the consulting sector, particularly in the case of large and complex projects involving a number of project managers from different companies, all competing to achieve their different organisational objectives.



Source: Owen et al (2006)

Figure 2.7: Conceptual differences between TPM and APM

Apparently, agile project management varies dramatically from the traditional way of managing projects where the conventional tools and techniques are not suitable for change once the baseline plan is running. According to Augustine and Woodcock (2008) most agile tools and methodologies are different from those of traditional project management and this

is attributed to varying views on fundamental assumptions about change, control order, organisation as well as their approaches to problems. This misalignment between agile and traditional methodologies is sometimes blamed on literature as the cause for the slow adoption of the promising agile project management approaches (Chin, 2004). Therefore it is important to examine how these two can be harnessed for the benefit of project managers, shareholders, stakeholders and the organisation as a whole. A review of literature shows that the two approaches mainly differ on the basis of the following assumptions and characteristics (See Table 2.2 below).

Table 2.2: Differing views on Project Management from Traditional and Agile approaches

Traditional Project Management	Agile Project Management	
Focus on process and plan	Focus on people	
Focus on developing all parts of the scope	Focus on the most important part of the scope	
first	first and then proceed to the next.	
Regulation of changes is based on rigid	Regulation of changes depends on flexible	
procedures.	and adaptable procedures.	
Members work individually within teams	Team members collaborate in all aspects	
i.e. less collaboration.		
Order establishment is facilitated by	Order is established as a result of continuous	
hierarchical organisational structures	and voluntary interaction in complex systems	
Increased order is a result of increased	Self organization, interaction and simple rules result in increased order.	
Control		
Organisations must be rigid and static hierarchies	Organisations must be flexible and eliminate unnecessary bureaucracy.	
Controlling type of management	Management role is to facilitate and give	
Controlling type of management	support	
Employees are interchangeable 'parts' in the	Employees are an important part of the	
organisational 'machine'	organisation whose contribution is necessary.	
Customer is mainly involved during	Customer is continuously involved	
requirements gathering and delivery phases	throughout the project lifecycle	
The reductionist task breakdown and	Iterative approaches to selected tasks with	
allocation is necessary for solving problems	continuous feedback from team members and	
(e.g. Work Breakdown Structure (WBS) and	stakeholders result in valuable incremental	
the Project Breakdown Structure (PBS)).	progress in a short time.	
Projects and risks are adequately predictable	It is impossible to control the future because	
and it is possible to manage them through	projects and risks are unpredictable due to	
detailed and complex advance planning.	uncertainties; therefore there is no need for	
	detailed advance planning.	
Testing is done at the end of the project	Testing is iterative and done more frequently	
cycle		
Documentation is thorough	Documentation is done only when needed	

Adapted from Augustine and Woodcock (2008) and Hoda et al (2008)

Since both APM and TPM are strong in their own right it might be necessary to blend the two in order to benefit from both. According to Frye (2009) APM can benefit from TPM's Clear guidance on project initiation and closure; communications management; project integration management; project cost management as well as Risk management. Whilst TPM can also benefit from APM's autonomous teams; flexibility and accepting continuous adjustment; the

need to keep client involved and reduced documentation. Therefore the path to follow mainly depends on circumstances and project type.

2.6 New Developments in Project Management

Although APM offers a lot of promise, it must be adopted with all the necessary managerial support for it to succeed. This cannot be ignored especially if one considers the demerits of APM highlighted above. It will be folly to believe that APM alone can solve all project management problems because just like TPM it is not a solution but a tool to enhance project implementation. This is also true in view of Aguanno (2004)'s balanced evaluation of APM methodologies which presented their shortcomings and possible misrepresentations and also concluded that no single method can address all situations. This is also in agreement with other scholars (Brooks, 1987; Shore and Warden; 2008) who state that there is no 'silver bullet' in selecting a project management methodology.

The existence of varying degrees of literature advocating for APM (Weinstein, 2009) and the various arguments put forward against it (Chin, 2004; Harrison, 2003) makes it imperative for one to further explore these approaches with the recognition that bias can play a pivotal role in the selection process (Jiang and Eberlein, 2008). Many scholars agree that TPM performs better that APM in some situations and vice-versa. However, this tendency by scholars and practitioners to prefer one more than the other may not be beneficial due to selection error. Given such circumstances, Jiang and Eberlein (2008) postulate that it is possible to combine the two in order to benefit from both but this possibility is still a subject of investigation. Nevertheless, what is clear from this review is that organisations tend to benefit more if APM is correctly applied than in the TPM case. However, the varying nature of projects, size (complexity), anticipated uncertainties and the associated dynamic changes (if any) pose a threat to organisation's decision making process on the project management approach to follow. Consulting firms are also facing these challenging scenarios (Geraldi, 2008) and in most cases managers tend to prefer what they know best (Kerzner, 2003) and hence the need to also avail information on the possibility of applying agile concepts in these organisations.

In view of the above dilemma researchers and academics are continuously searching for other project management methodologies with different schools of thought. One interesting view (which also encompasses APM) to crop from these efforts is that a project does not necessarily need to be there for project management to exist but rather it is the application of 'project management' to an endeavour that creates a project (Weaver, 2007). In addition to the theory of complexity (on which APM is anchored) discussed above, another idea stemming from this view is that of Projects as 'Temporary Knowledge Organisations (TKOs)'as suggested by Lundin and Söderholm (1995). According to Weaver (2007) this approach is centred on project teams as fundamental assets for project management. Moreover, in stark contrast with TPM and just like APM it emphasises on the unpredictability of projects. These two concepts are more closer to reality and seem to offer promise for the future of project management because they tend to embrace the underlying principle that projects are as a result of people's actions and not an attempt to control the future through schedules and plans. It can be deduced from these assertions by Weaver (2007) that future project management approaches (APM and TKOs) will be a force to reckon with because of their consideration of uncertainty, unpredictability of projects, inability to control the future as well as their emphasis for communicating with, guiding and influencing stakeholders during the development of the project. Nevertheless TPM may continue to play a leading role because it can be seen as a complete formal procedure that covers all areas of project management unlike APM and the other new development approaches that are sometimes seen as incomplete (Fitsilis, 2008).

2.7 Consulting

Some semantics! In the course of this literature words like consulting, management consulting, professional services may be used quite often. It is therefore imperative to give some guidance on what each of these terms mean in this thesis since different meanings have been adduced by different authors. Generally, this section discusses literature on the subject of consulting. Though the subject has been in existence for a long time, there seems to be relatively few scholarly articles (Haywood-Farmer and Nollet, 1994) related to consulting as compared to the growth it has experienced over the years (Greiner and Metzger, 1983) especially between 1980 and 1990 (Kyro 1995). Consulting is quite broad in the sense that it denotes advice and judgment (Sandberg, 2003; Kubr, 2002; Haywood-Farmer and Nollet, 1994) and therefore may fit well in any particular industry or subject area. A broad overview of consulting is depicted in figure 2.8 below. From this broad view, consulting organisations can be categorised into two: *Corporate consulting* and *Professional service consulting*. Professional Service Consulting (PSC) will be discussed in-depth, since it is the focus of this thesis, but some classifications ought to be made beforehand.

The context of this thesis is a business or management consulting entity. In order to ensure an appropriate focus for the theoretical review, discussions would be biased towards management consulting and related business subject-matter such as Accounting, Audit, Tax and Finance since these broadly represents the main service offerings of the entity. One element of PSC that has enjoyed quite some extensive literature is management consulting (Kyro, 1995) and therefore commands majority of the theoretical discussions on PSC. However, since this thesis is about consulting firms in general and professional service consulting specifically, we have resisted the temptation of defining management consulting and rather considered it as a part of PSC along with Accounting, Audit, Finance and other business related subjects. It is, however, worth mentioning that a definition of management consulting provided by Greiner and Metzger (1983) connotes advice, which is a key element of consulting discussed above. This thesis therefore follows the steps of Kubr, (2002), Lowendahl (2000) and Kyro (1995), who clearly emphasise that management consulting is an aspect of PSC. Figure 2.8 below depicts the broad overview of consulting.

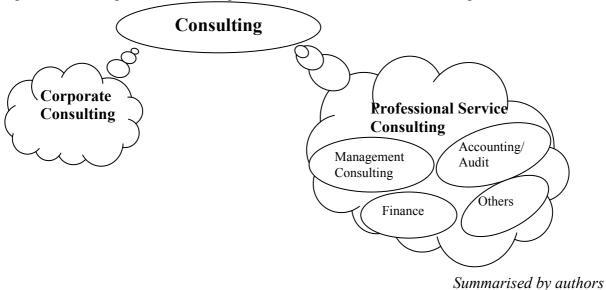


Figure 2.8: Broad overview of consulting

2.7.1 Corporate Consulting

Sandberg (2003) is one key proponent of the idea of corporate consulting describing them as "firms within product-based parent organisations" (ibid: 14). Examples of such firms include Shell Global Solutions, AT&T Professional Services and Ericsson Consulting among others. Sandberg indicates that such firms tend to have internal clients (parent company) and external clients. These firms are required to show a high level of independence from their parent companies, which sometimes become challenging, especially when they are dealing with clients that are also competitors to their parent companies. These companies are mostly driven by customer demands on their parent company and therefore are considered as departments or units within the parent company. They are required by the parent companies to satisfy non-core customer demands on the parent company, whilst the parent concentrates on its core business. On the other hand, external clients require them to provide mainly technical solutions in a professional manner. Sandberg (2003) identifies four types of corporate consultancies in terms of how they create value for the parent company and the key knowledge needed to support external clients. The four types have been reproduced in Figure 2.9 below:

Role in product business' value chain: Extending		
The consulting services extend the value chain - as in the case of consultancies that integrate the product business' technical products or offer compelmenting services	Spearhead CC	Integration CC
Supporting		
The consulting services extend the value chain - as in the case of consultancies that offer support in IT, finance or product development	Expert CC	Know-how CC
Key knowledge:	Professional	Firm Specific
	Professional knowledge is a combination of science, personal skills and experience. It is developed by exchanging professional experience in different situations.	Firm Specific knowledge is the unique knowledge of an individual organisation that gives it a competitive edge.

Adapted from Sandberg (2003:19)

Figure 2.9: Types of Corporate Consultancies (CC)

Expert CC: Professional knowledge of the consulting firm is exploited and marketed to clients who are not within the value chain of the parent (product) business. An example is ABB Financial Consulting, which provides services such as balance sheet management and other financial support services to clients even though such services are not provided by the parent company – ABB Engineering.

Know-how CC: The consultancy is driven mainly by firm-specific knowledge with the consulting firm acting mainly as knowledge brokers for different departments of the product

company. An example is Shell Global Solutions that was created to support internal non-core business services such as product research and technical advisory among others but with time these services have also been extended to external clients.

Spearhead CC: This type of corporate consulting is expected to complement the parent company's value chain in quite a loose manner. The services provided by such corporate consultants need no industry specific knowledge and may also be required by the product organisation. Such consultancies, as Sandberg identifies, should largely be independent of the parent but still thrives on the brand image built by the product company over the years. An example is Ericsson Consulting, which gives business strategy and customer management advisory services to the telecom industry.

Integration CC: These types of CC like Spearhead CC also complements the value chain of the product company but in a very connected manner. That is, they are highly integrated with the product company whilst relying heavily on firm-specific knowledge. An example is PeopleSoft Consulting, which provides software and IT system solutions to clients, which are closely tied to the product company's software package.

Corporate Consulting is a growing phenomenon in view of the increasing focus on customer needs (Hax and Wilde, 1999), which has generally led to greater attention on customer satisfaction even where the needs are not entirely related to the core business of the organisation. Often, there is the explanation that the organisation is providing total customer solutions, which can only be described as a myth. With this trend, a unit is usually set up to give the customer the needed support without interfering with the core business of the product organisation. Such units, with time, acquire some competences, which lead to their spin off and invariably becoming corporate consultancies. Though the results of the thesis can be applied to such consulting organisations and their approach to work, the context of the study is rather Professional Service Consulting, which may have some characteristics different from corporate consulting. These characteristics are not captured in this thesis as it is outside the scope of the study.

2.7.2 Professional Service Consulting

The other category of Consulting described as *Professional Service Consulting (PSC)* is the focus of this thesis. This area of consulting has been intentionally chosen in view of the prominence such firms enjoy in the consulting industry. More so, the bias of the thesis partners influenced the decision, to a large extent, as one of them has some experience working for one of the big professional service consulting firms (PSF). Though the word consulting and consultant have been described as overarching at the initial parts of this section, we will use it interchangeably with words such as professional service and professional respectively. This is not to override the earlier assertion that consulting is an apex term for corporate and professional service consulting but it will be used for the sake of convenience and largely means professional service.

Professional Service Consulting (PSC) is defined by Lowendahl (2000:18) as "services delivered by *professionals* or services delivered according to *professional norms or rules* of conduct". He further asserts that such services should be a vocation with the following characteristics:

• There should be a body of knowledge, which qualifies a person;

- The services should apply the body of knowledge and experience in dealing with challenges that connotes selfless service to clients; and
- There should be a code of ethics that guides conduct.

Lowendahl, however, agrees that some PSCs such as management consulting may not necessarily have all these characteristics explicitly but their conduct acknowledge elements of professionalism, which guides their behaviour and the services they provide. This caveat from Lowendahl tends to agree with Greiner and Metzger's (1983:3) view that consulting "will not sit for a clear definition". Greiner and Metzger, notwithstanding, attempts a definition of management consulting that can be adapted to PSC since it is broader enough to capture the key elements noted by Lowendahl. Greiner and Metzger (1983) says "...consulting is an advisory service contracted for and provided to organisations by specially trained and qualified persons who assist, in an objective and independent manner, the client organisation ..." From the definitions above, the personality of the consultant is described as well as the way services are provided. Therefore, the subsequent literature discusses professionals, the services they provide and professional service firms.

Professionals

Professional or Professionalism has been used quite loosely in describing services provided by people or the people themselves just like the word "consulting" as noted by Sandberg (2003). Lowendahl, (2000) and Kyro (1995), however, attempt to draw a dichotomy between the two ways that the word can be used. They indicate that the word can be used to describe the person (individual or organisation) that offers the service or the process by which the service is performed. Whilst both authors agree on describing persons in a certain industry with a global certification as professionals, they tend to have different views on the second use of the word. Kyro (1995:17) indicates that the second view of the word "profession" is used to describe "quality or nature of the process" of providing the service. That is, work done in line with some quality standards or the process was according to some procedures that assure quality. Lowendahl (2000:18), on the other hand, describes it as "services according to professional norms or rules of conduct". It can be inferred that Lowendahl's view connotes definition of quality as working according to agreed norms or rules. Notwithstanding, both authors seem to tow the line of describing professional service as relating to certain presumed qualities or qualification possessed by the person providing the service and the process of providing or end result of the service.

Akella (2003:57) mentions "formation of professional association" to certify entry of practitioners as one key determinant of professionalism in any industry. Akella indicates that such associations help to weed out incompetent persons and therefore preserve the integrity of the industry. In other words, PSCs are considered the preserve of those who have completed the required education and certification procedures. Professionals are therefore considered as people with high education and certified by a vocational organisation from industries such as Engineering, Law, IT, Project Management, Finance, Accounting and Management among others (Nachum, 1999; Haywood-Farmer and Nollet, 1994, Greiner and Metzger, 1983). There is further consensus among these authors that the certification and required education is a continuous process and all requirements must always be adhered. As indicated earlier, Lowendahl (2000) cautions that some practitioners may not have any certification from a body of knowledge but their approach to work can be compared to that of those with certification; and therefore they can also be described as professionals.

Again, vocational organisations or professional associations ensure that professionals strictly adhere to the norms and rules of conduct in order to ensure quality. In line with this, any deviation by an individual may prevent the individual from providing services to clients (Akella, 2003, Lowendahl, 2000). Professionals who do not belong to such organisations also tend to conform to accepted norms (best practices) of their vocation in order to keep their clients; since such norms become an integral part of clients' expectations (Lowendahl, 2000).

In view of the high academic qualification (Nachum, 1999) expected of professionals, Consultants are considered as knowledge carriers (Alvesson, 2002; Kipping & Engwell, 2002; Kyro 1995). This supports Lowendahl's view that clients perceive professionals as possessing specialist knowledge or what Sonnerby (2007) describe as experts. The growing awareness of knowledge management (Zack, 1999) and its emergence as a tool for competitive advantage (Walker, 2004) have led to a focus on the consultant or professional as a knowledge carrier and disseminator (Kipping & Engwell, 2002). To this end, professionals are seen as movers of knowledge and business innovation from one client to another (Kubr, 2002). Since PSC also employs graduates annually and collaborates with academic institutions, they also 'drive' research knowledge from institutions to the marketplace (Kipping & Engwell, 2002).

Sonnerby asserts that professionals are "truth tellers" as they create value by subscribing to procedures that ensure trust and builds a strong brand image. As truth tellers, clients and the public rely on professionals' information and guidance to make critical decisions. Akella (2003) supports this view by indicating that certifications given to professionals have legal backing within particular jurisdictions, which imposes obligations of trust on clients and hence a duty on professionals to keep up with the expectation of truth telling. In other words, professionals are esteemed in the society in view of their education, expertise, certification and approach to work.

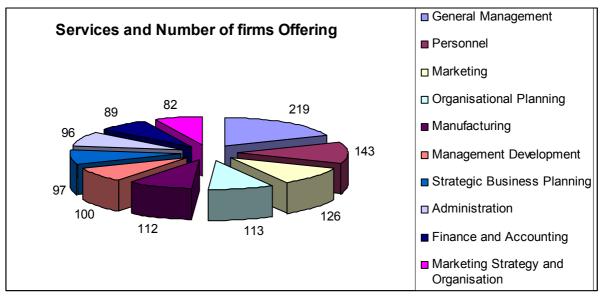
Though mentioned earlier, it is important to discuss further the role of Professionals as advisors. Kubr (2002:7) mentions that consultants provide "advice and assistance". This is supported by Haywood-Farmer and Nollet (1994) who also brings in another dimension that the advice should be problem related. In talking about assistance, Kubr indicated that professionals should go beyond just suggestions and recommendations and rather help in the process of achieving results. This demands support such as training, providing encouragement, moral support and at times negotiating on behalf of clients. Such extra efforts are well provided by small firms or sole practitioners rather than all consulting firms (Greiner and Metzger, 1983).

Services offered by the professionals

Kubr (2002) claims that Professional services cut across a broad spectrum of business and management as consultants assist clients find solutions to problems. Kubr further indicates that changing client needs have led to consultants' service offerings also changing as they seek to satisfy their clients. Moreso, research and innovation in service offerings by consultants have led to the introduction of services that anticipate client needs and fulfil them. All these have tended to make the classification or description of services provided by consultants almost elusive.

Greiner and Metzger (1983) approached the issue of service offerings by surveying consulting firms and the services they provide to clients. This was based on the functions,

processes and systems (Kubr, 2002) within the organisation. The areas identified and firms offering the services have been presented in figure 2.10 below.



Summarized from Greiner and Metzger (1983)

Figure 2.10: Services and number of firms offering

From figure 2.10, "general management" consulting services dominate services provided by professional firms. This area of consulting addresses challenges faced by top management such as strategies for acquisitions and reviews of management strengths and weaknesses among others. Greiner and Metzger were surprised to see an area like Finance and Accounting services provided by relatively few firms and ascribed it to possible client organisations adeptness to those services. Though Greiner and Metzger's view is not in dispute, an area like Accounting (including audit) demands certification by an accrediting body and that possibly may have also deterred some firms from that area; unlike general management, which demands no such certification by a professional body.

One other observation worth noting is the differences between the firms that offer the different services. Apart from 'general management' and 'personnel' services that seem to have attracted larger number of firms, the rest of the services attract almost the same number of firms with insignificant differences. This seems to support the view by Kubr (2002) that professional services are becoming more and more homogeneous; hence firms have continuously competed by size, which has been achieved mainly through mergers especially around the turn of the millennium.

On the other hand, Kubr (2002), whilst describing Greiner and Metzger's approach to classification of professional services as traditional and follows prevailing organisational structures, criticises the approach for failing to acknowledge new business trends such as Information technology management services currently provided by several professional service firms. Kubr rather proposes what is described as a 'system coordination and integration' approach to classification of consulting services.

Kubr mentions that the first classification views service offerings in the light of those that deal with "specific management problems and challenges". This classification entails

problems and challenges that span several functions and processes within the organisation. Such challenges may require creativity and innovation from the consultant in order to provide appropriate solutions. The solutions may also be contextual and specific for particular clients. For example, high production costs, adaptation to new environmental legislation etc.

The second classification proposed by Kubr is services that emphasise "organisational change and performance improvement". Such consulting services are defined by the "consulting approach or method used" (Kubr, 2002:41) rather than the organisational function or problem they are tackling. The service offerings share work methods, action programmes, initiate and develop systems for knowledge management whilst ensuring that they are implemented. Some notable examples of this approach are team building, business diagnostics and business process re-engineering among others.

Kubr (2002) continues with the system coordination and integration approach to reviewing service offerings by looking at those that deal with "business strategy and transformation". This comprise services that address the "why" and "where" aspects of the clients business. In other words, it provides solutions to the purpose of client's business existence and the future of the business. Such services may have major and long term impact on the organisation and are usually handled by highly experienced personnel.

The next school of professional service offerings identified by Kubr is those related to "human resource". The services grouped under this heading include:

- Employee benefits social insurance, pensions, salaries;
- Executive search and recruitment;
- Personnel administration; and
- Human resource and human capital management & development.

Kubr identifies one particular service provided by consultants as "outsourcing and other emerging lines of service". Such services are those that are usually performed by internal staff as part of the organisational functions. However, these services are given to consulting firms to perform on behalf of clients and they include administration, IT, financial, opinion polls for market research, sectoral economic and market studies etc. In so doing, Kubr (2002:43) says that the "consulting industry is moving towards becoming a wider business-service sector…but other services are also offered when this is technically feasible, legally and ethically acceptable and financially attractive to both the consultant and the client".

Kubr describes two quite broad categories of consulting services called 'generalists' and 'specialists' services. Generalist services are described as those that cut across all industries whilst specialists concentrate on specific industries. Generalist services apply management principles across industries and hold the view that there are some management principles that are needed to run every business (Greiner and Metzger, 1983). They are however, criticised for lacking in-depth know-how to deal with client problems. Specialists on the other hand are those that target work in one sector or industry. They are supported for the in-depth knowledge they are presumed to have in the sector they serve. However, it is believed that to be able to serve the client and offer appropriate solutions to problems, there is the need to have a broad understanding of the business but specialists lack such knowledge. There is however a convergence of expertise as the specialist and generalist consultants are cooperating more and more to bring total solution to clients (Kubr, 2002).

Having dealt with the types of services, it is important to assess the nature or characteristics of the services provided. This is likely to give insight into why consultants perform their tasks the way they do, which impacts on their approach to project management. Harte and Dale (1995:38) describe professional services as "characterized by a lack of tangibles, a high degree of uncertainty, interactive client relationships and a professional culture based on individualism and autonomy". These elements as described by Hart and Dale seem generally accepted by various authors (Kubr, 2002; Stumpf *et al*, 2002; Lowendahl, 2000; Kyro, 1995).

Lowendahl (2000) supports the idea of intangibility of services by asserting that the services cannot be "stored" or "test-driven" as in manufacturing industries. Greiner and Metzger (1983:42) support this view by asserting that consulting lacks attributes of manufacturing such as ability to "see, touch, hear or smell". Alvesson (2002) rather describes the intangibility of services of professionals from the front-end by asserting that the *products* cannot be investigated before purchase. In line with this, management of such consulting assignments may demand a lot of documentation and interviews (Kubr, 2002) in order to make a trail of procedures used in arriving at decisions. Notwithstanding, the outcome of assignments still have uncertainties.

The uncertainty of professional services is described in terms of quality and heterogeneity (Lowendahl, 2000; Kyro, 1995). Lowendahl indicates that issues of strong interaction between service actors demands special skills to be able to assure quality. However, since the process is usually individualistic in nature, another person undertaking the same process can have a different outcome and hence quality is very much subjective and uncertain. Kyro follows on from Lowendahl's argument and mentions that it is difficult to have standardized professional services since individual idiosyncrasies are very much prevalent in the service provision; hence the more labour intensive, the higher the variations in content and quality. The implication is that managing such services demands an approach that is able to adapt to the uncertainties, whilst ensuring that expected value is delivered to the client.

For the client to be satisfied there is the need to involve them in the work to some extent. This is described by Kyro (1995:81) as "inseparability of production and consumption". Kyro mentions that in view of the intangibility of services, the client should participate in the process of 'production' in order to create and control quality, which is client specific (Lowendahl, 2000). However, Kubr (2002) cautions that some clients do not have a clue of what consultants do and therefore their involvement may not be needed on all assignments though their expectations should be clarified at the onset. In all these, professionals are advised to guard against their independence ensured through autonomy (Kubr, 2002).

Lowendahl (2000) describes the issue of autonomy as the need for individual judgement in professional service based on independence of mind. Kubr (2002) indicates that service independence includes technical, financial, administrative, political and emotional. That is the service outcome should not be influenced by the client in any way. However, Kakabadse *et al* (2006) criticises the idea of emotional independence and stresses that emotions are a key part of consulting service since clients see consultants as the only people who can listen and advice on challenges their organisations are facing. Notwithstanding, the idea of autonomy and the link with integrity (Kubr, 2002) is critical to professional service and professional firms.

Professional Service Firms

Professional Service Firms (PSF) are firms that provide professional services as its core business and employs mostly professionals in providing solutions to clients (Haywood-Farmer and Nollet, 1994). Lowendahl (2000) tries to clearly detail the view of Haywood-Farmer and Nollet by indicating that PSFs should have more than half of its employees as professionals. Lowendahl further indicates that for a firm to be designated as PSF, giving solutions to clients should be high on her agenda as well as respecting professional norms. Such firms should also create and apply knowledge whilst having professionals make key decisions and also handle various activities. In other words, PSFs have a high concentration of professionals, both as leaders of the organisation and in dealings with clients.

PSFs have been considered as knowledge intensive firms and therefore, unlike manufacturing and other product oriented organisations, the capital needed to start is very small (Chang and Birkett, 2004; Kipping and Engwell, 2002). In view of factors such as these, there are several consulting firms and they continue to grow, especially those Kubr (2002) describes as small partnerships and independent practitioners, usually made up of 2-5 professionals. Kubr indicates that such firms make up 82% of consultancy firms in Europe. However, since clients usually get attached to the firms that provide the needed advice and assistance, old and well established large PSF have dominated the market, in terms of revenue and clientele base, for several years (Kubr, 2002).

The large PSFs are experienced and therefore have very strong and well established brands (Kubr, 2002) in their field of service. For instance, in Accountancy, firms such as PricewaterhouseCoopers, Ernst & Young, Deloitte and KPMG are strong brands and described as "The Big Four" (formerly big six before merger of Price Waterhouse and Coopers & Lybrand in 1998 and collapse of Arthur Andersen in 2000) (Clark and Fincham, 2002). Strategy and Management consulting also boasts of names such as Booz-Allen & Hamilton, McKinsey & Co. and Boston Consulting Group among others (Kubr, 2002).

These large and well established PSFs are faced with high competition within the consulting industry with increasing demand for service quality and dynamism (Kubr, 2002). Consulting firms have therefore resorted to advertisements and other aggressive marketing tools to attract new clients, which did not use to be the case in some years past. Greiner and Metzger (1983:42) caution that there is high competition in the consulting profession and therefore "without successful marketing by the consultant, there is likely to be little business walking in your door". However, there is no indication of how to manage such jobs, once the marketing efforts bring them in. Kipping and Engwell (2002) indicate that the competition is not only for client orders but also prestigious client projects. It is without doubt that prestigious projects should be managed in a 'prestigious' way, hence a look at other project management approaches. Alvesson (2002) brings out another dimension of the competition when he hinted that PSFs do not only compete for clients but also for human resources. Greiner and Metzger (1983) describe how big and long established consulting firms seek to employ graduates from top business schools as a way of selling their expertise to clients, who are made to think that they are getting the best and latest management know-how as these new recruits are 'unleashed' on them. Bloch (1999) however, cautions that such new graduates are paraded as experts, though they only tend to learn on the job. The management of these human resource vis-à-vis client expectations all call for different ways of managing projects in PSFs.

Client expectations and other issues such as financial capability of the client to pay for consultancy determine choice between using consultant and in-house staff. Kubr (2002) reveals that where clients opt to use staff within the organisation, the staff is subordinate to the client and is affected by administrative decisions. Such effects may delay project implementation but has the advantage of responding appropriately to the client's expectations since the staff is immersed in the organisation. On the other hand, the consultant's independence - technical, financial, administrative, political, emotional (Kubr, 2002) - may enhance value to the project but responding to client expectations appropriately may be a challenge since they lack the collaboration needed to adjust to client expectations as and when it changes (Clark and Fincham, 2002). Notwithstanding, clients consider consultants as possessing specialist knowledge and hence PSFs are usually contracted to help deal with challenges clients do not have the expertise to handle (Lowendahl, 2000). Also, the high cost of contracting consultants (Sharma, 1991), especially in well established international firms (Kubr, 2002), are making some organisations resort to training their own staff to handle challenges that come up within the firm (Clark and Fincham, 2002). But these trainings are still handled by consultants! (Chickillo and Kleiner, 2007) It is obvious that client may not be able to do away with consultants but there is the need for the consultant to optimise the value to clients by being flexible to the client's work environment and collaborate more with the client in order to best serve their needs. Such flexibility and collaboration demands a different approach to project management in consulting firms.

Changes in technology, globalisation and the drift towards information driven economies (Kubr, 2002; Stumpf *et al*, 2002; Kirsch *et al*, 2000; Sharma, 1991) have all contributed to growth in business for PSFs. Moreso, the issue of quality, after the failure of some firms, (Kubr, 2002) has increased client and regulators' demands especially for large PSFs. Stumpf *et al* (2002) also adds that the decrease in large PSFs in recent times (after collapse of Arthur Andersen) has put a lot more pressure on the other big PSFs. Chickillo and Kleiner, (2007) sums it up by describing consultancy work as physically, emotionally and socially demanding. The victim of all these is the staff of PSF, who is constantly under pressure, working long hours (Greiner and Metzger, 1983) to meet targets. PSFs ability to retain the highly qualified staff they recruit, notwithstanding the big salaries (Clark and Fincham, 2002) offered, is therefore a challenge. Such challenges call for a new approach to managing client projects that will free-up staff and give them a good work-life balance, which staff of all types of PSF need.

Greiner and Metzger (1983) identify eight types of PSFs presented in Table 2.3 and mentions that each has some distinguishing features as determined by the market segment to which they serve.

Table 2.3: Type of firm and Market Segment

Type of firm	Market segment
National general management firms	Provide services to meet top management
	challenges – e.g. strategic planning, organisational
	design, management development etc. e.g.
	McKinsey & Company
National CPA [public accountant]	Financial analysis of investments, computer
firms with consulting units	systems design and installation, audit, Accounting
	e.g. [PricewaterhouseCoopers]
Functionally specialised firms	Compensation and human resource, Strategic
	planning, training and management development
	e.g. Boston Consulting Group
Industry specialized firms	Concentrate on a few industries - Utilities, Apparel
	& textiles, Real Estate
Public sector firms	Government contracts for studies of various social
	and economic issues, design and implementation of
	new programs e.g. Charles River Associates
Think tanks	Futuristic studies, novel approaches to problem
	solving, advanced technical advice e.g. The Rand
	Corporation
Regional and local firms	Serves clients located near their offices especially
	with small enterprises
Sole practitioners	Perform consulting assignments on part-time basis.
	Their expertises vary from finance, training etc.
	May include Academics in educational institutions

Summarized from Greiner and Metzger, 1983

It is worthy to note that firms that are classified by Greiner and Metzger as National have an international outlook since they have offices located in several countries as part of their expansion and growth drive (Nachum, 1999).

In summarising how these firms operate, Kubr (2002) indicate that PSF projects involve the following broad processes – Entry, Diagnosis, Action planning, Implementation and Termination. Kubr is however, quick to mention that PSFs may perform either some or all of these processes for specific clients on projects.

Entry: This is where the consultant and client make initial contact. The client decides whether the consultant is the one best suited to perform the task and the PSF also decide whether they are willing to work for the client. At this stage, the terms of reference (ToR) or statement of work is shared with the consultant if it has already been prepared by the client. Otherwise a consultant is contracted to prepare the terms of reference.

Diagnosis: This is described as the problem and purpose definition stage. At this stage, the consultant research more into the issues raised in the terms of reference in order to be satisfied that the project is feasible within the time and budget constraints in the ToR. This demands a lot of data collection and analysis and ends with the firming up of scope and contract. This stage may also require a detailed plan in the proposal, which help in identifying the time needed for the project and fee chargeable.

Action Planning: This stage of consulting process deals with detailed planning of the project. It requires developing possible alternative solutions and presenting project plan to client. Implementation: This is considered at the phase that requires both client and consultant efforts. This stage deals with executing the plan or the alternative that has been agreed with the client as appropriate for the project. There are instances where the client may decide to take up implementation depending on the expertise needed and the alternative selected. This stage demands a lot of flexibility and monitoring in terms of team and procedures. It may also require training client staff in any new methods or systems before the project is finally terminated.

Termination: This is the final stage of any assignment and all assignments go through this stage. It demands evaluating the work done, learning lessons, final reporting and possible follow-up depending on the nature of project and agreement between client and consultant.

Generally, PSFs play a key role in client businesses and provide services to clients at various stages of the client business depending on need and ability of the client to pay for the services. PSFs are becoming crucial to businesses and therefore techniques that will improve on project implementation and management should be very welcomed.

2.8 Project Management in Consulting Firms

Despite the crucial role that consulting firms continue to play in the current business environment (Visscher, 2006; Bloch, 1999; Haywood-Farmer and Nollet, 1994), a review of literature showed that there is less emphasis on the way consulting firms (PSFs in particular) are governed and how they do their work (Grey, 1998). Of the little that is known about PSFs is that they usually operate in highly institutionalised environments such as resorting to methodologies (Stumpf *et al*, 2002), which are accompanied by unique governance and management challenges (Stumpf, 1999). These unique governance and management challenges manifest themselves in the way PSFs do their work, more specifically on assignments undertaken by the firms, since each consulting assignment can be considered to be a unique project in nature (Kipping & Engwell, 2002).

Consulting firms are involved in a variety of assignments depending on their line of focus. Their work is intangible (Alvesson, 2002; Lowendahl, 2000; Greiner and Metzger, 1983) and its classification can be a subject of debate among practitioners and scholars (Chickillo and Kleiner, 2007). However, Cadle and Yeates (2008) state that consultancy and business analysis assignments are projects, even where it can be as simple as giving advice. This is supported by the fact that PSFs are considered as temporary service providers (Kubr, 2002; Lowendahl, 2000; Greiner and Metzger, 1983) whose mandate is to provide unique support over a specific period of time. Nonetheless, it is not uncommon to find PSF work that spans over several months or years (Stumpf et al. 2002) but such relationships are considered temporary to the extent that contracts between the parties are for shorter periods and specific solutions. Nachum (1999:4) supports this view by describing PSF as providing "one time solution to specific client problems". The idea of one time and specific problems, mean PSFs are not included in the standard organisational structure of their clients but considered as temporary organisations. Their works then conform to the definition of projects as "temporary endeavour...to create unique...service" (PMI, 2004:5). Since the services provided by PSFs are customised or adapted to specific client's requirements (Chang and Birkett, 2004), which covers the element of uniqueness in projects. Thus PSF assignments can be considered as projects in terms of support provided to clients. Therefore it can be deduced that consulting firms by their very nature are project based organisations and are not exceptional to new developments in project management.

Chickillo and Kleiner (2007) emphasize the need for consulting firms to adopt new ways of approaching their work in order to experience the growth had happened within the industry in the past. In view of this, the adoption of agile becomes more relevant for consulting firms because according to Cadle and Yeates (2008), estimation, planning and control of assignments in consultancy is sometimes difficult since some clients have a vague scope (do not understand their problem) and are unable to specify their specific requirements. In addition, most consultancy projects are obtained on the basis of a fixed-time and fixed-cost constraints which strongly interfere with how the project will be executed in the face of uncertainties (Hällgren and Wilson, 2008; Steffens *et al*, 2007). In these situations, the consultant will also be constrained by the budget and time scale from the contract. To deal with such challenges, the budget and time scale ought to be fairly flexible (Cadle and Yeates, 2008; Steffens *et al*, 2007) and this is where the adoption of agile project management may be useful.

Although it is normal practice for some consultancy to agree and fix the scope of the project before execution, it must be noted that this may lead to the unforeseen challenges of trying to explain to the client the limitations that may emanate from this arrangement (Kakabadse *et al*, 2006). These limitations may pose issues such as scope creep leading to delays or a narrow scope, which may not result in desired outcome (Cadle and Yeates, 2008). These situations create accusations and counter accusations when project manager try to adjust the scope to meet quality delivery requirements; whilst on the other hand, he may be viewed as being greedy to increase his contract value (Kakabadse *et al*, 2006). Therefore, for some projects it may be necessary to adopt a flexible approach that allows for uncertainties in defining scope at the onset. The need to consider other project management approaches (such as agile) is illuminated by the increasing complexities and uncertainties of client's business, use of technology and stiff global competition (Kubr, 2002) among others that consequently result in project management challenges for PSFs.

There is well documented evidence on TPM being exploited to the benefit of consulting firms, however, little is known about the newly emerging approaches. For instance, Henry (1982) in his study on, 'A look at the strategic planning consulting firms,' mentions that the Boston Consulting Group (BCG), Mckinsey & Co and Arthur D. Little have been running their assignments as structured projects for a long time. Stumpf *et al* (2002) describes PSF's TPM approach to projects by indicating that they are standardizing service offerings through the use of methodologies in their approach to work. Furthermore, the fact that consultancies are expected to ensure stability within teams and establish good relationships with clients by focussing on communication and management skills as well as the project outcome (Chang and Birkett, 2004), shows that traditional project management exists in consulting firms.

Nevertheless, some literature on professional service firms suggest that APM practices may be part and parcel of their project management operations. For example the study carried by Chang and Birkett (2004) on an Australian branch of a large international accounting firm (providing professional accounting and consulting services) details how autonomous and creative top teams are exploited to manage projects in such a professional service firm. They highlight that at a certain level of professionalism, the team members are expected to "manage assignments from start to finish with limited supervision" (pp. 19). This suggests that APM may be applied for certain projects in PSFs because some of its principles are already being applied. In this case, team autonomy and creativity are important elements of APM being employed by this professional service firm. The bottom line, however, is that

project management exists in consulting firms and can be enhanced for their benefit in this rapidly changing business world. Therefore, with the proliferation of consulting firms (Visscher, 2006) and the difficulty in differentiating products or services offered, it is important for PSFs to consider adoption of new project management approaches that can help them to deliver effectively, retain and acquire new clients in a competitive environment (Ferguson, 1996).

In some instances the paradigm shift to APM or a combination with TPM might be essential in transforming how PSFs operate especially when one considers that consultancies are often blamed for being in bad company with management and thus becoming part of the problem instead of the solution (Bloch, 1999). By embracing APM which emphasises on collaboration with the client at all levels this challenge might be eliminated. Using consultancies to carry out projects is also criticised on the basis of employing inexperienced people to run the projects. A strong critique of using consultancies to develop and/or implement projects comes from Bloch (1999:115) who argues that consultancies project the image of "the superman of industry, but all too often they are know-it-alls with little useful experience or knowledge, certainly a lot less than they claim." He is more critical about consultancies' on the job training approach that result in trainees dealing with projects and consequently leading to failure in meeting client requirements. Again, he argues that senior managers may not be in touch with new developments and thus making their skills redundant and obsolete. These challenges, Bloch describes as 'uneasy alliance between theory and practice' (pp. 115). His line of reasoning is that if a company is adequately staffed with creative people who can carry out the consulting projects then there is no need for using consultancies.

On the other hand, Bloch (1999) also admits that there are certain situations where contribution from the consultancy may be valuable especially if real teamwork between consultant and client company is employed. The emphasis is on cooperation with the right people from the client company and not necessarily with management, which some PSFs may already be doing (Stumpf *et al*, 2002). In so doing, he agrees with Chang and Birkett, (2004) and Alvesson, (2002) as well as Kipping & Engwell (2002) who describe PSF as "knowledge intensive firms" (KIF) where the consultant transfers knowledge acquired from one client to another.

Stumpf *et al* (2002) summarizes by asserting that since the projects of consultants are complex and interdisciplinary, they may require a team of professionals either from internal or client sources to work together. The team is disbanded upon completion of work and reassigned to other projects. However, PSFs ability to handle human complexities both within the teams and from the client side is continually challenging. The need for interpersonal skills in managing these project teams is increasingly becoming important for team leaders. Leaders in PSF projects are therefore required to be experts in their fields (Stumpf *et al*, 2002) in order to give the needed guidance and direction to the teams they supervise. The team leaders are expected to demonstrate exceptional technical, leadership, project management and client relationship management skills. These leaders are also the same people required to seek for work for the firm and therefore there is pressure on them to neglect their role as mentors on projects. The need for other approaches to project management for consulting firms is therefore more urgent.

In view of the criticisms, it is necessary for consultancies to reconsider the way they implement their projects and embrace new approaches such as APM, where necessary, to ensure that their services respond appropriately to client expectations, whilst they also meet

their internal obligations. This should be coupled with taking the necessary precaution as suggested by Kipping & Engwell (2002) who opines that the organisation's ability to share information (Knowledge) effectively within the firm (especially large consultancies) is an essential competitive advantage. In addition, rather than the management of tangible factors of production as in other industries (e.g. manufacturing), PSFs are said to be better off managing intellectual capital as its key factor of production (Chang and Birkett, 2004) and such capital should permeate the organisation (Lowendahl, 2000).

2.9 Research Gap

Literature abounds with information on traditional project management theories and application in different industries; however, the same cannot be said with agile project approaches because they are still in their infancy. Literature on APM showed that it performs better under complex and uncertain environment. In addition, the literature review has also shown that there is a dilemma for organisations to choose between traditional and agile approaches to project management (i.e. there is a problem of matching project types with management approach). Literature is silent on what form of challenges consulting firms are likely to face during the transition from TPM to APM. Literature is also inadequate on consulting firms applying agile methodologies, the possibility of using a hybrid approach and how it can be done is rarely mentioned. Last, but not the least, the literature review also indicates that consulting projects have characteristics such as complex or simple depending on the expertise needed to respond to the project needs. However, it was noted that there are no studies regarding the nature of such projects – that is how the consultant categorize them in order to identify an approach to implement the project.

2.10 Chapter Summary

Managing through projects is becoming the order of the day for many organisations because of the benefits associated with it. However, for some organisations it is proving to be difficult because they are spoilt for choice between traditional management approaches and the newly emerging principles such as agile. Both TPM and APM approaches can be beneficial because they are suited to different scenarios. A hybrid approach may be appropriate in some cases but this is still to be explored. The tendency is, however, for organisations to maintain the status quo because of the fear associated with change even where new methods are more promising. Consequently this results in misrepresentation of new project management concepts and piecemeal approaches to their implementation because most managers do not know the importance of matching project type to management approach (Müller and Turner, 2007). This leads to inevitable failures and blames on the new methods and thus affecting their dissemination. Relying on traditional project management approaches alone in the face of high volatility, unclear goals and solutions is suicidal to the organisation. Therefore the desire to effectively manage projects characterised by a high degree of complexity, unpredictability and uncertainty is the main driver for the emergence of agile project management. By investing in agile project management organisations stand to immensely benefit from its adaptability and flexibility if correctly implemented. The dissemination of agile project management in consulting firms is heavily dependent on knowledge generation in the area and management support to avoid implementation challenges.

Literature also showed that professionals and the services they offer through business consulting have arguably filled a gap that managers of business would have found difficult to deal with. Their work has given opportunity to regulators to have a second and independent opinion whilst giving clients the needed support to build their businesses. Consultants have

also become conduits for disseminating knowledge in this knowledge driven business environment whilst at the same time originating business innovation through their work. The road has not been all that rosy for Consultants as some perceive their work as merely cosmetic to the extent that they only tell Corporate Management what they already know in the name of consulting (Bloch, 1999). Notwithstanding, considering the growth the profession has experienced over the years and the proliferation of firms and services in consulting, their contribution to business cannot be discounted. It was also evident from literature that most consultancies rely on project management approaches to fulfil their assignments Going forward, their project management approach to work need to be reviewed in the light of current economic and business trends in order to ensure they continue to give appropriate 'advice and judgement' to their clients, whilst continually upholding the professionalism they have been noted for.

This chapter has provided the justification for the study, identified the research gap, the elements that constitutes both agile and traditional project management. The next chapter focuses on the study area and research methods used in the study.

Chapter 3 Research Methodology

3.1 Introduction

May (1998) opines that research methods are an integral component of social sciences that acts as an avenue for enhancing intellectual development. This is achieved through innovative thinking, meticulous attention to the detail of data gathering and analysis. According Crossan (2003), to effectively address the research questions it is always important to match the nature of research with the methods used to answer them, to avoid disputes and confusion. For this reason, this chapter provides the research context, underpinning philosophy, approach, design and methods used to address the research questions and the associated objective given in chapter 1.

In selecting the overall research methodology for this study a framework of questions suggested by Crotty (1998) and forwarded by (Creswell 2003:4) were taken into account. These guiding questions are mainly concerned with *epistemology* (theory of knowledge embedded in the theoretical perspective that informs research e.g. objectivism and subjectivism), *theoretical perspective* (philosophical stance that lies behind the methodology in question e.g. positivism, interpretivism and critical theory), *methodology* (strategy or plan of action that links methods to outcomes which determines one's choice and use of methods such as surveys, experiments and case studies) and *methods* (i.e. the techniques and procedures that are to be used e.g. questionnaires and interviews). The composition of this chapter will show that this study sought to fulfil the research purpose through an exploratory qualitative approach (research process) that exploits inductive reasoning (research logic) to get applicable outcomes (research findings, conclusions and impact) as mentioned by Bryman and Bell (2007). The chapter first provides a brief description of the research context, underlying philosophy and then outlines the study materials, data collection and analysis methods used for the study.

3.2 Research Context

The study site for this research is PricewaterhouseCoopers (PwC). PwC is one of the largest consulting firms in the world providing industry-focused assurance, tax and advisory services for public and private clients. The firm's annual review report for 2009 indicates that worldwide revenues topped USD 26,171 million. About 163,000 people were also employed within 2009 representing one of the highest within the consulting industry. In 2009, students in UK, China, Poland, Switzerland, Czech Republic and Pan-European countries ranked PwC as best among the Big four consulting firms (PwCglobal annual review, 2009). PwC provided services for 55% of top 500 global firms (Fortune Global 500) in 2009 (ibid). PwC offers diversity in consulting services, which is represented by over 20 industries that benefit from their services. The firm is also global to the extent that member firms are located in all five continents. Staff are also moved to perform services at different locations where their expertises are needed. In 2009, 1,426 new assignments were performed using staff from different locations (ibid). There are three main lines of service that are used in PwC -Assurance, Tax and Advisory to serve all the various industries. The Assurance line of service represents the biggest in terms of both revenue and people followed by Tax and Advisory in that order. These lines of service approach work or projects differently depending on the nature of the project but across geographical regions and in the 757 offices, similar methods are used.

The research unit will be specifically composed of a single case, one of PricewaterhouseCoopers' offices located in Accra, Ghana. The case was chosen on the basis of the researchers' experience and accessibility to information. A more elaborate discussion on the selection of study site is given in section 3.5.2 below.

3.3 Research Philosophy

3.3.1 Nature of Research

In order to choose an appropriate research philosophy it was necessary to understand the nature of the research questions and the objective of the study. The research questions and the purpose of research given in chapter 1 suggested an exploratory study rather than both descriptive and explanatory studies. The research was mainly exploratory because its research questions sought to understand what is happening as well as acquiring new knowledge on agile and traditional project management in a consulting firm through a rigorous assessment of the actual situation on the ground at PwC which is in line with the description of an exploratory research given by Saunders *et al* (2007).

3.3.2 Terminology 'Jungle'

Before delving into the underpinning philosophy for this thesis it is crucial to note that in almost all aspects of qualitative research, different authors use different labels to describe approaches that are almost similar and thus sometimes creating serious confusion as well as disputes within the qualitative research community (Howcroft *et al*, 2004: 331; Gardiner and Thorpe, 1994). This drawback of a 'rose being called by any other name' is acknowledged by a number of scholars among them Lee (2004:5), Creswell (2003:3), May (1998:3), Rubin and Babbie (1997:376) as well as Gardiner and Thorpe (1994). This paradox is well illustrated by Rubin and Babbie (1997:373) who states that, "If you read much of the literature on qualitative inquiry-either reports of qualitative research or texts about how to do it-you are likely to encounter what Lofland and Lofland (1995:6) call a 'terminological jungle.' In this jungle, authors often use different labels for research approaches that can seem awfully similar." Although different terms abound in literature, for this thesis the discussion will not be a philosophical treatise on terminology, but it will be restricted to availing an in-depth knowledge on the philosophical ideas that underpin this research.

3.3.3 Underlying Philosophy

It has been argued that the researcher's assumptions, interests and purposes are mainly responsible for the choice of a particular research philosophy (Taylor and Bogdan, 1998). However, there are so many other factors that are at play when a philosophical choice is made. These among other things include research experience, logistics, capital and accessibility (Crossan, 2003) and these will be briefly mentioned in this thesis. Since the research tradition that one selects is responsible for shaping the nature of the problems perceived, the research questions and any decisions that are made throughout the research process (Saunders *et al*, 2007; Mingers, 2004; Creswell, 2003), it is therefore necessary that the research school for this study is brought to the fore. In order to make a position it was necessary to look at the possible research philosophies.

It is important to note that these alternative research philosophies have been labelled with different names by various scholars. For example, Cohen et al (2000) calls them 'research

lenses' or 'paradigms', Creswell (2003) calls them 'knowledge claims', whilst May (1998) calls them 'schools of thought', Bryman and Bell (2007) call them 'epistemological considerations' and many other names still abound in literature. To avoid confusion in this thesis they will all be regarded as research philosophies or research philosophy. An examination of literature showed that there are mainly two research stances to choose from (Taylor and Bogdan, 1998). These different research philosophies are based on different ontological and epistemological positions i.e. they differ on the basis of their implicit and explicit assumptions (Cohen et al, 2000). At the highest level, the two research philosophies that were identified are positivistic and anti-positivistic. Whilst the positivistic paradigm is regarded as positivism in various circles (Probert, 2004:140; Remenyi et al, 1998:32), the anti-positivistic stance is also named: interpretivism (Bryman and Bell, 2007:17) and Phenomenology (Introna and Ilharco, 2004; Remenyi et al, 1998:34; Taylor and Bogdan, 1998:3; Rubin and Babbie, 1997:376, Dooley, 1995:262; Saunders et al, 1997:72-74). According to both Cohen et al (2000) and Rubin and Babbie (1997) the anti-positivistic stance is mainly composed of phenomenology, ethnomethodology and symbolic interactionism. This leaves phenomenology at a lower level than interpretivism. However, Rubin and Babbie (1997:376) also argue that phenomenology can be taken at a higher (philosophical) level. They state that "Sometimes the more philosophical term, phenomenology, is used to emphasise a focus on people's subjective experiences and interpretations of the world. This type of focus tends to apply to all qualitative inquiry, and therefore the term phenomenology might also be used to convey the philosophical assumptions underlying ethnography, ethnomethodology, or other terms for qualitative inquiry." Based on these considerations, in this thesis the term phenomenology was adopted to represent the anti-positivistic philosophy which was in line with the arguments from its founders (Husserl and Schutz), put forward by Cohen et al (2000). The word was, however. adopted with caution because some scholars use it either as a philosophical underpinning or a method of investigation (Introna and Ilharco, 2004; Giorgi, 1997).

Apart from positivism and phenomenology some scholars (Saunders *et al*, 2007; Cohen *et al*, 2000; Neuman, 2000) offer a third alternative which is composed of a combination of the two major research philosophies. They argue that there are no rigid divisions between the two, such that it is possible to exploit both in a single study. This pragmatic view resulted in what is called Critical Theory which is still relatively and not yet so popular. The Critical/Transformative Theory is rooted in feminist research (e.g. gender and civil rights). According to Neuman (2000:76) Critical Theory is "a critical process of inquiry that goes beyond surface illusions to uncover the real structures in the material world in order to help people change conditions and build a better world for themselves." However, the critical theory dimension was not appropriate for this study because the research questions do not emphasise on criticism and transformation of social relations as advocated for under this dimension (Neuman, 2000). The three possible research stances are illustrated in figure 3.1 below.

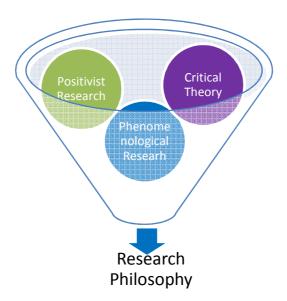


Figure 3.1: Possible Research Philosophies

In order to see the rationale behind the chosen research paradigm it is necessary to understand what the two stances represent.

Positivism

A positivistic stance emanates from physical sciences (e.g. Physics) and it can be described as having the following distinctive characteristics outlined by Saunders *et al* (1997:71).

- A positivist research is deductive (i.e. theory is tested by observation);
- It seeks to explain causal relationships between variables;
- It normally uses quantitative data;
- It employs controls to allow the testing of hypothesis;
- It uses a highly structured methodology to facilitate replication.

According to Neuman (2000) positivistic researchers prefer precise quantitative data and in many cases they employ experiments, surveys and statistics. In addition within the positivistic paradigm, the researcher is an independent and separate observer of events (Dunning-Lewis, 2004). Thus it can be deduced that under the positivistic paradigm the researcher seeks the facts or causes of a social phenomena that externally exert an influence on people with the assumption that an objective reality exists independently from the perceiver (Probert, 2004; Taylor and Bogdan, 1998; Dooley, 1995). Although positivism is one of the most popular research stances because of its structured approach (Neuman, 2000) it is widely criticised for preventing genuine thought and reflection on the actual situations being investigated, its emphasis on quantitative data and theoretical laws as well as its proposition that the past is a guide to the future (Neuman, 2000; Cohen et al, 2000; Probert, 2004). For this thesis, the positivistic stance was rejected on basis that the research questions presented in chapter 1 are exploratory and this does not favour both the deductive and quantitative approaches given under this philosophy. In addition since the objective of the thesis was to find out and understand how and why traditional and agile project management are applied in a consulting firm where no previous theory exist, it was impossible to test the hypothesis as required by the positivistic paradigm. Furthermore, positivism was rejected on the basis that the study dealt with people's experiences and perceptions that cannot be subjected to controls as required by the positivistic approach. Moreover positivism was inappropriate because the aim of the study was to get meanings through people and not to generate laws. To avoid this prohibition on genuine thought and reflection on the actual situations, an alternative philosophy was sought.

Phenomenology

The phenomenological stance has its foundations in philosophy, anthropology and sociology (Graziano and Raulin, 2007; Taylor and Bogdan, 1998; Dooley, 1995; Easterby-Smith *et al*, 1991). According to Remenyi *et al* (1998:34), phenomenology is a "theoretical point of view that advocates the study of direct experience taken at face value; and one which sees behaviour as determined by the phenomena of experience rather than by external, objective and physically described reality." This is supported by Finlay (2008:1) who describes phenomenological attitude as "the process of retaining a wonder and openness to the world while reflexively restraining pre-understandings" in research. Phenomenology can thus be described as a philosophy of human science that seeks to explore and describe phenomena as they present themselves in the lived world in order for the researcher to understand what is happening and its causes (Saunders *et al*, 1997; Creswell 2003). The phenomenological stance is therefore linked to the meanings (perceptions) that research subjects (people) attach to social phenomena in their lived world of experience (Taylor and Bogdan, 1998; Dooley, 1995; Creswell, 2003).

Given the above descriptions any informed choice of the overall research philosophy was made with the aid of various guidelines suggested by many scholars among them are: Creswell (2003), May (1998), Taylor and Bogdan (1998), Saunders *et al* (1997), Dooley (1995) and Easterby-Smith *et al* (1991). A more comprehensive comparison of the two research philosophies is given by Easterby-Smith *et al* (1991:27) also forwarded by Remenyi *et al* (1998:104) as shown in Table 3.1 below.

Table 3.1: Comparison of Research Paradigms

Characteristic	Research Paradigm		
	Positivist	Phenomenological	
Basic Beliefs	The world is external and	The world is socially	
	objective	constructed and subjective	
	Science is value-free	Human interests are the	
		drivers behind science	
	The observer should be	The observer is part of what	
	independent of what is	is observed (i.e. the element	
	observed	of subjectivity).	
Researcher's Tasks	The focus is on facts	The focus is on meanings	
	Seek for causality and	Endeavour to understand	
	fundamental laws	what is happening	
	Formulation and testing of	Idea generation through	
	hypothesis	induction from the gathered	
		data.	
	Reduction of phenomenon to	Looking at the totality of	
	simplest elements	each situation (helicopter	
		view).	
Methods of preference	Making concepts operational	Multiple methods are	
	to ensure that they are	exploited to establish	

Characteristic	Research Paradigm	
	Positivist	Phenomenological
	measurable	different views of
		phenomena
	Taking large samples	Small samples are
		investigated in depth over
		time

Adapted from Easterby-Smith et al, 1991:27

On the basis of the above information and the exploratory nature of the research questions for this study, a phenomenological research paradigm was selected to investigate the subject under inquiry. This research paradigm is more appropriate in that it tends to produce qualitative data (Charmaz, 2006; Hussey and Hussey, 1997), which according to Bryman and Bell (2007) suits well with the case study approach that was employed for this research. In addition the fact that data is rich and subjective (Easterby-Smith *et al*, 1991; Hussey and Hussey, 1997) due to the influence level of the researcher (i.e. observer being part of what is observed) also suits this type of research because the managers interviewed and the researchers were part of the phenomena as a result of the element of subjectivity.

Furthermore phenomenology's emphasis on natural location (i.e. the life world and lived experience) (Creswell, 2003) is appropriate for this research because its setting is an existing consulting firm (PwC) where managers have both existing and previous experience on projects as emphasised by Van Manen (1997:36) that "Lived experience is the starting point and the end point of phenomenological research." Moreover phenomenology's emphasis on an in depth study for a small number of subjects through extensive and prolonged engagement (Creswell, 2003; Remenyi *et al*, 1998) fits well with the case study approach employed in this research. This is so because according Bryman and Bell (2007) a case study gives detailed and intensive analysis of a single phenomenon. The phenomenological research paradigm is also suitable for this study because it allows the researchers to look at the totality of each situation (in this case the organisation) to develop patterns and relationship of meaning (Easterby-Smith *et al*, 1991).

3.3.4 Philosophic Assumptions

In order to firmly choose an appropriate research stance it was also necessary to look at the applicable philosophic assumptions (Crossan, 2003). This is so because all the schools of research (traditions) are associated with various philosophical assumptions depending on how the researcher thinks about or views the world under the given school of thought (Trochim, 2006). The four key philosophic assumptions found in any research at varying degrees are ontology, epistemology, axiology and methodology (Creswell, 2003; Crossan, 2003). Ontology is the philosophic branch that is more concerned with the nature of reality and is said to be the basis of metaphysics (Carr and Kemmis, 1986). Epistemology deals with the nature of knowledge, knowing and beliefs. It can be briefly described as how one comes to know the world or hold certain beliefs. Axiology is associated with the exploration of the roles of values (quality) and it is closely related to aesthetics and ethics. Lastly methodology is a philosophic branch concerned with the methods that researchers employ in a scientific enquiry.

A comprehensive comparison of the available philosophic assumptions for the three different research schools adapted from Carr and Kemmis (1986) is shown in Table 3.2 below.

Table 3.2: Research Traditions and Associated Assumptions

Orientations to	Ontology	Epistemology	Axiological	Methodological
Research	(nature of	(knowledge)	(Role of	(Research
	reality)		values)	strategies)
Positivist Research (Quantitative)	Fixed, stable, observable, measurable	Gained through scientific and experimental research. Knowledge is objective and	Emphasis is on the objective researcher, value free	Descriptive (correlational), causal comparative, and experimental research
Interpretive	Multiple	quantifiable Gained through	Researcher's	Qualitative,
Research (Qualitative, phenomenology, ethnography, case study, grounded theory	realities that are socially constructed by individuals.	understanding the meaning of the process/experience.	subjective values, intuition, and biases are important	phenomenology, ethnography, case study, grounded theory
Critical Research (Critical theory, feminist theory, advocacy research)	Multiple realities that are based on socioeconomic, political, and cultural basis.	Knowledge is generated through ideological critiques of power, privilege, and oppression.	Researchers need to acknowledge their values and biases	Both quantitative and qualitative methods

Source: Carr and Kemmis (1986).

From Table 3.2, it can be seen that a case study approach followed in this research falls under the Interpretive/Phenomenological research stance. In view of the research questions and objectives given in Chapter 1, three major assumptions explained under this research philosophy in Table 3.2 are of particular importance. Firstly, the assumption that multiple realities socially constructed by individuals are possible is fulfilled in the study through the availability of various alternatives of interviewees within PwC. Secondly the endeavour to understand how agile project management and traditional project management are applied in PwC fulfils the epistemological assumption that knowledge is gained through understanding the meaning of the process/experience. This is so because data gathering involve interviewing experienced personnel and that researchers may also apply their experience in the field. Lastly it was important to consider researchers' biases, intuition and subjective values because these have a direct bearing on the final analysis and findings.

Since the objective of this research was about finding if consulting firms are either applying or not applying both traditional and agile project management methodologies as well as what challenges they face and why, as stated in Chapter 1 then the phenomenological research paradigm was found to be the most appropriate. This is in line with the statement by Saunders *et al* (1997:72) which says, "... if you are particularly interested in understanding why something is happening rather than being able to describe what is happening, it may be more appropriate to adopt the phenomenological approach than the positivist." In addition according to Saunders *et al* (2007) one of the main advantages of phenomenology is that it enhances understanding of how and why something is happening. Since the research

questions for this thesis sought to understand how project management was applied in PwC and why, then the phenomenological approach was found to be the most appropriate.

3.4 Research Approaches

The choices for the research approach were mainly concerned with issues to do with empirical or non-empirical, quantitative or qualitative, deductive or inductive and subjective or objective as well as being pragmatic. The research approaches were selected bearing in mind the caution from Saunders *et al* (2007) that these approaches are not better than each other but one might be better suited depending on the research questions and the context. On this basis a mixed approach was adopted for some cases to ensure optimum benefit.

3.4.1 Theoretical/Empirical Research

According to Remenyi *et al* (1998) empirical research is based on, or guided by the results of observation or experiment only whilst theoretical research is said to be hinged on the literature review (i.e. the pre-existing body of knowledge) on the subject matter and the faculties involved. Thus theoretical research is less tangible when compared to empirical research. For this thesis, both the theoretical and empirical approaches were applied, although these two paradigms are sometimes treated as separate and distinct entities. In this thesis this was not the case because both literature and empirical evidence were necessary to obtain a thorough understanding of the subject and to make a satisfactory claim on the findings. This was also in line with the argument put forward by some scholars that it is not possible to be an empiricist without having a thorough understanding of the literature encompassed by the subject matter (ibid). Therefore in this thesis the literature review (non-empirical research) was used to develop the structure and understanding, in order to conduct meaningful empirical research activities. This was inevitable, since the two are intertwined.

3.4.2 Qualitative/Quantitative/Mixed Approach

For this study there were three main elements of inquiry available for choice as stated by Creswell (2003). These are quantitative, qualitative and mixed approaches. This choice was important because it determines the methods of data gathering and analysis (Charmaz, 2006; Strauss and Corbin, 1998). In this study the selection was made by making reference to informed judgement from a number of scholars' 'quantitative-qualitative' debate in relation to research methods. Authorities on the subject include; Crossan (2003), Taylor and Bogdan (1998), Bryman and Bell (2007), Bryman (1999), Hammersley (1999) and Lowhorn (2007).

Quantitative and qualitative approaches are research strategies that are regarded by some authors as distinctive contrasting strategies (Taylor and Bogdan, 1998, Lowhorn, 2007) but others (Bryman and Bell, 2007; Creswell, 2003; Bryman, 1999) argue that they are not mutually antagonistic research processes. Hammersley (1999) goes further to give a strong critique of this qualitative-quantitative divide saying that their distinction is of limited use. However, since the choice made from this dichotomy has a bearing on the methods to be employed and data analysis (Charmaz, 2006) it was necessary to make this somewhat dangerous selection. An understanding of this dichotomy was therefore necessary before any selection was made.

According to Bryman and Bell (2007), quantitative research is a research strategy whose emphasis is on quantification in the collection and analysis of data. It is also characterised by using a deductive approach to link theory and research with more emphasis on theory testing.

Although some disagreements exist (Hammersley, 1999) many authors (Lowhorn, 2007; Bryman and Bell, 2007; Bryman, 1999; Taylor and Bogdan, 1998) seem to agree that quantitative research mainly employs the practices and norms of positivism. In addition the quantitative view of research stresses on the element of objective reality with little emphasis on social reality (which is normally viewed as external).

On the other hand qualitative research is defined as a research strategy that normally puts emphasis on words (meanings) instead of quantification during the collection and analysis of data (Keegan, 2009; Remenyi *et al*, 1998; Bryman and Burgess, 1999). It is mainly characterised by employing an inductive approach when relating theory to research, with an emphasis on theory generation. Qualitative research stresses the need for practice and norms that prefer an emphasis on the ways in which individuals interpret their social world (phenomenology/interpretivism) and not the natural scientific model. An additional characteristic that separates qualitative research from quantitative research is its ontological position which views social reality as a constantly changing and emergent property resulting from the action of individuals (i.e. constructionism).

The selection of the appropriate approach was made with the recognition of distinctive characteristics of both approaches given by Bryman (1999) as shown in Table 3.3 below. According to Bryman and Bell (2007), quantitative and qualitative researches differ in their epistemological and ontological considerations as well as how they link theory and research.

 Table 3.3: Some Differences between Quantitative and Qualitative Research

	Quantitative	Qualitative
Role of qualitative research	Preparatory	Means to exploration of actor's interpretations
Relationship between researcher and subject	Distant	Close
Researcher's stance in relation to subject	Outsider	Insider
Relationship between theory/concepts and research	Confirmation	Emergent
Research strategy	Structured	Unstructured
Scope of findings	Nomothetic	Ideographic
Image of social reality	Static and external to actor	Processual and socially constructed by actor
Nature of data	Hard, reliable	Rich, deep

Source: Bryman (1999)

It can be seen from table 3.3 that there are many differences between the two, with quantitative research being more positivistic and objective whilst the qualitative approach is more phenomenological and subjective. However, it must be noted that many researchers agree that these differences are not 'cast in stone' because the interconnections between the two are not straight forward. This is also in line with Bryman (1999)'s argument that the extent to which quantitative research is guided by theory is questionable because there is always theoretical reasoning that is made at the end of the study. He further argues that quantitative research can also be exploratory and unpredictable. On the other hand, Bryman and Bell (2007) also argue that there is enough evidence on how qualitative research was

used to test instead of generating theories. In addition, according to Creswell (2003), both methods are more suited to certain types of research but they do not exist in isolation.

Faced with the above controversy some scholars (Hammersley, 1999; Gable, 1994) mention the importance of adopting a mixed methods approach as way off getting maximum benefit from both. The mixed methods approach is pragmatic because it employs both qualitative and quantitative approaches in a single research. In this case the problem is said to be more important than the methods because the researchers will be trying to understand the problem from all angles (Creswell, 2003). Apart from overcoming the shortfalls of each method, the mixed methods approach is also said to be advantageous in that it allows the researcher to choose what works at a particular point in time. Nevertheless, the mixed methods approach has its own disadvantages which among other things include the need for more time to collect and analyse data. Thus in selecting the appropriate approach for this thesis a careful consideration was made with reference to the research question and the time that was available for the study.

A quantitative research strategy was rejected on the basis that it mainly follows a deductive approach (which start with theory) which was not possible for this study because there was inadequate information on APM and TPM application in consulting firms to allow for the development of theory first. In addition it was also noted that quantitative researchers are mainly preoccupied with measurement, causality (cause and effect approach), generalisation and replication. However, these cannot be applied to this thesis because data concerning variables was to be simultaneously collected and as such there will be ambiguity of causal influence as postulated by Bryman and Bell (2007). Quantitative approach was also found to be inappropriate because of its emphasis on generalisation of the findings that may not be suitable for this thesis because the results are derived from a specific context (PwC). Furthermore quantitative research strategy was rejected on the basis of its emphasis on replication which might be impossible with this thesis because it dealt with different people's perceptions and views that can rarely be reproduced.

In view of the phenomenological aspect (discussed in the previous section) and the exploratory characteristics of the research questions, a qualitative approach was preferred for this study. This was in agreement with Strauss and Corbin (1998:10-11) who described qualitative research as; "... any type of research that produces findings not arrived at by statistical procedures or other means of quantification. It can refer to research about person's lives, lived experiences, behaviours, emotions and feelings as well as about organisational functioning, social movements, cultural phenomena, and interactions between nations. Some of the data may be quantified as with census or background information about persons or objects studied, but the bulk of the analysis is interpretive." In addition, according to Charmaz (2006) some of the methods used in qualitative approach are case study research, ethnography and action research. Therefore since this research was mainly involved with understanding the case of PwC, then a qualitative approach was found to be suitable. Furthermore the selection of a phenomenological approach under the research philosophy section of this chapter also emphasises the need for a qualitative approach (Carr and Kemmis, 1986; Creswell, 2003).

Qualitative research was also selected on the basis of its steps that are more applicable to this exploratory study as shown in Figure 3.2 below.

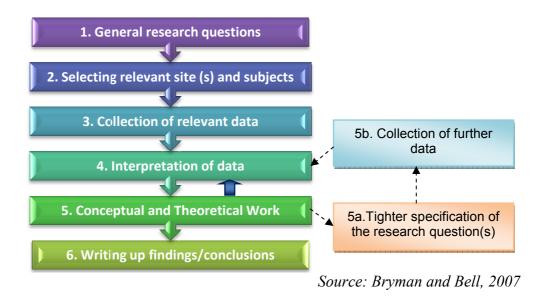


Figure 3.2: An outline of the main steps of qualitative research

Since this thesis started with the generation of general research questions, followed by site selection, collection and interpretation of data it was found to fit well with the outline of qualitative research steps given in Figure 3.2. This was important in order to familiarise with the subject matter and study site, since not much information was available on the application of APM in consulting firms.

Furthermore qualitative research was also preferred based on its preoccupations, given by Bryman (1999) as follows:

- It allows the researcher to see through the eyes of the people studied. Since the researchers had little knowledge on the applicability of APM in consulting firms it was necessary to take an empathetic view of the perceptions given by the interviewees in order to have a deeper understanding of what actually happens in reality. However, this was done with caution, because it can also lead to unnecessary biases such as diverting the focus of the study (Bryman and Bell, 2007).
- It allows researchers to describe and emphasise on the context. This was found to be more appropriate in this thesis because it is context specific and hence the need to give a more detailed account of what goes on within PwC first, so as to develop an understanding of the organisation's activities.
- It emphasises on the process (Change and flux). Since the organisation being studied (PwC) is continuously subjected to change due to its environment, a qualitative approach that acknowledges this was found to be more appropriate for data collection and analysis. This was also essential for one to see how patterns in terms of the application of APM and TPM emerge over time within the organisation.
- Flexibility and limited structure. Qualitative research's flexibility and limited structure also suited this thesis because a reduced influence on how PwC operates was important in order to gather genuine data on TPM and APM application as they exist within the organisation. This approach was also suitable in that it allows some important issues to emerge during the research process, thus allowing the refinement of the somewhat more general initial research questions unlike in rigid and structured

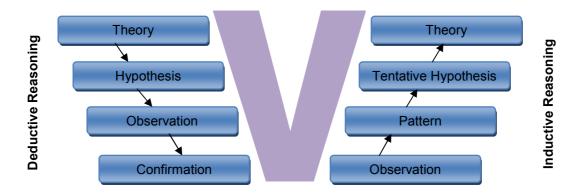
approaches. For this exploratory study this was an essential consideration for thesis development from the more general to the particular.

The main methods of data collection used in this study (i.e. semi-structured interviews, observation, documents, texts, researcher's impressions and reactions) also support the idea of following a qualitative approach (Strauss and Corbin, 1998). A qualitative method of data gathering and analysis was also suitable because the research attempted to understand the nature of the application of TPM and APM in consulting as they occur in the field through people's perceptions and activities which is in agreement with Charmaz (2006)'s propositions on the use of qualitative research. Moreover, according to Strauss and Corbin (1998) qualitative methods can be used to generate information in situations where little is known about subject. For this study, therefore, following a qualitative approach was appropriate because as shown in Chapters 1 and 2 little was known about the application of agile and traditional project management methodologies in consulting firms. This choice of a qualitative approach also fits well with Strauss and Corbin's (ibid) recommendation that the method can be used to collect intricate details about the phenomena (e.g. thought processes) that are normally difficult to obtain when using quantitative methods.

However, just like quantitative research, the qualitative approach has its own disadvantages, which among other things include; being too subjective, difficult to replicate, cannot be generalised and its lack of transparency (Bryman and Bell, 2007). In view of this, the potential contribution of quantitative research was not completely ignored during the development of this thesis and the subsequent analysis of results. This was also in line with the arguments put forward by Hammersley (1999) who mentions that many reasonable combinations (not necessarily derived from the methodological or philosophic commitments) are quite possible depending on the objectives and circumstances of the research. This enlightenment was crucial in order to avoid the obscurity that may result from taking a purely qualitative view.

3.4.3 Linking Theory and Research - Deductive/Inductive

According to Trochim (2006) system of logic is composed of two major logical systems i.e. deductive and inductive methods of reasoning. For this study it was therefore necessary to make a choice between the two because they are important in the analysis of qualitative data. The recognition of this choice is crucial in formulating an appropriate strategy to guide the inquiry in qualitative research design (Saunders *et al*, 2007). An understanding of the two is therefore important before any choice is made for the research. A number of scholars (Graziano and Raulin, 2007; Trochim, 2006; Saunders *et al*, 2007; May, 1998; Taylor and Bogdan, 1998) extensively dealt with the issue of selecting between deductive and inductive reasoning approaches; their valuable contribution to knowledge was used in making an informed choice for this study. Figure 3.3 illustrate the processes involved in these two major logical systems.



Adapted from Trochim, 2006

Figure 3.3: Deductive Research Approach versus Inductive Research Approach

It can be seen from Figure 3.3 that deductive research is a study in which theory and concepts about the topic of interest are developed first and then they are hypothetically tested by empirical observation ending with confirmation (or not) of the originally proposed theories (Graziano and Raulin, 2007; Trochim, 2006; Hussey and Hussey, 1997). According to May (1998) in deductive approach theorising comes before research and this described as 'top-down' approach by Trochim (2006). Deductive reasoning therefore can be seen as moving from the more general to the more specific. Consequently deductive approaches are said to be narrow and important mainly for hypothesis testing and confirmation.

On the other hand as shown in Figure 3.3, inductive research is a study in which one begins with empirical reality (specific observations and measures) and then detects patterns and regularities to devise tentative hypothesis that can be explored to develop some general inferences and/or theories (Hussey and Hussey, 1997; Trochim, 2006). Therefore inductive research is a 'bottom up' approach because it moves from the specific observation to the broader generalisations and theories (ibid). In this case research comes before theory to generate theoretical propositions from the empirical evidence. Inductive approaches are therefore more open-ended and exploratory when compared to deductive approaches.

Since the two approaches have their own merits and demerits, some scholars (May, 1998; Perry, 1998; Trochim, 2006) postulate the need to exploit both in certain studies. This is supported by Perry (1998:789) who states that "... some prior theory can have a pivotal function in the design of the case study and analysis of its data. Pure induction might prevent the researcher from benefiting from existing theory, just as pure deduction might prevent the development of new and useful theory." In view of the above, both deductive and inductive reasoning were considered in this study. However, to enable the development of an appropriate strategy to guide this qualitative research the main logic of reasoning followed in this study is inductive in nature because of its emphasis on an exploratory approach that is applicable in most case studies (Bryman and Bell, 2007). This inductive logic of reasoning is also appropriate because it is open-ended and thus allows for information gathering in the early stages of the study since not much research had been done on the application of agile and traditional project management in consulting firms. Although deductive research was also attractive because it is much quicker (Saunders et al, 2007) given the time constraint under which the thesis was carried out, it was rejected on the basis of the absence of substantial knowledge on the application of both APM and TPM in consulting which made it difficult to initially develop hypotheses for the research questions.

3.4.4 Subjective/Objective

The element of whether to be subjective or objective in approaching this research was also essential for the development of the research design. The choice was made with reference to previous selections (phenomenology, qualitative and inductive). Subjectivity relates to the researcher involvement and influence on the research findings and conclusions whilst objectivity relates to independence of the investigator in the process of gathering empirical evidence (Saunders et al, 2007). These two paradigms result from different ontological (nature of reality) positions. It must be noted that by its very nature the phenomenological paradigm is subjective. This means it is necessary to explore the subjective meanings and monitoring the social actors in order for the researcher to understand these actions. Since the project was interested in getting meanings, subjectivism was therefore important. This inclination was pursued in this thesis to enable the researchers to get the minute details through understanding the subjective reality of the interviewees (managers) in the way they view their day to day activities in project management. However, subjectivity was embraced with caution because of its potential limitations on the research process and the final result. In certain instances therefore an effort was made to be near to objectivity as much as possible. Nevertheless, since subjectivism is central to the phenomenological and qualitative approaches selected for this study, it was incorporated in every aspect of the study.

3.5 Research Design

In this section, the research design is discussed. Research design is defined by Bryman and Bell (2007:39) as "a structure that guides the execution of a research method and analysis of subsequent data". Bryman and Bell goes further to describe research design as a framework used in collecting and analysing data. This framework is described by Saunders *et al* (2007) as a general plan, which they indicate that it serves as a guide in answering the research questions. Since the approach to inquiry for this thesis is qualitative, various qualitative designs were assessed before a specific choice was made. The research design as discussed in this section therefore describes the framework for collecting data, giving clear reasons why a particular design was chosen among other alternatives.

3.5.1 Research design alternatives

Several authors have discussed different research design alternatives, with some giving variations of one alternative or the other. It must be noted that some authors describe research design either as strategy (Saunders *et al*, 2007) or approach/tactics (Remenyi *et al*, 1998), but in this thesis, the discussion of semantics will be ignored and for consistency and simplicity, all will be described as research design. Several literature such as Bryman and Bell, 2007; Saunders *et al*, 2007; Creswell, 2007; Cohen *et al*, 2000; Remenyi *et al*, 1998; Rubin and Barbie, 1997 reveal common qualitative research designs, which are presented in figure 3.4 below.

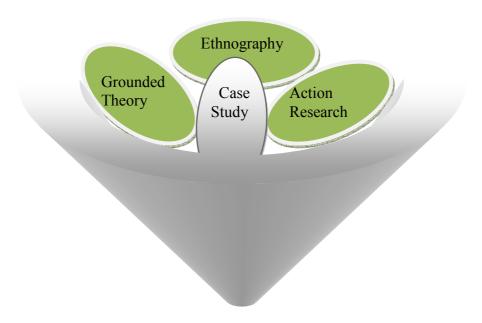


Figure 3.4: Qualitative Research Design Alternatives

These designs would be discussed before a case study design is selected, which seems most appropriate for our research considering the research questions enumerated in chapter 1. This is not to say these are all the alternatives, but there are other less common designs such as Longitudinal research (Bryman and Bell, 2007), Archival research (Saunders *et al*, 2007), Narrative research (Creswell, 2007) and Focus groups (Remenyi *et al*, 1998) among others that are not discussed in this thesis.

Ethnography

This research design can be said to have developed from the field of anthropology (Saunders et al, 2007). Creswell (2007:68) defines ethnography as "a way of studying a culture-sharing group". Saunders et al, 2007 agrees by indicating that it involves research subjects and a description and explanation of their social world, which Crewell (2007:68) describes as "shared and learned patterns of values, behaviours, beliefs and language". Both authors agree that ethnography demands that the researcher is immersed in the social world (Saunders et al, 2007) or day-to-day lives (Creswell, 2007) of the people. This demands a lot of time as the researcher seeks to understand the people and form opinions about them. Ethnography could have been used for this research to the extent that it would have helped to "gain insights about particular context [consulting firms in this case]" (Saunders et al, 2007:143). However, considering the short time available for this research, which Remenyi et al (1998) mentions as one criterion for choosing a research design, ethnography was rejected.

Grounded Theory

Grounded theory was developed by Glaser and Strauss, 1967 (Bryman and Bell, 2007; Remenyi *et al*, 1998). It is defined as "theory that was derived from data, systematically gathered and analysed through the research process" (Strauss and Corbin, 1998:12 cited in Bryman and Bell, 2007:585). The process of gathering and analysing data is iterative and

continues till there is a point of theoretical saturation (Bryman and Bell, 2007; Remenyi *et al*, 1998). That is, where data collection and review no longer adds anything substantially new to the concept being developed. Grounded theory would have fit well with this study, especially answering the first research question, as it facilitates theoretical work in an area not well researched (Bryman and Bell, 2007); in this case, agile project management and consulting firms. It is however criticised by Bryman and Bell (2007) as time consuming since the iterative process of data collection and conceptualisation may not fit well for a study with tight deadline like this one.

Action Research

Action research is defined by Cohen *et al* (2000:226) as a "small-scale intervention in the functioning of the real world and a close examination of the effects of such an intervention". To this end, Remenyi *et al* (1998) maintains that the researcher really gets involved in the organisational situation; such that aside producing knowledge, practical solutions are also found and implemented within the organisation. Action research therefore bridges the gap between practice and theory (Cohen *et al*, 2000). Action research could have been applied to this study; since the involvement of the researchers in the organisation would have given the opportunity of firsthand experience with complexities within the organisation (Cohen *et al*, 2000), while seeking to build theory that could be applied elsewhere. However, as Remenyi *et al* (1998) captures, action research is quite a demanding process and needs some good amount of time as the effects of the intervention is observed. It is therefore not appropriate for a short term master's degree thesis like this one.

3.5.2 Case Study

Case study research design or strategy, which has been selected for this thesis, has been explored by many authors (Bryman and Bell, 2007; Rahim and Baksh, 2003; Woodside and Wilson, 2003; Bryman and Burgers, 1999; Perry, 1998; Gable, 1994; Yin, 1994; Eisenhardt, 1989; Kaplan and Duchon, 1988; Stake, 1978) in different contexts. Though several definitions have been given by most of the authors that have explored case study, Yin (1994) definition seems quite prominent. Yin (1994:13) defines case study as "an empirical inquiry that investigates a contemporary phenomena within its real life context, especially when the boundaries between phenomena and context are not clearly evident". Berg (2004:251) supports this definition and indicates that by studying a phenomenon through case study, one is able to "capture various nuances, patterns, and more latent elements that other research approaches might overlook". This definition is, however, criticised by Woodside and Wilson (2003:493) who explain that case study should be defined rather as "inquiry focusing on describing, understanding, predicting and/or controlling the individual (i.e. process, animal, person, household, organisation, group, industry, culture or nationality)". Though Woodside and Wilson mention that their definition takes a broader perspective than that of Yin, one may argue that Woodside and Wilson are only playing the flute of semantics. The word 'investigate', as used by Yin, can connote elements such as describing, understanding and predicting, which are mentioned in Woodside and Wilson's definition. Though Woodside and Wilson seemed to have 'smuggled' into their definition a dimension of 'controlling the individual', this is one fundamental assumption underlying results or outcomes of research especially from social science. One of the themes of this thesis (Agile project management) fits well with Yin's idea of studying contemporary phenomena, Woodside and Wilson's objection to the notion of 'contemporary', in Yin's definition, is upheld since case study may involve a classical phenomena in an untested context such as studying traditional project management (classical phenomena) in a consulting setting. From the arguments above, this thesis tends to lean towards Yin's definition of case study, of course, with the modification that the phenomena being studied need not necessarily be contemporary. Possibly, the appropriateness of Yin's definition to our context emanate from his background in consulting on organizational processes (the broad theme of the thesis), which Bryman and Burgers (1999) reveal that it influenced his definition to a large extent.

There seem to be consensus among several authors (Bryman and Bell, 2007; Woodside and Wilson, 2003; Bryman and Burgers, 1999; Gable, 1994; Yin, 1994; Eisenhardt, 1989; Stake, 1978) that case study can be applied to either single case or multiple cases. Yin (1994), however, argues further that the application of single case study on previously un-researched area is more appropriate. Remenyi et al (1998:162) also mentions that case study "allows for meaningful exploration of the characteristics of real life events such as managerial process..." Berg (2004) put this view in a more succinct way as he indicates that case study of a single phenomenon helps to uncover how various aspects of the phenomenon interact whilst giving a holistic description and explanation of the interactions. In view of these arguments, a single case study was selected as the research design. This is expected to ensure that the depth and breadth of the subject matter and context are extensively explored since traditional and agile project management approaches have not been researched in the context of consulting firms. Also, since this is an exploratory study, case study will bring out characteristics of the managerial processes, which hitherto, were not known through empirical research. Gable (1994:2) supports this view and makes a summary by indicating that case study "provides the opportunity to ask penetrating questions and to capture the richness of organisational behaviour... [and] understand the nature and complexity of the process taking place". A case study design is therefore seen as most appropriate for this study.

Notwithstanding the support case study has attracted for studies such as this thesis, one main criticism has been its lack of 'generalisability' of conclusions, especially when one organisation or case is studied (Saunders *et al*, 2007; Gable, 1994) as in this instance. However, Stake (1978) wrote extensively to support the issue of generalizing in case study and concluded that case studies are preferred because "they may be epistemologically in harmony with the reader's experience ... a natural basis for generalisation" (pp. 5). He contended that as long as experiential understanding is important for exploratory study, case study will be preferred over other research designs. Yin (1994) takes a different view of 'generalisation' by asserting that generalisation should be to theory (analytic generalisation) rather than population (statistical generalisation) as critics of case study mention. In other words, Yin proposes an initial development of theory, which results of the case study can be generalised to. In this study, the Yin approach to generalisation was adopted. Therefore, contextual and other limitations to this research study, which includes generalisation, have been stated in Chapter 1 in order to get the reader to exercise caution in any adventure to generalise the results to other research settings.

Types of Case Studies

Case study types have been described by various authors. Some authors such as Bryman & Bell (2007) and Saunders *et al* (2007) have described case study based on time horizon and therefore have such descriptors such as longitudinal (over long period of time) or cross-sectional (short period of time). Others such as Berg (2004) and Yin (1994) identify the types of case study based on nature of inquiry and have descriptors such as exploratory,

explanatory or descriptive. However, the more detailed and diverse types of case study is what can be found in Jensen and Rodgers (2001:237-239) cited in Berg (2004). They indicate the following types of case study:

Snapshot case study: It studies one research entity at a point in time. It is detailed and objective. Saunders et al (2007) describe it as cross-sectional case study and mentions that it is conducted over a short period of time.

Longitudinal case study: Study of one research entity at multiple points in time. Saunders et al (2007) describe it as diary perspective and mentions that it is done over a long period of time whilst studying change and development over that period.

Pre-post case study: It also studies one research entity at two time periods. The periods should be separated by a critical event, which is an occurrence that is expected to have a significant effect on the case.

Patchwork case studies: Deals with multiple case studies of the same research entity using other types of case studies-snapshot, longitudinal, pre-post.

Comparative case studies: Multiple case studies of multiple research entities. The purpose is to undertake a cross-unit comparison.

This thesis was conducted based on the snapshot type of case study. This is because the time available for the study is relatively short whilst the study demands a detailed approach to understand the application of APM and TPM and appropriately answer the research questions.

Selection of case study organisation

The selection of case study organisation was motivated by Creswell (2007), who uses an approach he calls "purposeful maximal sampling" (pp. 75). Creswell mentions that in selecting the organisation or case, there should be possibilities of seeing different perspectives of the problem, process or event from the case. This is described by Perry (1998) as information rich cases, which he asserts is fundamental to any strategy used in selecting cases. Creswell maintains that cases may also be selected for their ordinariness, unusual circumstances or accessibility. The case study organisation – PricewaterhouseCoopers – was selected in view of its diversity in service offerings. This gives the possibility of studying how these different service lines (consulting departments) approach their work and whether the processes differ from one to another; hence giving different perspectives of application of traditional and agile project management in the same firm. Since PwC has several offices in different countries, the office in Ghana was selected among the various options. This was informed mainly by the issue of accessibility since one of the researchers had previously worked in the Ghana office of PwC. This is particularly important as it helped in obtaining approval from the company's management and understandability of the data collected; hence quality analysis of that data.

3.6 Data Sampling

Data sampling in this research involved the approach used in selecting people within the case organisation for data collection. Data sampling can be done in two basic ways – probability sampling and non-probability sampling. Probability sampling approaches include simple

random sampling, systematic sampling, stratified sampling, cluster sampling and multi-stage sampling (Remenyi *et al* 1998; Rubin and Babbie, 1997). Remenyi *et al* (1998) asserts that probability sampling is the domain of the positivist, whilst non-probability sampling is that of the phenomenologist. This research has phenomenologist underpinnings and probability sampling would not be appropriate; it would therefore not be discussed any further. Non-probability data sampling method has been selected for this thesis and would be discussed subsequently.

3.6.1 Non-probability Sampling

Non-probability sampling methods include Purposive or Judgemental sampling, Quota sampling, reliance on available subjects (convenience sampling) and snowball sampling (Rubin and Babbie, 1997). In view of the purpose of the study and to ensure that data is obtained from different service lines of PwC-Ghana, Purposive or Judgemental sampling was utilised in selecting the persons involved in the case study. This selection was based on Rubin and Babbie's (1997) advice that knowledge of the population (organisation) is important when embarking on the use of such sampling method. The researchers therefore relied on a former employee's (one of the researchers) knowledge of the organisation to select eight (8) senior managers as key informants for the case study. The eight senior managers represented a range of persons in key positions in the various service lines of PwC-Ghana, who were knowledgeable enough to give different perspectives as well as useful insights into the research issues.

3.7 Data Collection Method

Data collection methods for case study can be from several sources. However, Yin (1994) identifies six of such sources as direct observation, participant-observation, archival records, documentation, physical artefacts and interviews. These sources are described as methods for gathering data or empirical evidence to support findings from the research (Remenyi et al., 1998). The data collection methods are also classified either as primary or secondary depending on how the evidence was made available. Remenyi et al. (1998) describes primary sources of data as those that require the researcher to deal directly with the originator of the evidence. Secondary data is one that is already published or available indirectly. In other words, the researcher was not the direct recipient or beneficiary of the data. The interview method was selected as the primary data collection source. This is in line with Yin's (1994:85) advice that interviews are essential sources of evidence for case studies since interviews with "well informed respondents [as in this case study] can provide insights into a situation". Moreso, interviews provide focus directly on the thesis topic (Yin, 1994) and help to address the research questions. A secondary source of data collection was the use of documentation available from the case firm. This was used also to corroborate and augment information gathered through interviews (Yin, 1994). The use of multiple data collection methods was in line with Remenyi's (1998) advice that it improves the reliability and validity of the data through an approach called triangulation.

Triangulation is a method of collecting data from multiple sources, which ensures that bias view from just a single source is minimised (Remenyi *et al*, 1998). Yin (1994) quotes four types of triangulation from Patton (1987), which is described below; giving how they were each achieved in the research.

Data triangulation: Minimises bias from using source of collecting data. The interview conducted involved staff from different service lines in PwC.

Investigator triangulation: Removes bias from the researcher. The two researchers undertaking the study were present for all interviews and, as much as possible, reviewed documents together to come to an agreement.

Theory triangulation: Deals with bias from using single or narrow theoretical background. Literature for theory building were from different sources including those that criticised key articles supporting TPM, APM and consulting firms.

Methodological triangulation: Deals with bias from using a single data method. Interviews were used as the primary source of data. However, documentation was also obtained to corroborate and augment the interviews. Where possible, and to a lesser extent, the data was also corroborated by one of the research partners who had worked for the firm.

3.7.1 Interviews

Interviews are becoming frequently used as a data collection method, especially for case study research design (Remenyi *et al*, 1998). Interviews may be open-ended, focused or personal (Remenyi *et al*, 1998). The *focused* or *semi-structured* (Saunders *et al*, 2007) type of interview was adopted in view of the short period of time that the interviewees had to spare for the research (Remenyi *et al*, 1998). Therefore, a set of questions were written to guide the interview process even though the questions were largely open-ended and the process informal. This was done in order to give as much room as possible to accommodate the respondent's ideas. For purposes of triangulation, the questions were discussed with the thesis supervisor before they were applied to the interview. The guide questions were also piloted with the first interviewee, after which some questions were refined. The set of questions asked during the interview had the following objectives:

- To determine what approach various service lines used in their consulting work;
- To understand the extent of planning that goes into the approach to work identified;
- To examine the extent of team (including leadership) involvement in each of the approaches to work and how communication is done;
- To determine the extent of client involvement in the approach to work; and
- To understand the challenges faced in the approach to work and determine effectiveness of measures used to address those challenges.

The interview process was as follows:

- Permission was sought from one of the Partners in the firm, having sent the thesis proposal and a synopsis of the interview process.
- Interview date and time were then booked with the persons involved.
- The interview began with exchange of pleasantries and introduction of thesis partners, whilst the interviewee also introduced him/her self briefly followed by a brief description of the service line.
- The interviews ended with a question on the interviewees' knowledge of APM.

The language barriers were minor as English is the official language in Ghana. In addition, the interviewees are senior managers, who have communicated on several occasions with high profile personnel in English. The interviews were conducted within an hour each through telephone.

Telephone interview: This approach has been accepted over time as a very convenient and cost effective way of interviewing with increase in telephone reach and when distance between interviewer and interviewee is a challenge (Rubin and Babbie, 1997). Remenyi et al (1998) also advices that questions for telephone interview should be simple, brief and focused. Since the interviewee, who are staff of PricewaterhouseCoopers-Ghana, were farther away from Umea in Sweden (interviewers' abode at the time of the research), telephone interview was deemed most appropriate. The guide questions were also concise and about eleven (11) in total (see appendix 2), though sub-questions and interjections increased the total questions asked for each interview. In line with Remenyi et al's (1998) advice, the interviewee's were convinced that the interview will be short, which the interviewers lived up to. Moreover, the interviewees were comfortable with the genuineness of the study since one of their former co-workers was involved. During interviews, skills of interviewing such as clarification, active listening, paraphrasing (Mansourian, 2008) were employed by interviewers in order to obtain relevant information for answering the research questions. The interviewers also made notes during the interview in order to interact more with the data before further analysis (Mansourian, 2008) was made. The telephone interviews were recorded and transcribed, as Remenyi et al (1998) advice, in order to aid analysis of the data.

3.8 Ethical Considerations

The ethical considerations that guided this study were those presented by Rubin and Babbie (1997). They indicated that participation in research should:

- be voluntary and informed consent;
- ensure there is *no harm to participants*;
- be anonymous and confidential; and
- not deceive subjects.

Voluntary and informed consent: Having secured the approval of Management of PwC-Ghana, the eight senior managers involved in the interviews were sent e-mails with the research proposal and guide questions in order to secure their consent and voluntary participation. Though some gave their consent by e-mails, others agreed through phone conversations.

No harm to participants: It was agreed that results of the thesis will be shared with the interviewees in order for them to confirm that it accurately reflects the views they shared during the interview and no part of it embarrass them or injures the reputation of their firm.

Anonymous and confidential: It was agreed that the names of the interviewees would not be mentioned in the research results. This will ensure that comments are not directly attributable to individuals in order to guard against confidentiality issues with their employers. Furthermore, names of clients and projects were avoided during the interview process in order to respect confidentiality clauses signed with clients. This also helped to remove some bias since interviewees were comfortable discussing the issues. Since one of the researchers worked with the firm previously, he was privy to some data not necessarily given by the interviewees. Such data was confirmed with PwC-Ghana before it was included in the study in order to avoid any breach of confidentiality.

Deceive subjects: In order to avoid deception of identity, the researchers introduced themselves before each interview and before asking the interviewees to also introduce themselves. The proposal was also sent to each of them in order to give them a clear

understanding of the objectives of the research. The final thesis will also be shared with each of them so that they can confirm if the results reflect their views accurately.

3.9 Research Process

The research began in August 2009 with theoretical data gathering. The interviews were conducted between 10th November and 27th November 2009. The analysis and other elements were done afterwards before it was finalised and presented on 7th January 2010. The senior managers that were interviewed were from the lines of service in PwC-Ghana specified in Table 3.4

Table 3.4: Interviewees and their LoS

Line of Service (LoS)	Number of interviewees	Interviewees coded ID
Assurance	4	AB, CD, EF, GH
Tax	2	IJ, KL
Advisory	2	MN, OP

3.10 Analysis and presentation of results

The interviews conducted and other information gathered were analysed in order to present general characteristics and how they relate to the phenomena (TPM and APM) discussed in Chapter 2. In performing the analysis, the past experience of one of the researchers helped in understanding the various documents and how they differ from one LoS to another. Notwithstanding, clarifications were sought on conclusions in order to confirm understanding and remove any bias.

As Yin (1994) advises, patterns were identified from the interviews before they were related to the phenomena. Since the study assumes that TPM is already being applied in consulting firms, the key issue was to empirically identify how it is applied and whether it fits all projects and the challenges encountered. The five characteristics of TPM identified in Chapter 2 were discussed one after the other in relation to information obtained from each of the LoS in PwC-Ghana. Based on the tenability of the characteristics on particular projects, a conclusion is drawn on the application of TPM on those particular projects.

On the other hand, since there is little evidence pointing to the application of APM in consulting firms, in line with the *patterns matching* identified by Yin (1994), the analysis sought to identify elements of APM (as per theoretical discussion in Chapter 2) in the approach consulting firms use in their work. The analysis discusses the extent to which the APM practices in section 2.4.6 are prevalent in the various LoS and projects of PwC-Ghana under general headings such as planning, iterations, teams, leadership and client involvement. In order to draw conclusions, information from interviews and documents were matched against the elements of APM before concluding whether those elements are prevalent in the various LoS or projects undertaken by PwC-Ghana. There was also an attempt to assess whether the challenges encountered with TPM could be dealt with using APM practices.

A summary is then presented, which shows how the elements of TPM and APM are manifested in the various LoS and project types in PwC-Ghana. The findings and analysis of the research is presented in the next chapter.

Chapter 4 Findings and Analysis

4.1 Introduction

This section of the research deals with findings from the interviews conducted in PwC as well as discussions on literature vis-à-vis what pertains in the case study organisation – PwC. The section begins with a profile of PwC after which patterns from the interview are enumerated to give a vivid account of how projects are managed in PwC. The discussion part will assess characteristics of TPM and APM as well as project management challenges that were identified in PwC. An elaborate review of the extent to which the research questions were answered concludes this chapter.

4.2 Profile of PricewaterhouseCoopers (PwC)

PricewaterhouseCoopers is a global professional service organisation, resulting from the world-wide merger of Price Waterhouse and Coopers & Lybrand, which took effect from 1 July 1998. PricewaterhouseCoopers has brought together 163,000 of the best brains in 151 countries in the world to become the world's largest business advisory and consulting organisation that aims at helping clients build value, manage risk and improve performance.

The firm is one of the few global professional services organisations with a unified global leadership structure which allows the investment and deployment of resources where they are needed. As an organisation with global consistency, the firm is focused on capturing national and cultural differences and adapting their services to clients' local customs and work styles. This approach enables PwC to be an integrated organisation which emphasises a combination of responsiveness to the local environment in which the firms practises and a worldwide standard of excellence of service achieved through inter-change of Partners and staff, the final review of admissions of persons into the partnerships, dissemination of technical material, co-ordination of technical and manpower policies and related quality control procedures. In this process, PwC global firm provides support to the country organisations in achieving their long-term strategies, without being responsible for their management. In view of this, processes, work standards and patterns are quite uniform in all 757 member offices worldwide, including PwC-Ghana.

4.3 Findings from Interviews and Documents

In PwC, each assignment or job is considered as a project and executed as such; sometimes with resources from different countries and service lines forming the team(s). Teams within projects are mobilised at the beginning of assignments and structured with different levels of authority. Teams also interact in various ways with client staff at different levels of the project. The client staff involvement depends on the type of assignment and the approach that guides projects in the Line of Service. There are three main Lines of Service (LoS) in PwC; these are Assurance, Tax and Advisory offering services to diverse industries and clients. Within these LoS, members of the PwC network of firms in each country adapt to the economic environment and respond to client needs accordingly. Therefore, sub LoS or departments and services discussed in this section will be what pertain in PwC-Ghana specific; though they may be similar to other PwC offices in other countries. The office in

Ghana also serves countries such as Liberia, Sierra Leone and Gambia, where PwC has no offices yet.

4.3.1 Assurance

The assurance line of service (LoS) in PwC-Ghana serves various industries, which include consumer and industrial products (CIPS); Energy, Utilities and Mining; Financial Services and Government & Public sector. In terms of the clientele served, the line of service differentiates between private sector and public sector in view of differences in client needs, employees' skills and processes needed to provide solutions to them. For private sector clients, the LoS provides services described as Statutory Audit/other assurance and Systems & Process Assurance. For public sector clients, the LoS provides Public sector audit and Fund Management assurance services. Figure 4.1 below gives an overview of the assurance line of service in terms of the services provided to the different category of clients identified.

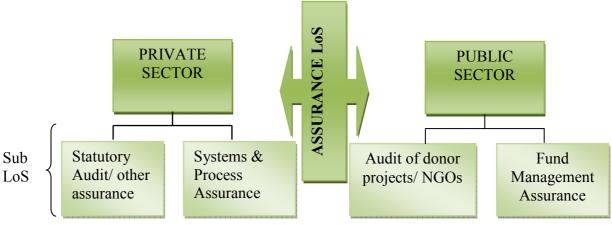


Figure 4.1: Overview of Assurance line of service

Summarized by authors

Notwithstanding the different services and clientele served, the sub LoS interact a lot sharing expertise, staff and at times common training though their approach to work somewhat differ. The approach to work in each of these sub LoS may differ based on the requirements of a particular assignment or project but there are a lot of similarities as well.

PwC implement consultancy projects according to work plan stages such as Planning, Execution and Completion. In terms of specifics, audit assignments are generally guided by either International or National Standards, which include International Standards on Auditing (ISA) and Ghana Auditing Standards (GAS). In order to ensure that all assignments conform to quality standards set by PwC, all assignments also follow procedures set out in the PwC methodology. They include planning requirements, detailed execution tasks for areas of financial statements covered in the audit, completion and documentation among others. The methodology for any assignment conforms to the auditing Standards applicable for the particular project. Non-audit assurance projects are also guided by International Standards on Assurance Engagement (ISAE). The Standards have requirements for planning and completion, which can be described as high level since, unlike audit, non-audit assurance projects take different forms. There are, however, no tasks specified in the Standards for execution, since it is very much assignment specific. Notwithstanding, teams and sometimes the contracting party specify tasks to be performed, which may be tested through a pilot project before it is rolled out fully for the whole project depending on the complexity and size

of project. In view of the Standards that set the tone for the projects, planning for these assignments is very detailed and includes daily tasks for team members. The duration of the projects are also fixed during the planning stage and are usually adhered to. Modifications to the plans are also very minimal. In terms of classification, projects are generally structured even where they are considered complex or simple. In line with this a complex project is usually identified in terms of its big size, value, risks, stakeholders and where the firm has not performed executed such project before. Notwithstanding, risks are identified and detailed tasks are planned for execution.

Within the Assurance LoS, there are still other assignments or projects that may not yield to detailed task definitions. These are classified as 'executory projects' and usually involve systems and process change management handled by the Systems and Process Assurance (SPA) sub LoS. For such projects, the tasks are hands-on and require continuous reviews to ensure the objectives set out are being achieved. Such projects are also divided into phases and each phase will have a complete work plan with segments such as planning, execution and completion. The work plans for each phase are however, agreed at the beginning of the whole assignment and adjusted as the project unfolds. For such assignments, the agreed work plans are reviewed at the beginning of each phase. All team members are involved in planning for every assignment.

Teams are constant feature within projects at PwC. The teams for assurance projects are selected and booked for the period of the assignment through a database called 'RETAIN'. The database has information on staff availability and access is given to assignment managers, who book staff on projects they handle. Staff have little choice as to which project they would like to be involved in since expertise are not so high and all are conversant with the methodology training. Team roles are set out at the beginning of assignments during planning meetings, which all team members are required to attend. Team roles for audit and other assurance projects normally have the structure in Table 4.1 below.

Table 4.1: Assurance Team structure, roles and responsibilities

Project Leadership

	Position/ Role	Responsibilities			
	Quality Review Quality review of deliverables. Clearance of				
	Partner (QPR)	and critical matters, concurrence review of technical			
		matters.			
	Engagement (Project)	To provide strategic direction to the team, review of			
	Leader (EL)	deliverables and work. Top level client relationship			
		management			
	Project Manager (PM)	Overall project management, planning, review of			
		deliverables, liaison with the team, Middle level client			
		relationship management, review of work done by team			
		leader.			
Field team leader Preparation of deliverables, execution of high					
		detailed review of work by other team members.			
	Team member(s)	Execution of fieldwork			

Summarized by authors

Though the structure in Table 4.1 may be standard, there are variations depending on the size of the assignment and whether special expertises are needed. It must be noted that the Quality Review role is not used for all projects. During the planning meeting, teams also agree other

meetings during the execution stage, which are described as 'Taking Stock' meetings. The number of 'taking stock' meetings held for any particular assignment depends on the extent to which detailed tasks have been tried and tested. Where the details are very much known and tested, fewer taking stock meetings are held than where the details are not tested though they may be known. Where there are modifications to original plan, they are communicated to team members at taking stock meetings or placed in a database referred to as 'client file', where all team members can access. At the end of any assignment, a 'Debrief' meeting is held to discuss and document lessons learnt from the assignment, which is rolled forward to subsequent assignments.

From Table 4.1 above, Project leadership, which is made up of the QRP, EL and PM are not involved in the field work but provide direction in terms of quality, strategy and project management. There are, however, instances that require the EL and/or PM to be on the field to review work when the assignment has some complexities. Project Leadership involvement in assurance projects usually includes attendance at planning meetings, consultations on areas that need their advice, and review of work for quality and conformity to technical underpinnings. Their involvement in 'Executory' projects are however more intense as the PM at times will have to be on the field on a daily basis, whiles weekly meetings are held with EL and sometimes QRP to ensure objectives are being achieved. Such meetings may involve the client.

For assurance LoS projects, involvement of client is done at various stages with different objectives. At the planning stage, the client is required to provide information such as documents that are necessary for effective planning. The planning document is also communicated to the client to obtain their concurrence on issues such as timing and availability of staff for responding to queries. During the execution stage, which normally takes place at the client office, the client staff are required to avail themselves for questioning and also provide information as and when needed. During the completion stage, issues are discussed and draft reports sent to clients for their comments before the report is finalised. For projects that PwC is implementing change, at least a client staff is involved in the assignment as a de-facto member of the team. The client staff, aside providing information, gives direct input into the process usually based on experience with the system or process being modified and how it is likely to impact on the organisation and their work. The client staff is also required to study the system, become a 'champion' and eventually a trainer to other staff. In summary, client involvement in assurance projects is limited to provision of information and concurring on the report of the assignment with the exception of executory projects where clients get involved in all aspects of the project.

4.3.2 Tax

The Tax LoS includes two distinct sub LoS or departments: tax services and company administration services. The Tax Service LoS provides direct tax services to companies and individuals including withholding tax management and indirect tax products such as VAT and Customs & Excise Duty. The Tax service sub LoS also provide tax compliance assessments, tax planning advise, tax health checks/audits, client representation and negotiations for and on behalf of our clients in both direct and indirect taxes. The other sub LoS – company administration provide consulting services such as company secretarial services; Immigration services; Share registrar services; Start-up advisory services; Act as local managers and process agents to external companies; Registration of corporate bodies;

and Advising on corporate compliance matters among others. The Tax LoS serves clients from various industries.

In view of the diversity of service offerings in the Tax LoS, the approach to each assignment may be very different from the other though across industries and clientele, there will be similarities. Unlike the Assurance LoS, where Standards guide their approach to each project, the Tax LoS is guided largely by Tax laws and regulations applicable within the jurisdiction of operations of the client at any point in time. The laws and regulations give guidance, boundaries and used as basis for output of work rather than procedures to be followed in planning, executing or completing the consultancy project. Projects within the Tax LoS are therefore classified into 'structured' and 'unstructured'. The 'structured' are considered less complex or simple projects, where the firm and team have extensive experience executing similar projects, even if they were in other industries. In such projects, the approach is likely to follow written or unwritten procedures applied successfully to similar projects, with some modifications. On the other hand, 'unstructured projects' are those that are considered more complex because no similar assignment has been done in the past; the scope is big and not very clear; the project value is big and skills set needed is multi-disciplinary involving staff from different LoS, backgrounds and even countries. For unstructured projects, extensive planning is done to understand the work that needs to be done and be assured that PwC is in a position to provide quality service to the client. However, execution tasks may not be planned to a very low level of detail since that may not be known fully. The detailed tasks rather evolve in the course of executing the project. Such assignments therefore involve very experienced teams for execution, unlike structured projects where the bar of experienced may be lowered since the tasks have been tried, tested and proven. Generally, most Tax projects are not structured but the structure evolves in a formal or informal manner as similar projects are executed over time.

Teams for Tax LoS projects are mobilised after senior members of the sub LoS involved meet to match assignment scope and skills set to staff. This may involve drawing on the skills and expertise of staff in other LoS. It must be noted that the structure of teams largely take the same form as assurance LoS shown in Table 4.1 above. However, in view of the high level of expertise needed for most unstructured projects, persons who usually would be a Project Manager can be used as a field team leader and the roles cascade down accordingly. For structured projects teams are assigned from the beginning and may stay the same throughout the project life cycle. However, teams for unstructured projects are changed anytime during the project when it is deemed necessary – as and when different expertise are needed. Unlike structured projects, unstructured projects team meetings are more often and may not have any particular format. Any team member can call for a team meeting, which may be done either formally or informally depending on the issues to be discussed.

The role of project leadership is similar to assurance LoS except that Project Managers are very much involved to the extent of day-to-day work where the projects are unstructured. More so, Engagement Leaders perform more periodic reviews for unstructured projects to ensure that the team is on course to achieve agreed objectives and within scope. The EL also communicates more with client management to ensure that the field team's work is in line with their expectations.

Clients' involvement in structured projects is similar to assurance projects, where they are regarded as information providers during planning and execution before giving their consent to reports at completion. Clients for unstructured projects, on the other hand, take a deeper

dive into the project. During the planning stage, clients are involved in various meetings and research to help define the scope. The clients may then become information providers during the execution stage but will still be in constant communication with team members to ensure the objectives are being achieved and the scope has not shifted. The completion stage demands that the report is discussed with the client to ensure that the client's expectations have been met. There is always room to do a bit more where client expectations have not been met but any extra time input is discussed and charged accordingly.

4.3.3 Advisory

The Advisory LoS of PwC seems to have the most diversity of service offerings. The LoS is made up of two sub LoS namely Deals and Performance Improvement. The Deals sub LoS also has two divisions – Corporate Finance/ Transaction and Business Recovery. Performance Improvement also maintains three divisions namely Human Resource Management, Performance Improvement and Training & Development. The structure and services offered have been presented in Figure 4.2 below.

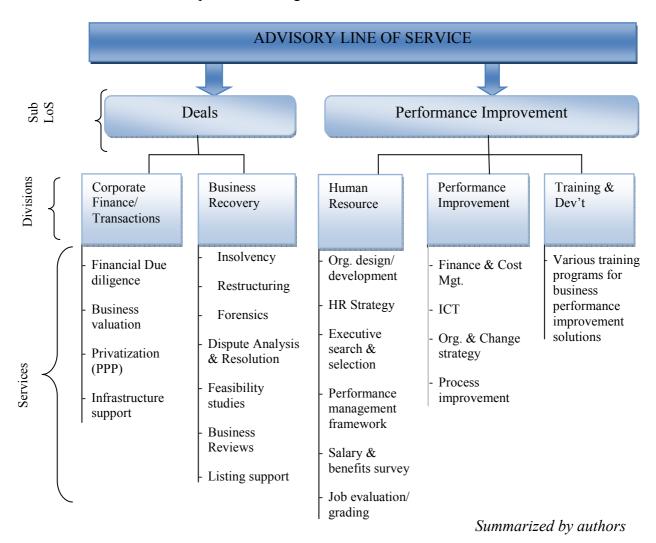


Figure 4.2: Overview of Advisory Line of Service

The advisory LoS, unlike assurance and tax, does not have Standards or Laws that guide their approach to work. In view of this, every project is considered complex such that the process

of accepting assignments from clients even goes through quite some rigorous reviews involving senior management personnel. Projects handled by this LoS may also be undertaken for a long period of time except Human resource and Training sub LoS, which are usually completed within shorter periods. It must be mentioned that with the exception of planning, which PwC has certain requirements that need to be followed, each project in this LoS is considered unique and planned, executed and completed as the team deems appropriate; of course, with a lot of guidance from senior team leadership.

Planning of these assignments follow PwC requirements and include initial research to understand the nature and scope of the assignment through a process called 'scoping'. Having understood the nature of the assignment and scope, the expertise needed to execute is mobilised, which may involve collaborating with individuals and at times other organisations outside PwC considered as associates. The planning process also includes breaking down the project into various deliverables with different teams managing sizeable deliverables according to their expertise. Based on the estimated time that each project team budgets and the areas to be covered for the sub projects, the whole assignment is costed and a planning document prepared for the whole team.

Some projects are considered less complex to the extent that the team or PwC might have performed previous assignments in the past. To this end, those projects may be 'structured' in line with procedures that were applied on previous assignments. Others may also be considered more complex to the extent that the such assignments have never been performed, time needed to execute is long, the risks involved is very high, the value is high and the stakeholders (including expertise) are several. These may be described as 'unstructured projects' and the approach to implementation would be very much project-specific, though trends can be drawn. For less complex assignments, execution may involve the team that undertook the previous assignment but the procedures followed would still be reviewed and assessed against the current scope and client requirements. However, execution of more complex assignments may involve an initial process described as 'situation analyses'. This process is required to confirm the understanding that the team had and confirm that the scope is exactly what is described in the contract document. The planning of such assignments may involve several interactions with other experts and the client. In fact, for some of those more complex assignments, the processes of planning and execution may not be so distinct and therefore it becomes difficult to identify where planning ends and where execution begins.

The completion process of advisory projects involves reporting on outcomes and work done based on terms of reference agreed at the beginning of the assignment with the client and shared with the team. Generally, most advisory projects are less structured but as the same assignment is performed for a number of times, a structure develops, which may be accepted as the norm for similar undertaking similar projects, with some modifications.

The team of consultants involved in most advisory projects, are considered experts in their professions. This is because the nature of assignments involves a lot of reliance on experience, deep knowledge of the area and interactions with high profile personnel of the client and contracting organisation. The team structure and roles are similar to that presented in Table 4.1 for assurance projects except that different designations are used as in Table 4.2 below:

Table 4.2: Comparison of Assurance and Advisory project roles

Assurance	Advisory
Engagement Leader	Project Director
Engagement Manager	Project Manager
Field Team leader	Project team leader

This structure emphasises the project nature of Advisory assignments, where the leader has a role to steer the project to a successful end. Teams for advisory projects have several meetings during the planning and execution stages. In fact, some projects demand weekly progress meetings, where extent of work done, work needed to be done and challenges among others are discussed. There is also an almost daily interaction among team members in order to share experiences, whilst ensuring that all aspects of the project are being addressed. All these progress meetings involve leadership of the projects. The completion stage also includes a meeting where experiences are shared. Such a meeting may lead to trainings for team members when some key skills of some of the expertise are identified as necessary for other team members.

Project leadership for advisory assignments are so interactive such that it may be difficult to identify leaders from team members during the period of the project. This is because client solutions are constantly being sought for various areas of the project and it is done through interaction of various expertises. Unlike assurance and some tax projects, Project leadership for advisory are very much involved in the tasks execution by constantly reviewing the work to ensure that the right solutions are being given to clients. They are involved in the weekly progress meetings aside some number of hours allocated for them to review each project on a weekly basis. They are also constantly engaged with senior client staff giving them progress of the assignment and managing any expectation gaps to ensure the outcomes, at least, meet their expectations.

Client involvement in advisory projects is quite like that of tax unstructured projects, except that complexities in some of the assignments may limit the extent of involvement of the clients. During planning, the team vigorously engages the client in defining the scope of the assignment, which will help estimate the time input and fee charged. It is known that some clients may only have a faint idea of what they are asking from the consultants, it is important to involve the client at the initial stage in order to appropriately define the scope and ensure that resources needed to execute the project are made available as and when needed. For instance, forensic services may involve several inquiries with different stakeholders and therefore the client needs to make the relevant personnel available as and when needed. Involvement of client in execution of advisory projects also takes different forms. Ideally, the teams would like to engage the client constantly to ensure that objectives have not changed and outcomes are in line with client expectations. However, there are occasions where clients are only interested in outcomes of the project and may not even have the expertise to understand the work being undertaken. In such situations, the clients are considered as information sources. On the other hand, clients that are interested in the process are included as members of progress meetings in order to ensure that the extent of work is likely to meet their expectations. Generally, Advisory projects involve a lot of interactions with the client and their involvement is sought when possible.

4.4 Analysis

This section will discuss the research questions as proposed in Chapter 1. The section considers the specific questions one after the other utilising the theory from Chapter 2 as well as information collated from interviews conducted and documents in the case firm – PwC-Ghana. The discussions adopt the characteristics of TPM and APM and analyses the extent to which those elements exist in projects managed by the various LoS in PwC-Ghana. In the end, challenges identified under TPM would be set against APM and assessed whether APM can help solve them.

4.4.1 How is TPM applied in consulting firms?

Rigid and Detailed Planning

From the literature in Chapter 2, TPM was identified as an approach that is characterised by rigid and detailed planning (Shenhar, 2004). This is because there is an assumption that risks and projects' environments are adequately predictable and can be managed through detailed planning (Weinstein, 2009). Therefore, under TPM, planning is very detailed and there are tasks that attempt to capture all elements of the project. This gives little room for changes in the plan during the execution of the project (Augustine and Woodcock, 2008) as the tasks are sequenced in a rigid way to ensure that all the risks identified are addressed accordingly and the project is delivered on time. In PwC, the assurance LoS carries out audit and assurance projects only after predicting the risks involved in the project and assessing how those risks can be mitigated. Specific steps are then enumerated to deal with each of the risks within set timelines. One of the interviewees from the assurance LoS, EF noted that

"In PwC, assignments are mainly risk-based and the risk level,... determines the experience level of team members that should be put on any project".

CD, another interviewee from assurance adds that

"One of the key elements of every audit and non-audit assignment is risk assessment, which the Standards emphasize. ... In PwC assurance, our system pulls out the risks that should be addressed after putting in some information about the client ... and steps are created within the client file to address those risks".

From these, assurance projects can be said to follow a rigid and detailed planning, which stems from the Standards that guide the planning, execution and completion of projects. There is also a lot of emphasis on predicting risks and the project environment since that is one of the factors that determine even the team's experience mix.

EF also mentioned that

"Teams follow plans as much as possible but there is some minimum flexibility in terms of details".

This gives an idea of the strict adherence to plans agreed at the beginning of the project. In other words, any change should go through some review and structured approach before it is accepted. There is also strict sequencing of activities and tasks in the assurance LoS, especially for audit and similar assurance assignments where a pattern is followed for every project. The pattern involves the procedures described simplistically in Figure 4.3 below.

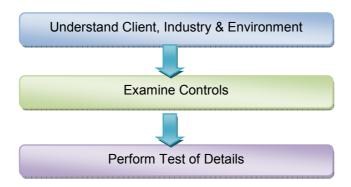


Figure 4.3: Simplistic sequence of procedures followed for audit

Project planning for Tax LoS projects also involves assessment and prediction of risks. Planning of projects involves assessing risks associated mainly with the client. This is because the firm seeks to protect its reputation and brand name by trying to disassociate itself from clients involved in unacceptable business and practices. As IJ, an interviewee in the Tax LoS, identifies

"... you start with all the client acceptance procedures and making sure that you do all the due diligence on the client before you accept to engage with them".

Having done the risk assessment and accepted the client, structured projects tend to involve a bit of detailed planning since procedures may have been tried and tested on previous projects, the risks are quite known and team members generally have experience handling such risks.

The Advisory LoS, like Tax also performs risk assessment on the client, after which some detailed planning is performed for structured projects. Planning in Advisory may take a lot more time in view of the complexities involved in understanding and meeting client needs. OP, from Advisory indicates that

"So if it is a simple assignment, you would sequence the tasks quite clearly because it sets the mind up for the client and for the team and that way you are able to minimize any surprises"

MN, from Advisory LoS, also gives another dimension of the risk assessment during planning, which involves ensuring that the project is within the expertise of PwC. He asserts that

"We are very risk sensitive and averse and these are the major drivers. We wouldn't do or we wouldn't want to do any job that we don't have competences, that is our number one priority and therefore we only do jobs based on our products codes".

It should be noted that, though Tax and Advisory adopt detailed planning for structured projects, they differ from Assurance to the extent that their teams may modify the plan and sequence of tasks as they deem appropriate. In other words, there is no rigidity in terms of the details of the plan and teams can modify through a brainstorming session without necessarily resorting to previous methodologies.

It can be inferred that though all the Lines of Service perform planning, which includes risk assessment of clients and projects, Assurance LoS goes a step further by detailing and sequencing procedures, which are rigidly followed in addressing the risks identified. Structured projects under Tax and Advisory also detail and sequence tasks but there is a lot of flexibility since the plan can be modified at any time.

Task Breakdown and Allocation

Traditional Project Management also involves breaking down elements of the project into various deliverables and detailed tasks (Weinstein, 2009; Augustine and Woodcock, 2008). These tasks are then assigned to various team members to execute. As Fitsilis (2008) and Rodrigues & Bowers (1996) identify, the tasks are based on historical documentation of procedures or steps that have been applied to previous similar projects. These tasks are identified early in the project and allocated to team members to be responsible. In the assurance LoS, a database of tasks is maintained for various areas and industry of audit and other assurance projects. Every project involves a breakdown of various parts of the work into steps or tasks incorporated into a system-based client file known as "MyClient". The tasks are assigned to various team members, as per their availability in RETAIN, including those who will review the particular step and mark off to ensure the task has been performed as required. CD confirms that in view of the intangibility of output of projects,

"MyClient file helps give a trace of how audit work was done and what informed the opinion reached, for example, on financial statements...It is evidence for future reference and regulators who would want to check on say quality of work at PwC".

EF, then adds that team members have responsibility for areas assigned to them during planning.

In the Tax LoS of PwC, structured projects, which are also classified as simple may be said to follow the dictates of task breakdown and allocation. It must be noted that task, in this sense, does not refer to daily activities as in the case of assurance; they are more high-level. On these simple projects, team members are expected to have some experience dealing with similar issues. Therefore, as IJ, an interviewee in the Tax LoS, identifies

"...then most of the things that we do will not be a matter of written procedure but they will become a matter of practice. What do we do to be able to deliver on this project?"

IJ explains that instead of written procedures or tasks, areas of the work identified, for example income tax issues, are rather given to those with prior experience in that area to deal with it and report. In the report however, they are required to write the procedures they applied in coming up with the findings reported. Hence, the emphasis on work practices rather than upfront written tasks. Also, in the Tax LoS, the basis for the task allocation is historical knowledge from the team member rather than historical documentation of procedures. Notwithstanding, the laws and tax regulations give guidance to the team member, in terms of what to do and how to report.

Projects considered as 'less complex' under Advisory LoS also follow quite the same trend as structured projects under Tax. For these less complex projects, OP, from Advisory, describes it as

"...an assignment that is done repeatedly so the issues that would be encountered are already known because the same team has done that for, say, 3 years".

OP's statement implies that though tasks are not written down, there is a lot of reliance on team members who are expected to know the issues involved or procedures to follow in the project because of their past experience.

Another element of breaking down and allocating tasks, which is shared by Saladis and Kerzner (2009) and all the LoS of PwC-Ghana has to do with costing of projects. This happens usually at the proposal stage or pre-planning stages of the assignment. All the three LoS acknowledge that there is some level of breaking down tasks and assigning to team members in order to appropriately determine the time, skills mix, and cost of projects; usually for those that are lump sum. Though the assurance LoS follows up on this task breakdown and execute the project accordingly, the others - Tax and Advisory only use the breakdown for project budgeting purposes.

Though task breakdown and allocation is an integral part of projects under the Assurance LoS, Tax and Advisory uses it for costing projects and whilst they also rely on unwritten task breakdown based on experience of staff and work practices during implementation of structured projects.

Employees can be changed

Elliot (2008) argues that under TPM, employees can be changed without having to change the functionality or alter the environment of the project. This stems from the detailed task planning approach (Shenhar, 2004) that TPM entails, which gives room for any employee with the minimum required understanding to perform the task. That is, under TPM, employees are only required to perform tasks as planned and there is minimal need for any modification from the employee (Conforto and Amaral, 2008; Fitsilis, 2008). The employees are seen as executors of planned tasks rather than influencing tasks that need to be performed. They can therefore be changed at any time during the project implementation and it only requires them to indicate where they are with the tasks and another can take it up from there without much disruption.

Generally in PwC, employees work on projects to the end; since several consulting projects are of shorter duration – less than six months - though some projects, especially in Advisory, can go on for a couple of years. In view of this, the hypothetical question was, which LoS will be able to change staff without much difficulty and no disruption to the project? The assurance LoS indicated that staff may be moved from one project to another but since the work done would have all been documented in 'MyClient' file, with level of completion of tasks, another staff can take it up from there without much difficulty. GH, of assurance LoS mentions that

"...unless a client insist on us using a staff included in a proposal, all team members are dispensable on any project since your work can be done by other staff at the same level ...after all, you've all been trained in PwC methodology".

The Tax and Advisory LoS tend to have similar stance on changes in project team members. Tax and Advisory indicate that since project execution rely very much on the team member, a change of that team member can be very difficult since it may disrupt project implementation. Also, clients usually insist on using team members that were included in

proposal for jobs, since they indicate that the job was given to the firm in view of the experience the team members possess rather than the firm's methodology. However, in view of the inability of any organisation to pin down staff, especially professional staff who are quite mobile, measures are adopted by these LoS to deal with situations. IJ from Tax hint that

"So as manager, I am also supposed to be handling staff. You are supposed to be their coach".

This process of coaching as IJ mentioned includes building various expertises in several staff in order to avoid overdependence on one or few staff. MN from Advisory supports IJ's view with the assertion that

"...we don't joke! We invest a lot in continuous training and therefore we would have the resources to deliver and in terms of resource allocation and deployment. Because the assumption is that every member has the same attributes and quality because of our very rigorous training programs".

It can be inferred that though assurance LoS can change employees or team members without much disruption to projects, Tax and Advisory would have a lot of disruption to projects should staff be changed and have therefore adopted measures to deal with such situations should change become inevitable.

Command and Control Leadership

Traditional Project Management is also said to be characterised by a leadership approach described as command and control. Kerzner (2003) identifies that project managers that adopt TPM tend to possess all powers to change or make decisions on the project. Augustine and Woodcock (2008) call such project leaders 'taskmasters', where they see their job as setting the plan out with all the details and afterwards ensuring that the plan is followed to the letter. Any team member that would like to make modifications should revert to the taskmaster (Conforto and Amaral, 2008; Fitsilis, 2008). EF sets the tone well for such an approach in the assurance LoS by saying that

"For any changes, it should be agreed with the Engagement Manager. At times, the Engagement Leader should also be involved if it is a substantial change".

This clearly supposes a 'revert to leadership' kind of approach as noted by Augustine and Woodcock (2008). Team members are not empowered to make decisions on changes to plans but suggestions, which can only be accepted based on approval from project leadership. Also the role of the Engagement Leader, who is seen as a 'planner and reviewer for quality' also give credence to this view in the assurance LoS as CD notes that

"The Partner [Engagement Leader] is owner of the file and has responsibility to sign off the financial statements and other reports...He is required by the firm's procedures to be present at planning meetings...he is also supposed to sign off the file after reviewing..."

The comment below from GH of assurance, in respect of purpose of meetings during the execution stage of the project also supports this view.

"...as I said periodically we meet, we call something taking stock meeting where we take stock to see whether what we planned is on course or we have deviated..."

This comment means taking stock meetings are also used to 'control' the team and ensure there are no deviations from plan.

In the Tax LoS, IJ tends to have captured succinctly how leadership handles teams on a project. He said

"One important thing about the jobs that we do here is that most of the jobs are very entrepreneurial in nature..."

This means that staff are seen as leaders of projects and required to implement in the best way possible. This notwithstanding, project leadership review decisions made by teams and ensure that the firm is not exposed in any way.

For the Advisory LoS, meetings during project execution are called progress meetings. MN's comments below indicate that such meetings are less hierarchical and far from the control objective as identified in Assurance.

"Therefore when it comes to our internal meetings, it is like colleagues reporting and briefing".

Just like Tax, Project Directors also review decisions made by team members ensuring they are sound and in line with the quality standards of the firm.

It can therefore be noted that though assurance follows a typical command and control type of leadership, Tax and Advisory tend to have a less hierarchical approach with team members empowered to make decisions on projects.

Pre-determined Stakeholder requirements

TPM requirements indicate that project requirements should be documented before the beginning of every project (Leybourne, 2009; Cadle and Yeates 2008; PMI, 2004). This demands that project implementers agree on those requirements with the project owners and adhere to the requirements strictly (Aguanno, 2004).

The assurance LoS approach to work tends to focus more on client requirements such as issuing opinion on set of information, procedures or financial statements as the case may be. Such requirements are always indicated in the letter of engagement and therefore tasks are detailed to ensure the work done forms the basis of the opinion. Proposal from the assurance LoS to clients usually have a statement stating that

"The Terms of Reference (ToR) for the provision of ... services to [client name] are generally clear and comprehensive. We appreciate the overall objective..."

This statement is followed by issues that are deemed ambiguous, which are discussed prior to signing contracts. This statement and the discussions set the tone for the assignment and indicate that the project requirements are clear and will be implemented as such. In other words, assurance assignments follow a strict determination of requirements before

commencement of projects and adherence to those requirements throughout the project implementation.

For structured under Tax and Advisory LoS, requirements are also pre-determined before commencement. This is because such projects have been executed for sometime and therefore the requirements are clear. KL, from Tax, testifies that

"...you have to be definite on the scope of the assignment so that at the end of the day you will be able to satisfy the requirement of the client"

However, for Tax and Advisory, there is no strict adherence to these requirements, since there is always a presumption that clients do not know exactly what they want; as cautioned by Cadle and Yeates (2008). Therefore, there is constant engagement with the client to continuously assess that their requirements have not changed in order to avoid misunderstanding customer requirements (Tomaszewski and Berander, 2008; Atkinson *et al*, 2006). KL confirms that they usually have meetings with clients to clarify scope and expectations constantly because

"Sometimes these clients themselves give you an assignment when they themselves don't know what they need".

MN, from Advisory, concurs by indicating that

"What we do is that sometimes the client may come and tell you that you have done so much but given the issues you have raised, we want you to consider these other factors as well... When these things happen, what we also do is to again go into reengagement..."

It can be seen that assurance LoS projects generally entail pre-determination of client requirements, which is strictly adhered. On the other hand, though Tax and Advisory determine stakeholder requirements at the beginning, they constantly engage the client in the course of project implementation to ensure that the requirements have not changed.

4.4.2 Is APM applied in consulting firms? If so, how?

Advance planning considers uncertainties

In the works of Griffiths (2007) and Hewson, (2006), planning of APM projects considers uncertainties as a key component. Alleman, (2005) emphasises that APM incorporates change into planning and adapts to the environment as the project progresses. In PwC, assurance projects rather emphasize on rigid planning with detailed tasks assigned to team members. Tasks are planned based on risks identified ahead of time and as EF emphasises, there is minimal modifications to the plan.

On the other hand, Tax and Advisory LoS tend to incorporate some level of uncertainty into their planning. For structured projects under these LoS, the extent of uncertainties is minimal and therefore planning is a bit detailed than unstructured projects. Structured projects for these LoS tend to rely very much on experience of staff, who might have been involved in similar projects. These staff tend to influence the plan for these projects by incorporating procedures and tasks that were workable in previous projects though this is quite minimal as complexities differ very much from project to project. IJ, from Tax who calls structured projects 'simple' indicates that

"At least we have an initial meeting explaining the issues for me to also understand their [team members] understanding of the issues that are being raised. If there are no key areas then we agree on the kind of research material we need in order to be able to respond. So that's a fairly simple project"

These LoS tend to approach planning of unstructured projects quite differently because such projects may be new to the firm and team members may not have had any prior experience. On such projects, since risks evolve as the project progresses, the plans are heavily adaptive as risks emerge and client requirements also change in line with what Owen *et al* (2006) and Larman (2004) describe. IJ, from Tax indicates such projects are complex and

"Where we have a complex type of job ... the area they are talking about might not be very clear to us at that time when we are discussing, so we enter in there to the client side before we get to know the outcome. And say ok these are the further issues that we want to look at".

This means unstructured projects are not fully planned upfront but the team adapts as uncertainties are identified in the course of the work. OP from Advisory describes such assignments as

"...an assignment where you know that you are almost going to open a Pandora's Box and anything could jump at you" as a way of emphasising the uncertainties and adaptation that is incorporated into planning for unstructured project.

It can be concluded that advance planning of Assurance projects assumes the environment is fixed to some extent, whereas Tax and Advisory considers the environment as uncertain and therefore the plan is flexible enough to adapt as the project progresses.

Project features as iterations

The implementation of projects as an iterative process is one key element of APM emphasised by authors such as Sauer and Reich (2009) and Hass (2007). Hass indicates that APM approaches implement projects by dividing into features, with each feature exhibiting stages of a project such as planning, execution and completion as in the case of consulting firms. Tests are performed (Hass, 2007) and value assessed (Cadle and Yeates, 2008) for each feature and lessons learned (Larman, 2004, Hass, 2007) before moving on to the next feature. These ensure each feature gives the level of quality desired (Owen *et al*, 2006); avoiding end of project surprises. The assurance LoS implements assurance projects as a whole by planning from beginning to the end with the assumption that the risks and project environment are predictable with some degree of certainty. This is because projects are required to follow specific guidelines traceable to the deliverable.

In terms of iterations, Tax and Advisory LoS also tend to implement structured projects in quite the same way as Assurance. Though structured projects in these LoS rely very much on the experience of team members, each project is considered as a whole rather than implemented by features or phases. This is because such projects are known with some level of certainty and the firm has some experience ensuring optimum value is given to clients.

On the other hand, unstructured projects tend to adopt feature driven approach since the firm may lack experience for such projects and the event of anything going wrong, when the project is far advanced would be very costly in terms of time and money as Aguanno (2004) notes. In view of this, unstructured projects are usually divided into phases as a way of managing complexities, cost and learning before moving on; in order to give optimum value to clients. However, it must be noted that initial planning is performed in a framework manner for the whole project and reviewed at each phase. This is because such framework planning approach is deemed more efficient as senior personnel brought together to support the planning can be used all at once. OP gives an example that in planning for such assignments

"...you may have 2 Partners sitting in the planning meeting with a senior manager and some other key team members, the whole day or sometimes 2 days. Compared to a planning meeting that lasts a couple of hours. Maybe that assignment is an assignment that is done repeatedly so the issues that would be encountered are already known"

Iterations, which are considered as phases for a consulting assignment, are used very much by Tax and Advisory LoS for unstructured assignments rather than Assurance, which usually adopts a structured approach to projects.

Autonomous Teams

APM approaches advocate that teams should be autonomous (Owen *et al*, 2006; Elliot, 2008; Weinstein, 2009) with effective communication (Hewson, 2006; Hass, 2007; Augustine and Woodcock, 2008). This is because the team members are considered highly skilled and involved in the project as stakeholders helping to bring value to clients. Augustine *et al* (2005) adds that such teams should have simple rules, employ an open system of sharing information, whilst being dynamic in adapting (Hass, 2007) to the environment as necessary. For assurance projects, as indicated earlier, the teams are highly controlled to ensure they conform to the detailed planning. Team meetings and consultations are required to be documented in the database for trails and work done requires detailed documentation among others. Assurance teams are also less experienced and follow strict structures set out in terms of making changes to the plan in the course of the assignment.

On the other hand, Tax and Advisory teams are highly experienced. In fact, in PwC-Ghana, graduates employed for the Tax and Advisory LoS are made to acquire, at least, one year of experience in the Assurance LoS before being transferred. Teams in Tax and Advisory work very much on their own, which IJ describes in this statement

"...most of the jobs are very entrepreneurial in nature. When it gets into your hands you need to run with it and make sure that it's executed"

Tax and Advisory LoS teams also have less hierarchy and shares information in very informal ways, which is in line with what Augustine *et al* (2005) describe as necessary for team learning in APM. For instance, MN describes team members as colleagues and indicates that team meetings are considered as

"...colleagues reporting and briefing"

There are also a lot of informal interactions and team are very transparent in sharing challenges on their areas with other team members.

In terms of the way teams work within PwC, it can be seen that Assurance adopts a more formal approach with rules, documentation and control. Tax and Advisory LoS, on the other hand, tend to allow team members more lee-way.

Visionary and flexible leadership

Agile requires that project leadership gives the vision and continuously monitor the vision, whilst adapting as the project progresses (Augustine *et al*, 2005). This means, instead of command and control under TPM, project leadership collaborates more with team members (Hass, 2007; Hewson, 2006) to ensure that objectives are achieved. In terms of hands on activities, Augustine and Woodcock (2008) advices that the leadership set direction; establish simple and generative rules; and encourage constant feedback and adaptation. The nature of assurance projects, which emphasizes structure in view of the Standards followed in execution, does not lend itself to such type of leadership. Assurance projects plan detailed tasks upfront and all team members are expected to follow the plan with minimal modifications, which requires approval from leadership.

Tax and Advisory LoS, on the other hand adopts a system where the project leaders, comprising the Project Director and Project Manager are involved with the team, facilitating discussions and team learning in a very collaborative manner. Project leadership empowers team members (Augustine and Woodcock, 2008) to make decisions on the field, which are ratified through reviews. Such reviews ensure that the project is continuously adapting to client expectations and the changing environment. MN emphasises the extent of leadership involvement by saying that

"We have quality reviews ... At our level, what we do is that for every assignment we have one Partner [Director] who is in charge of risks management and quality. He will come in, in the course of an assignment and review even so often"

The word 'often' emphasizes the informal nature of interactions between the Project Director and the team and the fact that hierarchy is broken down as much as possible. This also ensures that decisions of these autonomous teams are ratified in time. KL also describes the role of the project leader for Tax LoS in a way that succinctly captures the view of Augustine and Woodcock (2008). He asserts that the project leader

"...tries to get feedback, he also knows the scope of work in order to do the quality review. So if I take the project leader, he is one who actually supervises and monitors everything"

The discussion above means that project leadership for Assurance LoS tends to be less flexible, whilst those of Tax and Advisory are more flexible, encourage team ingenuity and continuously monitor progress.

Extensive client involvement

On the client or service owner side, Highsmith (2008) and Schuh (2005) advice that there is the need to involve the owner of the service in an extensive manner in order to ensure that value derived from the project are in line with their expectations. Hass (2007) indicates that such involvement demands co-locating key team members and client to ensure effective communication, coordination and interaction.

It needs to be emphasized that for all LoS, projects are generally implemented from the client/ end user's premises. However, from the assurance LoS point of view, in order to give unbiased opinion and also to preserve the firm's integrity, there is the need for greater independence of the consultant and therefore client involvement is limited to providing information as and when needed.

Tax and Advisory projects rather take a slightly different approach where no assurance opinion is sought. For structured projects, client involvement is very much like that of assurance, where clients are considered as information providers; except that some complexities may demand that the client gets involved a bit more. This is because team members are quite familiar with issues such as scope and usually tasks to be performed under structured assignments. For unstructured assignments, the situation may be quite different such that the client may even designate one or more staff to be part of the consulting team as a way of clarifying various issues in the course of the project implementation, in order to ensure that the client's expectations are being articulated on a continuous basis. In other cases, KL mentions that deep involvement is done to avoid the situation below.

"...from the client side... some of them don't even know what they want so for the unstructured side you may deliver this report and at the end of the day they will tell you that this is not what we wanted meanwhile you have spent a lot of time in doing this work".

When such situations are identified, there are lots of discussions with the client at the initial stages of the project to clarify the scope and identify their expectations. These discussions continue at various stages of the project and may take formal dimensions as identified by MN below.

"We also have progress meetings with the client and we look at what we said we are going to do based on the time scales and report to them where we are and what remains outside"

From the forgoing, it can be seen that the nature of assurance projects limits client involvement whilst structured projects under Tax and Advisory do not also require extensive client involvement. However, unstructured projects under Tax and Advisory tend to involve the client extensively at the beginning and during project implementation in order to appropriately define the scope and capture their expectations on an on-going basis.

Executory projects

These projects have been singled out for discussion in view of its unique nature and the fact that it cuts across all the three LoS in PwC. These are projects that are implemented as an ongoing process. In order to implement such projects, the consultant becomes a quasi-staff of the client and assumes responsibility for dealing with challenges that may come up during the process of implementation. MN of Advisory mentions that with such projects

"...you are doing the actual work; therefore every problem is on your back"

Such projects may take between couple of months to years depending on the nature and size. Such projects make the consultant an implementer of solutions rather than just diagnosing or giving recommendations. The implementation of executory projects usually includes staff of the client firm embedded in the project team, which is normally headed by the consulting firm. In PwC, all the three LoS encounter such projects but the approach to implementation

takes about the same form. In the assurance LoS, examples of such projects include business and information system or processes changes, accounting system implementation etc. In the Tax LoS, executory projects include acting as local managers and process agents to external companies and client representation and negotiations whereas Insolvency projects such as liquidation and receivership characterise advisory executory projects.

In line with the assertion by Griffiths (2007), the planning for executory projects considers uncertainties as an important element. In view of this, planning is less detailed and may demand key human elements such as finding staff with problem solving and interpersonal skills.

Such projects are also very much feature driven as the whole assignment is broken down into various elements. Any feature that is completed is tested or confirmed with the client to ensure that value generated is in line with client expectations before the next is tackled. The project team also have meetings and discussions more frequently to ensure that lessons learnt are shared on an on-going process as Hass (2007) advises. That is, such projects take the form of iterations (Hass, 2007) where one feature is completed, tested and lessons learnt before moving to the next. AB from assurance confirms this by stating that

"...we need to break it down into phases because then you need their [client] buy in at various stages because they have to accept that change"

In view of the nature of such projects, there are lots of interactions between the team as processes and procedures unfold gradually. In line with Griffiths (2007), such uncertain and complex assignments demand highly skilled employees with simple rules (Augustine *et al*, 2005). The team members on such projects are usually considered experts with extensive experience in what they do. They are left very much on their own to work and interact with their colleagues in very informal ways.

The leadership of such projects are seen mostly as motivators as they ensure that team morale is high and the team members are on course to provide the needed value to the client. They encourage learning within the team and also learn themselves as the project progresses. As IJ of Tax identifies

"...there are some complexities in the assignment that even the Partner has no clue so we all have to discuss and at times consult others"

The client is also very much involved in such projects in order to ensure that their expectations are being met at any point in time. Even though AB identifies that

"...it can be in phases but it can be so technical that the client has no clue what you are doing"

He still agrees that their involvement is crucial to the extent that

"...it is not so much of a shock at the end of it".

4.4.3 Can APM practices be used in consulting firms to solve TPM challenges?

EF, from Assurance LoS, where projects are mostly structured and yield to TPM characteristics mentions that some projects that are complex due to its big size (geographical and team) and also the firm may not have performed such an assignment before. He indicates that one key problem with such projects using TPM is that

"Plans, as you know, are only assumed. Those plans may differ from what pertains on the field. These are therefore issues of uncertainties"

This is one key issue that APM sets out to address as indicated by Griffiths (2007). Project environments may demand incorporating uncertainties such that tasks are not planned as fixed but rather incorporates some level of adaptability especially when the project is complex and has not been done before.

Another challenge identified from approaching project implementation in a rigid and structured manner in line with TPM as EF identifies is that

"There is also an issue of timing, which may not go according to plan. This affects staff availability as they may have been booked for other assignments"

This is a typical problem with TPM since tasks are allocated to team members, who are expected to perform the tasks within a certain period of time. Those team members are therefore booked on other projects after that time. Therefore, any overrun in terms of time have repercussions for subsequent assignments, which may go on and on.

The issue of timing overrun may be quite challenging to deal with even under APM, since consulting firms' revenue is based on their ability to maximize the use of staff time. Notwithstanding, APM practices emphasize on involvement of client and therefore under situations where there are time overrun, clients under APM approach would be more willing to pay for such overruns since they are involved in the project implementation and therefore have first hand understanding of what might have caused the overrun. However, for lump sum consulting projects, the client may be less willing to pay any extra amount.

Another issue identified by EF in the above statement is *staff availability*. This issue demands a careful assessment of staff needs and matching them against projects. Such issues may occur when applying any project technique since consulting firms recruit in anticipation of projects in the future. Therefore, where staff are less than project needs, some projects would have to wait in line for the staff time - under TPM and staff expertise - under APM. On the other hand, the firm would not be able to maximise staff time where staff are more than projects available. Such challenges are considered as organisational rather than emanating from the project approach used.

The next challenge with TPM identified from the rigid and structured approach adopted by the Assurance LoS is again described by EF as

"...an issue of other experience needed for the kind of assignment"

For the assurance LoS, since risks have been identified and detailed tasks planned to respond to the risks, it is assumed that the staff assigned can be able to handle the tasks appropriately.

However, it happens that on complex projects, some other expertise may be needed in order to understand the issues on the ground and identify appropriate tasks that can address the issues. Since, tasks have already been assigned to team members, who are booked upfront; it becomes difficult to get other staff from other projects with the requisite experience.

APM on the other hand emphasizes on selecting teams, based on skills as identified by Griffiths (2007). Hass (2007) also mentions that projects should be implemented as iterations, where lessons would be learnt from one iteration to another. This gives the indication that APM requires a good level of experience whilst the team member develops as the project progresses. In this way, the appropriate level of experience would be developed before moving from one iteration to another. This is likely to help deal with situations under TPM where it is identified later on in project implementation that team members do not have the needed experience.

4.4.4 Summary

In summary, three main types of project approach were identified from the analysis namely structured, unstructured and executory. It was identified that Assurance projects are mainly structured or executory; whilst Tax and Advisory projects tend to adopt all project approaches. These three project approaches exhibit characteristics of either APM or TPM or both depending on the LoS implementing the project. Tables 4.3 and 4.4 below summarize the characteristics of TPM and APM in relation to the project approaches and Lines of Service whilst Table 4.5 gives an overall summary showing the project approach for each LoS and which project management technique (APM or TPM) is exhibited.

Table 4.3: Characteristics of TPM, Project approach and LoS

Characteristics	Assurance	Tax	Advisory	
	Structured	Structured	Structured	
Rigid and Detailed Planning			$\sqrt{}$	
Task Breakdown and Allocation			$\sqrt{}$	
Employees can be changed		×	×	
Command and Control Leadership		×	×	
Pre-determined Stakeholder				
requirements				

 $[\]sqrt{-\text{Applicable}}$ × - Not Applicable

Table 4.4: Characteristics of APM, Project approach and LoS

Characteristics	Assurance	Tax			Advisory		
	Executory	Struct'd	Unstructured	Executory	Structured	Unstructured	Executory
Advance							$\sqrt{}$
planning							
considers							
uncertainties							
Project	$\sqrt{}$	×	$\sqrt{}$	$\sqrt{}$	×	$\sqrt{}$	$\sqrt{}$
features as							
iterations							
Autonomous	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	$\sqrt{}$		$\sqrt{}$
Teams							
Visionary	$\sqrt{}$			$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
and flexible							
leadership							
Extensive	$\sqrt{}$	×			×		$\sqrt{}$
client							
involvement							

^{√ -} Applicable

Having shown in Tables 4.3 and 4.4 above how the elements of TPM and APM are manifested in the three LoS and the project approaches; Table 4.5 below summarizes the project management technique applied in each project approach.

Table 4.5: Overall summary: LoS, Project approach and Project Management Technique

Line of Service	Project Approach	Project Management Methodology		
Assurance	Structured	TPM		
	Executory	APM		
Tax Structured		TPM/APM		
	Unstructured	APM		
	Executory	APM		
Advisory	Structured	TPM/APM		
	Unstructured	APM		
	Executory	APM		

From Table 4.5 above, it can be seen that all three LoS exhibit TPM, APM or both characteristics depending on the project approach. However, unlike Leybourne (2009)'s and Bechtold (1999)'s view that structured projects, which are usually well understood with fixed requirements, tend to be purely TPM, Tax and Advisory structured projects rather exhibit elements of APM as well. A careful examination revealed that the elements of APM that these structured projects exhibit are those related mainly to the human or soft elements of the project such as teams and leadership approaches. But since, it is beyond the scope of this thesis; no attempt was made to investigate why this is so. The issue of soft and hard characteristics of TPM and APM projects would therefore be very interesting to study.

Another note of interest is that TPM approach is adopted by Assurance LoS for all projects including those considered as complex. Augustine and Woodcock (2008) argue that TPM is

^{× -} Not Applicable

inappropriate for projects with complexities and uncertainties. However, the Assurance LoS is able to bring all complex – several stakeholders & team members, high value & risk, no team/firm experience, large geographical spread - assurance projects into a structured approach that adheres to all the characteristics of TPM. One may argue that complexities and uncertainties are relative and may not be in line with that described by Augustine and Woodcock. However, as noted, the elements of complex and uncertain described by Assurance LoS are directly related to that noted by Augustine and Woodcock. It was identified that in order to conform to the Standards that guide assurance work, these projects are 'forced' into structure but the challenges noted above confirms all is not well with the way such complex projects are implemented by the Assurance LoS. Probably, Augustine and Woodcock's advice should be followed so that other approaches, such as APM, are considered for such complex and uncertain projects.

Chapter 5 Conclusions

5.1 Introduction

This study set out to investigate how project management approaches such as Traditional and Agile Project Management are used in consulting firms to implement projects. The chapter focuses on the conclusions of the study, recommendations and potential areas for further research emanating from this thesis.

5.2 Overall Conclusions

The following conclusions were drawn from the study:

There are different types of projects and circumstances that require different project management approaches. However, TPM is usually preferred as the main approach of project management in consulting firms with less regard given to the type of project. This stems from TPM being the most known approach and also preferred because it is utilised in costing projects. Therefore, Application of TPM is mainly characterised by detailed planning, which is mandatory in consulting firms for the purpose of charging fees.

TPM applications in consulting firms mainly follow the PMBOK Guide's recommendation to project management with some variations and modification depending on the nature of project and the constraints associated with it. Indications are that TPM is applied in consulting firms on some projects which according to PwC are referred to as structured. In the case of PwC such projects are guided by Standards that stipulate specific tasks and activities to follow during the execution process. Thus past experience with similar projects is sometimes used as guide in TPM approach.

Apparently, APM is applied partially or completely in consulting assignments depending on the nature of the project, although in certain circumstances, as in the case of PwC-Ghana, it is not referred to as APM. It is just taken as the normal practice of overcoming challenges associated with adopting TPM for specific projects. The lack of knowledge on its existence sometimes hinders its full implementation where necessary. This brought about some interesting revelations to the extent that the analysis in Chapter 4 above indicates that APM is applied in consulting firms since the characteristics of APM discussed are very much prevalent in projects implemented in PwC-Ghana. The interesting dimension is that APM elements tend to permeate all project approaches – structured, unstructured and executory used in PwC. However, it is worthy of note that whilst APM is adopted fully for implementing unstructured and executory projects, structured projects tend to exhibit APM characteristics only on the human side – employees' autonomy and flexible leadership of Tax and Advisory projects. Though this demands further investigation, it may have been influenced by the level of experience employees of the various LoS possess in line with Blanchard et al (1993)'s situational leadership continuum, which suggests that as employees' development level increases, leadership becomes less directive. That is, notwithstanding the structured nature of some Tax and Advisory projects, which makes them more prone to TPM, team members' high experience and autonomy makes leadership less directive than in Assurance LoS where team members are usually less experienced.

Small autonomous teams that execute projects in an iterative way are the cornerstones of APM application in consulting firms. For uncertain, ambiguous and complex projects, iterations and meetings are more frequent and are used as a source of improving the next step.

Projects with short and tight deadlines present a unique challenge to consulting firms' TPM detailed planning approach (due to time constraints that do not permit for detailed planning process) and as a result, in most cases, the teams end up adopting APM approaches unknowingly.

The requirement in most consulting firms to develop a detailed plan as a guide for charging fees is a major challenge where projects demand application of APM principles fully. This is because planning in APM is done progressively and does not allow for the long time needed for detailed planning as in TPM.

The level of risk is an important factor on how consultancies choose their project management approach. This is so because most consultancies are risk averse as clearly stated by one of the interviewees, OP who said: "Actually the risk factors could be value. You could judge from the value of an assignment or a project that this could be a very complex assignment. So before we do take on any assignment, we would have gone through all of these risk management procedures which then gives us the comfort that one would like to associate with clients."

Both APM and TPM are good project management approaches suited to different scenarios. Another interesting finding that emerged from the study indicates that consulting firms apply either TPM or APM on project basis rather than at the firm or even Line of Service level. This means the nature of the project vis-à-vis the firm's disposition to provide the service needed determines the approach and hence the project management technique to apply. This also attests to the versatile character of professionals to understand and adapt to different project environments and also provide solutions tailored for specific clients.

In some cases, a hybrid approach may be the best option, in which within one assignment both TPM and APM are applied. In other words, a particular project may exhibit elements of TPM and APM at the same time. In the case of PwC, it was interesting to note that some projects that began with the application of TPM ended up applying APM and vice-versa. For example at proposal stages, it was noted that some Tax and Advisory project proposals are detailed with task breakdown and allocation as well as clear requirements among others. This is usually done to satisfy client requirements as the Terms of Reference stipulates and also help in costing the project time input. At first glance, such projects would be described as conforming to TPM. However, at the planning stage, the team may realise from a situation analysis that the project requirements, risks and planned tasks are quite different from what was envisaged. At this stage, the planning takes a new turn as the proposal plan is thrown overboard. The project is then executed in line with APM practices such as iterations, extensive client involvement etc. Projects can also begin as APM but as noted in the analysis, repeated execution of such projects tend to follow a pattern, which later becomes the detailed tasks that should be rigidly followed in executing similar projects in the future. This is the nature of structured projects under Tax and Advisory LoS. This gives the notion that the designation of a project as applying TPM or APM can also be situational rather than on project basis as noted earlier. Another form of hybrid approach was exhibited from the management of structured projects under the Tax and Advisory LoS, in which case a blend of TPM and APM is applied. That is the project management approach's characteristics related

to the hard side of the project - Rigid and Detailed Planning, Task Breakdown and Allocation and Pre-determined Stakeholder requirements tend to conform to TPM, whilst the soft or human side conformed to APM.

APM can be used to solve some challenges presented by TPM such as the need to keep client involved and a shift from success measured by quantitative outputs to a customer oriented one. However, this must be taken with caution because just as Leybourne (2009) suggests, no method should be taken as "the universal best practice." From this study, it was noted that though APM practices can be used to solve some challenges identified under TPM, not all project challenges can be solved by applying APM practices, since some challenges may be based on organisational approach to work rather than the project technique used.

5.3 Theoretical Implications

Though consulting firms have been studied by various authors, not much is known about how these consultants work and approaches they employ in coming up with their advice to clients. This thesis has given some insight into how these consultants work and the structures employed on their projects. To some extent, it has opened up the practice of consultancy for further research.

There is limited literature on application of agile project management approaches in consulting firms. At the onset, opinions sought on the topic from some researchers were quite emphatic that agile is *not* applied in consulting firms. By this thesis, the contrary has been proven such that it can be said that consulting firms apply agile on some projects. This has added to the meagre literature that abounds on application of agile in different industries. The study suggests that APM, although mainly known to apply in software industry, it also has something to offer in other areas of project management such as consulting and thus there is a need to expand further APM literature in these areas.

It has also been noted that TPM and APM can be applied on the same project possibly at different times. This contributes to the discussion of a hybrid approach to project management where different approaches can be used on the same project at different times or on different projects within the same organisation. In other words, a project based organisation need not be described as either using TPM or APM. Rather, the project can be described as applying TPM or APM either throughout the project life cycle or at different times.

5.4 Managerial Implications

Projects in consulting firms are sometimes 'forced' to follow a structured approach in order to control it; as one of the interviewees, CD indicated "what you cannot control, you cannot manage". This study has given the other side of managing consulting projects without necessarily controlling through structuring. Managers would notice that, consulting projects can be managed as iterations in order to ensure that client expectations are continuously monitored and expectation gaps closed.

Managers, through this thesis, are also cautioned in analysing challenges of Traditional project management approaches, where they seek to employ APM in dealing with those challenges. There are some challenges that emanate from the modus operandi of the organisation and therefore a mere change in project management technique may not be able

to solve. Managers are therefore engendered to assess the type of problem and be sure it is caused by the project management technique before changing from one technique to another.

When the concept of APM was explained to one of the interviewees from Advisory, he exclaimed "that is exactly what we do!" This gives other project managers in the field of consulting the confidence that APM can definitely be applied to enhance value from projects. Therefore, rather than spending a lot of time on pilot projects in order to understand the whole project and structure with detailed planning and tasks breakdown, APM can be applied and the project phased as iterations. In addition, senior managers and project teams should distinguish between projects where TPM approach is the best from those that are suited to APM methodology or a blend with other approaches. The challenge in such situations may be the high level skills that APM demands from team members.

One of the major challenges in implementing APM in consulting firms is that consulting firms employ a lot of fresh graduates who may not have the requisite experience and skills needed for the creation of autonomous teams. In PwC, this is exemplified by the teams in the Assurance LoS where the teams include a high percentage of less experienced staff. Although this is a way of portraying to clients that the firm has new ideas from these fresh graduates; it is recommended that where an APM approach is applied on a project, more experienced staff should be used, especially in the Assurance LoS.

Last but not least, it must be noted that the efficient use of professional time is essential in consulting firms (Chang and Birkett, 2004). Since APM approach usually demands involvement of client staff, some of whom may not have the needed skills to support the team as efficient as required, and therefore delay the project; consultancies employing agile must learn how to balance the involvement of client staff and time. This would ensure that APM does not become an expensive or inefficient approach to project management.

5.5 Strength and Limitations

The key strength identified in this thesis is that the interviewees were individuals well versed in the work they do. Each of them has several years of continuous experience in their service line. They also work for one of the top firms in the industry and therefore very exposed to diverse projects, which add to their store of knowledge and expertise. They therefore spoke from positions of authority.

However, the research is limited to the extent that few people were interviewed. The research findings would have been more representative if more people had been interviewed, especially from other companies within the same industry. However, the time available did not allow for a more extensive work to be performed. It would therefore be interesting to extend the research to other similar consulting firms and other staff at different positions within the firm.

5.6 Further Research

Literature on Traditional and Agile project management approaches describe characteristics of both without regards to differentiation between soft and hard characteristics. However, as Müller and Turner (2007) identifies, project management need to match project type to management approach. It is therefore important to understand that the expected characteristics of either TPM or APM may not necessarily identify the type of technique when it comes to the soft or human side characteristics. Also, in line with Blanchard *et al*

(1993) and Lee-Kelley & Loong (2003)'s assertion of situational leadership, the leadership characteristics expected on projects may be manifested differently at different times depending on factors such as employee development level. It would therefore be interesting to investigate the human elements of TPM and APM projects that are manifested during the project life cycle.

There are few studies on the way consultants work. In other words, the day-to-day activities that consultants undertake in managing their projects; and coming up with the advice or judgement that they make. Research in this area will likely inform the education of consultants and eventually improve on the services they provide. It will also help the public and clients to assess the extent of reliance they can place on consultant's work and possibly avoid the recurrence of situations where people lose so much hard-earned investments, as in the case of Parmalat in Italy (Tran and Jay, 2004), for over-relying on consultants' work.

Although TPM and other types of project management approaches are employed by consulting firms, few or no studies exist on their effectiveness. Therefore it might be necessary to study the effectiveness of TPM, APM, hybrid approaches and other methods for generic projects in similar environments. Furthermore, as consulting projects and activities differ from one firm to another it might be necessary that similar studies are carried out in other organisations of different sizes, locations and industry. Moreover, since some scholars such as Leybourne (2009) suggest that the gap between TPM and APM is closing, it might also be interesting to study how this is manifested in consultancy firms and find its implications for project management theory and practice.

One interesting finding of the study was the blending (hybridisation) of TPM and APM for particular projects in PwC as evidenced by one of the key informants, AB who said "... in real world, what happens is that you can never really apply a specific methodology rigidly because ... you may have to adapt to different approaches. Or even within one project once you move through the phases of the project you may find out that the style needs to change depending on what needs to be done or the challenges you are dealing with." This brings in an interesting dimension that may be subject to further investigation in consulting firms i.e. the element of hybridisation. In the work of Alite and Spasibenko (2008), a similar finding was noted where the hybrid approach was described as "integrated methodology". They assert that a project may adopt a particular methodology but some components of the project may be skewed towards a different methodology. According to Leybourne (2009), sometimes the increased freedom that APM offers is a disadvantage and thus a blend with TPM is used to introduce some element of control under such circumstances. On the other hand Fernandez and Fernandez (2009) suggest that the adaptive and practical nature of APM should be introduced into TPM. Therefore, the possibility of applying new approaches or a hybrid of the available project management methods needs further exploration since it offers some potential under scenarios of uncertainty, ambiguity, complexity and binding constraints.

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Appendices

Appendix 1: The Agile Manifesto and the Principles behind it

Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

Individuals and interactions over processes and tools

Working software over comprehensive documentation

Customer collaboration over contract negotiation

Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

Kent Beck Mike Beedle Arie van Bennekum Alistair Cockburn Ward Cunningham Martin Fowler James Grenning
Jim Highsmith
Andrew Hunt
Ron Jeffries
Jon Kern
Brian Marick

Robert C. Martin Steve Mellor Ken Schwaber Jeff Sutherland Dave Thomas

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Source: http://agilemanifesto.org/

Principles behind the Agile Manifesto

We follow these principles:
Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

Business people and developers must work together daily throughout the project.

Build projects around motivated individuals.

Give them the environment and support they need, and trust them to get the job done.

The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

Working software is the primary measure of progress.

Agile processes promote sustainable development.

The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

Continuous attention to technical excellence and good design enhances agility.

Simplicity--the art of maximizing the amount of work not done--is essential.

The best architectures, requirements, and designs emerge from self-organizing teams.

At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly.

Source: http://agilemanifesto.org/principles.html

Appendix 2: Interview Guide

- 1. Give us brief overview of what you do at your service line
- 2. How do you approach work in your service line?
- 3. To what extent do you plan the various assignments in your service line?
 - What determines the extent of planning that goes into any particular work?
- 4. Do teams always follow plans?
- 5. Are there assignments that require less detailed planning approach and therefore all procedures are not fully cut out at the on-set?
 - How do you approach such assignments?
- 6. What is the extent of client involvement in work in your service line detailed plan approach and overview plan approach?

 (Overview planned approach can be described as assignments where detailed procedures are not spelt out at the on-set. The procedures evolve in the course of the work)
- 7. How are plans communicated to staff? Any particular tools used?
- 8. What role do Team leaders play in execution of work in your service line?
 - What is their extent of involvement when the assignments have detailed plans and when plans are more of overview?
- 9. How are teams composed in each of the different assignments (detailed plan and overview plan)? Do they change along the way?
- 10. What is the nature of team meetings and how often are they organised?
- 11. What challenges do you encounter when assignments are detailed planned or overview? People issues, Leadership, planning issues, client management, execution issues, close-out issues, profitability/ revenue issues, value to client etc.
 - How do you deal with these challenges?

