How Does Management Style and Service Knowledge Affect ITIL implementation within the
UK Banking Industry?

by

[Author’s Name]

[Faculty Name]

[Department or School Name]

[Month Year]
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I would take this opportunity to thank my research supervisor, family and friends for their support and guidance without which this research would not have been possible.
DECLARATION

I, [type your full first names and surname here], declare that the contents of this dissertation/thesis represent my own unaided work, and that the dissertation/thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the University.

Signed __________________   Date _________________
When banking executives make strategic information technology (IT) infrastructure decisions for their financial institutions, the consideration of escalating costs needs to be factored into building strategic plans for the expansion of their IT infrastructure. Banking executives are constantly working on new strategic initiatives that use a variety of software, hardware, and communication systems in innovative ways to reduce IT infrastructure costs. IT infrastructure cost reductions in the banking industry remain a high priority for the foreseeable future because of the need to increase profitability through better management of escalating costs. The study was conducted using mixed method approach. Qualitative and quantitative data were obtained from managers and employees respectively. The result show that both management style and service knowledge affect ITIL implementation within the U.K. banking industry.
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CHAPTER 1: INTRODUCTION

Background of the Study

In response to global competitive pressure, service firms are searching for ways to deliver more cost-effective, high-quality IT service, including the principles of total quality management and IT infrastructure library which became ISO20000 since 2005 (Steinberg, 2006, pp 201). Information Technology Infrastructure Library or ITIL is one of the quality improvement tools or techniques specially designed for improving IT service and creating added value of quality. In short, ITIL helps organisations to meet customer satisfaction through maximising their information service processes and increasing IT service quality. Shang & Lin (2010, pp 53), for instance, notes that ITIL helps IT departments improve their service quality, including improvement upon project deliverables and time, resource utilisation, a decrease in rework, and providing services that meet business, customer and user demands. Given the attractiveness of the ITIL advantages such as increased productivity, increased efficiency, and reduced downtime, more and more organisations across the world have embraced and implemented ITIL (such as IBM, HP, P&G, Microsoft and HSBC) (Pink Elephant, 2008, pp 1).

The Information Technology Infrastructure Library provides organisations with a customisable framework of good practices directed toward achieving quality service. ITIL is closely aligned to the Deming Cycle (Sevcik, 2007, pp 10) and in order to select these good practices, an organisation should consider many factors. These factors include the organisation's needs and the IT provision requirements. After selecting the good practices, the organisation moves to the implementation process. Again many factors affect the implementation process.
The productivity of any service department/organisation depends greatly on the ability to analyse processes in detail and initiate any changes required. Banks are introducing an ITIL-based process to boost the quality of its service, together with the consideration of gaining “competitive edge” (Blokdijk, 2008, 68). The study assesses the effect of two factors that may affect the implementation of ITIL in the United Kingdom Banking industry. These two factors are management style and service knowledge.

**Research Aim and Objectives**

The aim of the research is to analyse the impact of management style and service knowledge on ITIL implementation within the UK banking industry. This aim is accomplished through the following objectives:

- To identify the receptiveness of banking industry to emerging technologies
- To identify the reasons for IT infrastructure changes within U.K. banking industry
- To analyse the challenged of implementing ITIL in the U.K. banking industry?
- To identify the factors that help the implementation process of ITIL in the U.K. banking industry?

**Significance of the Study**

The significance of this study is to provide a better understanding of the factors (leadership style and service knowledge) that affect the implementation of ITIL process measures that supply the banking industry with insight into ITIL process performance. The proper implementation of ITIL process measurements will enable improvement in quality and reduction in long-term costs of IT services in the U.K. banking industry.
Research Questions

Main Research Question

How Does Management Style And Service Knowledge Affect ITIL Implementation Within The UK Banking Industry?

Sub Questions

• Is the banking industry receptive to emerging technologies?
• What are your reasons for IT infrastructure changes within U.K. banking industry?
• What are the challenges of implementing ITIL in the U.K. banking industry?
• What are the factors that help the implementation process of ITIL in the U.K. banking industry?

Organisation of the Study

To have a better insight into the overall structure of the dissertations & for the facilitation of the readers to have a clear understanding, the structure is as follows:

Chapter 01: Provides a very broad but concise introduction & the background of the problem to be addressed for the readers, so that they could have an overview of the topic. The chapter also gives the objectives of the research & the research questions.

Chapter 02: Provide very clear highlights of the theories that are applicable & quite close to the related subject, on the other hand it also provides the explanation, discussion & crucial thinking for providing the involvement in the same area.
Chapter 03: Opens up with the discussion of the research methodology, philosophy of the research & the approach of dissertation. At the end it defined the data collection methods as well as the empirical construction.

Chapter 04: Presents the collection of data as well as its outcomes & interpretation.

Chapter 05: Offers the research question results & results shortened in the form of a conclusion to the dissertation along with the recommendations.
CHAPTER 2: LITERATURE REVIEW

History of the Infrastructure Technology Information Library

As reported by Shang & Lin (2010, pp 53), the Information Technology Infrastructure Library (ITIL) is a globally accepted information technology (IT) approach in the field of IT service management. Pultorak (2004, pp 46) has stated that ITIL’s core concept provides a cohesive set of best practices and conceptual ideas for use by IT service management. and Tan (2005) noted that in the 1980s, the quality of IT services provided to the British government led to the establishment of the Central Computer and Telecommunications Agency (CCTA)—since subsumed into the Office of Government Commerce (OGC)—tasked with the development of an approach for efficient, effective use of IT resources by British ministries and other public sector organisations. The CCTA aimed to develop a vendor- and supplier-independent framework, resulting in the establishment of the Information Technology Infrastructure Library (ITIL). Thus, ITIL v1 grew from a collection of best practices observed in the IT service industry (Pink Elephant, 2008, pp 4).

The ITIL framework provided a detailed description of important IT practices: thorough checklists, tasks, procedures, and responsibilities that could be modified to any IT organisation. These practices have been defined as processes encompassing IT service organisations’ major activities.

A number of other IT Service Management (ITSM) frameworks have been developed based on ITIL. As a result, ITIL has become the de facto standard for describing fundamental processes in ITSM (Sevcik, 2007, pp 10). Blokdijk (2008, pp 68) pointed out that the core of ITIL is comprised of five service delivery processes, five service support processes, and one
service support function (the service desk). The service support processes are applied to the operational level of the organisation, whereas the service delivery processes are tactical in nature. Shang & Lin (2010, pp 53) stated that ITIL v3 is currently available; earlier versions will eventually be removed from the market. The contents of the two most commonly used sets largely remain: (a) service support, which oversees the service desk, incidents, problems, configuration, changes, and release management processes; and (b) service delivery, which determines service level, capacity, availability, continuity, and financial management for IT services. Steinberg (2006, pp 201) continue to emphasise that while service support and service delivery can create value, they can also provide new opportunities and challenges.

**ITIL Framework**

ITIL is comprised of various concepts and practices for information technology processes, ITSM, and information technology development (Addy, 2007, pp 34). It provides organisations with a standardised framework of good practices, devised to help achieve quality service while simultaneously overcoming challenges associated with development of IT systems. Potgieter et al. (2005, 45) observed that ITIL is often organised into sets of texts defined by related functions: computer operations, software support, service delivery, service support, management, environmental concerns, and security management, among others. ITIL products and services include software tools, methodologies, qualifications, training, and user groups such as the Information Technology Service Management Forum (ITSFM) (Cater-Steel, Toleman, & Tan, 2006, 1379).

Various organisations have adopted the good practices described in ITIL. By utilizing different tools and methodologies, they have realized significant quantifiable benefits. Potgieter
et al. (2005, 49) conducted a government organisation case study and identified observable benefits of implementing ITIL, including increased customer satisfaction as well as a direct relationship between improvements in operational performance and increased activities in the implementation of the ITIL framework.

**Information Technology Service Management**

The Information Technology Infrastructure Library is a framework for managing information technology service management (ITSM). Information technology service management is a discipline for managing IT services. Managing ITSM is becoming more challenging as the complexity of IT increases, therefore best practices such as ITIL provide processes for managing this discipline and mitigate the severity of system failures (Cater-Steel & Tan, 2005, pp 214). Implementing appropriate processes for ITSM helps improve service performance, in addition to adopting the appropriate ITSM tool set (Blokdijk, 2008, pp 68).

The Information Technology Infrastructure Library provides a set of best practices for ITSM processes that promote effectiveness and efficiency in delivering IT services. The ITIL publications cover ITSM during the service support and service delivery phases. The work of Addy (2007, pp 38) support the importance of ITSM in the delivery of IT services by summarizing the need for ITSM: defining services and what services are about, how they are delivered, and management of the services within the organisation.

Information technology organisations seek to transform their existing IT infrastructure into ITSM processes. By implementing ITSM processes, organisations see interconnectivity between IT components, improved service quality, and cost savings. An article published by Jeston and Neils, (2006, pp 39) evaluated ITSM standards. In this article, Jeston and Neils emphasised that
solutions developed for ITSM benefit from a robust process framework, such as ITIL. The Information Technology Infrastructure Library is a process framework for implementing ITSM (Sevcik, 2007, pp 14; Jeston & Neils, 2006, pp 32).

The literature is consistent in stating that to successfully implement ITSM, quality processes to provide IT services must be developed. Steinberg (2006, pp 201) examined challenges in the implementation of ITSM and concluded that successfully implemented processes require a single authoritative owner, a defined process scope, process metrics, a supporting infrastructure, and an execution plan. Once ITSM processes are defined, the appropriate toolset to automate and support the processes should be taken into consideration (Cater-Steel & Tan, 2005, pp 219).

Approaches to ITSM implementation are vague, as there is no clear-cut strategy in the literature. For an implementation to be successful there must be commitment and involvement from the entire organisation. Requirements should be clearly defined, and long-term benefits should be identified (Blokdijk, 2008, pp 72).

Information Technology Infrastructure Library Implementation

The Information Technology Infrastructure Library is a powerful way to create a competitive advantage. The implementation of ITIL in organisations helps improve ITSM (Steinberg, 2006, pp 205). Over 10,000 organisations worldwide have implemented ITIL (Sevcik, 2007, pp 12), although the United States did not catch on till 2000 after the Europeans took hold of it in the 1990s. In a research paper published by Bandara and Burgess (2007, pp 57), it is noted that executives are continually under pressure to increase productivity while reducing costs. The ITIL best practice framework offers executives the best option for meeting
this requirement. In its research, Evergreen identified that ITIL re-engineers the services
provided by organisations with guidance to be client focused, eliminate duplicate efforts, and
consolidate service offerings to end users. There are a number of dependencies and interactions
between the different ITIL processes. These relationships are the building blocks of the ITIL life
cycle.

Bartolin, Salle and Trastour (2006, pp 45) explored issues related to the standards and
management of IT and affirms that organisations have become increasingly dependent on IT.
This dependence has made it more complex and challenging for the IT infrastructure
environment to manage the implementation of the ITIL framework, which affords the ability to
operate IT services. The ITIL best practice is globally supported by qualifications/certifications
and standards. Thirty percent of organisations in a study conducted by IDC reported having
experienced an overall efficiency gain with the implementation of ITIL. In addition, the results
from the Evergreen survey showed that the top drivers for ITIL initiatives were service quality
(80%), cost reduction (74%), and alignment of IT and business (64%). The results from the study
also showed that the main barriers to ITIL adoption are resistance to change (78%) and unproven
business value (5.5%). This study relates to the main topic of this paper as it provides
information on the drivers for the adoption of ITIL within organisations and the barriers that can
occur in the adoption (Cater-Steel & Tan, 2005, pp 214).

More and more organisational staff today are achieving their ITIL certification, as this
best practice enables companies to maximise their IT operations. This certification has become a
worldwide standard for IT service management (Blokdijk, 2008). The certification covers the
basic concepts and principles established by the Office of Government Commerce in service
strategy, service design, service transition, service operation, and continual service improvement
Certifications for ITIL version 2 and version 3 are available, although the ITIL version 3 library is the latest addition of ITIL, which was published in June 2007 and encompasses the most adopted worldwide standard for IT management best practices (Blokdijk).

For an organisation to successfully adopt ITIL, appropriate certification and training are essential for staff, which is supported by research that concluded the barrier to ITIL adoption is lack of understanding (Sevcik, 2007, pp 10). This statement supports the research question related to ITIL certification. Fifty-seven percent of IT managers and directors stated that lack of support for ITIL training was one of the barriers to adoption. Training provides staff with relevant skills that are necessary to deliver quality services. Certifications for ITIL can only be achieved by staff, not the organisation itself. However, organisations can obtain an ISO/IEC 20000 certification, which is the international standard for ITSM based on ITIL (Sevcik, 2007, pp 11).

Possible ITIL certification levels are: ITIL Foundation Certification, ITIL Practitioner Certification, and ITIL Manager Certification. The ITIL Foundation Certification proves the knowledge of the ITIL life cycle. Core disciplines of the ITIL framework must be demonstrated—for ITIL version 3 these include service strategy, service design, service transition, service operations, and continual service improvement. The ITIL Practitioners Certificate is a two-module certification on the specific ITIL disciplines: the Service Lifecycle Module (service strategy, service design, service transition, service operation and continual service improvement) and the Service Capability Module (service portfolio management, service level management, service catalogue management, demand management, supplier management, and financial management). This certification is geared toward team leaders and experienced specialists. This certification proves a deep understanding of knowledge in the specific
The ITIL manager certificate is for experienced professionals who manage the service management functions. This certification is awarded to those who demonstrate the capability of applying ITIL theory to an organisation. Upon completing and passing one or more of the ITIL certifications, definitions, terminologies, history, and basic principles will be thoroughly understood. Carter-Steel (2005) conducted case studies to understand how ITIL is implemented and managed. Carter-Steel and Pollard concluded from this study that although the ITIL guidelines are crucial to implementation, there is no standard approach. It is consistently stated in the literature that there is a lack of formal guidelines for implementation in the ITIL publications, but research without fail has shown the benefits of ITIL. The flexibility of the ITIL framework makes it essential for organisations to properly implement measurements that are ITIL-aligned, as measurements are true indicators of performance, and provide organisations the ability to measure compliance of processes, policies, and procedures.

Steinberg (2006, pp 201) concluded from case study findings that operational performance and customer satisfaction improve as the penetration of the ITIL framework increases within an organisation. Carter-Steel et al. (2006) replicated this research and found that ITIL implementation improved ITSM, organisational infrastructure, negotiations of service level agreements, and end-to-end services. The Carter-Steel et al. study took a qualitative approach using case studies with structured questions that were taken from a previously developed survey instrument. In 2002 a study was conducted by itSMF. In this study, itSMF found that 97% of organisations that have implemented ITIL say that they have seen some derived benefit. Sixty-nine percent say that there was measurable benefit. Proper implementation of ITIL process measurements affords organisations the ability to improve IT service quality and reduce long-term cost of IT services.
Even though ITIL is a process-oriented framework, many organisations choose to deploy software tools to automate and support the processes. This statement and the following discussion are relevant to the research problem for this dissertation and support the research question related to ITIL tool implementation. Tool implementation is used to support an ITIL process or processes that aid in collection and storage of data. An ITIL process should be developed and a tool used to support the process, but it should not be the other way around (Jeston & Neils, 2006, pp 32). In addition, a process should not be modified to fit a tool. The selected ITIL tool may not suit all needs of the process; if this is the case, a redesign of the process may be necessary but should not be limited to the tool's functionality (Bandara & Burgess, 2007, pp 54). The appropriate ITIL tool should meet international standards (ISO 20000) as well as enable the organisation to meet service management requirements.

Organisations often believe that implementing a tool will solve their problems, but the tool depends on the process. Selecting the appropriate tool to support ITIL processes is critical, as these tools carry a tremendous cost and selecting the wrong tool can be a huge financial burden to an organisation (Jeston & Neils, 2006, pp 32).

It is generally supported in the literature that appropriately selecting a tool can allow an ITIL process to run more effectively and provide valuable management information (Shang & Lin, 2010, pp 59). If the appropriate ITIL tool is selected, it can help reduce costs, improve productivity, and improve the quality of IT services delivered (Bartolin, Salle, & Trastour, 2006 pp 45). Bartolin et. Al (2008) recommended that an ITIL tool should be completely integrated and support many service management processes. One tool never satisfies 100% of the process requirements. Typically, the 80/20 rule applies, in which the tool comes closer to satisfying 80% of the established requirements.
Pultorak (2004, pp 56) conducted ten case studies over a span of two years that resulted in the key findings of challenges experienced by organisations in the adoption and implementation of ITIL. The findings from the Pultorak study included lack of support from upper management, resistance to change by technical staff, and difficulty in adopting appropriate toolsets. In addition, Pultorak discovered that organisations found it difficult to quantify the benefits of adopting ITIL as an organisational best practice, which also aligned with the findings from Steinburg (2006). Pultorak (2004) conducted a study that evaluated the perceptions of success factors for the implementation of ITIL on a 5-point Likert scale. In this study, the most important success factors identified by the respondents were commitment of senior management at 95% and having a champion to promote the project at 97%.

Challenges of Implementing ITIL

While the ITIL framework aims to increase the quality of several processes using service delivery and support, implementing such a framework has challenges: Research conducted by Bartolini, Salle, and Trastour (2006, 243) revealed that uncontrolled and unproductive changes in the applications cause problems for organisational use. During service disruption, poorly designed or poorly implemented applications may reduce productivity, increase downtime, frustrate end users, and increase overall costs. Another challenge is employee misunderstandings regarding their job functions (Latif et al., 2010, 83).

Most top organisational decision-makers ask about tangible benefits of implementing the ITIL framework (Shang & Lin, 2010, 58). However, most benefits occur at the cultural or organisational levels (Sharifi et al., 2008, 3). Brenner (2006, 23) suggested numerous difficulties specific to instituting key performance indicators (KPI) and their translation into numeric and
percentage values—further complicated by the fact that ITIL processes are relatively new, so organisations that have implemented them have not had time to fully realize and adapt to the benefits.

Benefits of Implementing ITIL

ITIL was developed to address many challenges faced by IT infrastructure organisations including service, support, and delivery issues (OGC, 2007). Wallace and Webber (2009, 35) agreed that this designation was accurate in the 1980s when ITIL was initially developed; however, they believe the need for secure, effective IT systems and processes has continually increased. Businesses require efficient and effective solutions, and ITIL offers benefits that assist IT organisations in meeting their needs.

Barafort, Renzo, and Merlan (2002, 57) emphasised some benefits of adopting ITIL: a more professional approach to service delivery, improved productivity, increased application of skills and experiences, reduced costs, improved systems, a clear competitive edge, better application of IT services, and higher customer satisfaction. Human resource advantages include reduced training costs, increased staff retention rates, heightened staff competence and capability, and application of IT services. Cater-Steel, Tan, and Toleman (2008, 25) noted many public sector organisations and private sector firms that adopted ITIL and made substantial progress in implementing the framework. However, the survey also found that although all ITIL core functions and processes were implemented, service desk functions tended to focus on the changes in management processes. Such changes resulting from ITIL ensure that standardised methods and procedures are used for effective, prompt handling of all organisational changes (Bartolini et al., 200, 86).
Research into increased IT efficiencies had considerable contributions from Steinberg (2006) and Pultorak, (2004) regarding infrastructure, transaction, and quality management. Current innovations in new technologies are being released at a phenomenal rate (Shang & Lin, 2010, pp 53). Improvements to IT infrastructure made banks more globally competitive and brought many benefits to consumers, whose consumption and business needs changed rapidly in the electronic age (Pink Elephant, 2008, pp 4). There have been numerous attempts to harness the power of IT to improve service delivery and reduce costs, as well as provide other services that might stop the leakage of revenue (Sevcik, 2007, pp 10).

Revenue leakage in banking refers to revenue losses incurred as a result of incorrect pricing, operational inefficiencies, missing transactions or uncollected revenues (Pultorak, 2004, pp 46). The banks’ inability to generate profits in cases where services were not charged or the services were charged at a loss also amounts to the leakage in revenue (Jeston & Neils, 2006, pp 32). Revenue leakage in the banking industry occurred at any of the stages of the customer relationship cycle, including prospecting, on-boarding, transaction processing, billing, monitoring, and service closure (Bartolin, Salle, & Trastour, 2006, pp 45). Revenue leakage has been a universal phenomenon, depleting the profits of service and transaction based industries (Bandara & Burgess, 2007, pp 54). Service providers in the telecommunications industries implemented revenue assurance solutions to counter this threat (Pultorak, 2004, pp 46). Banking executives acknowledged the prevalence of revenue leakage, but they were not always willing to pinpoint its sources or the financial impact (Jeston & Neils, 2006, pp 32).

The total cost of owning a personal computer is 4 or 5 times greater than the initial cost of the purchase price (Blokdijk, 2008, 68). Costs included the acquisition, installation, software licenses, infrastructure, maintenance, and support (Sevcik, 2007, pp 10). Banks need to identify
the sources of excessive costs and leakage associated with IT infrastructures so that revenue losses can be avoided (Addy, 2007, pp 34). Establishing adequate control processes and reporting facilities to predict potentially weak leakage points was another critical requirement (Pultorak, 2004, pp 46). Revenue leakage occurred due to incorrect pricing, operational inefficiencies, network configurations, slow communications, missing transactions, or uncollected revenues. Banks can convert revenue assurance into opportunities by leveraging centralised relationship based pricing models and billing solutions to ensure profitability, customer loyalty, and the inflow of revenue fees (Steinberg, 2006, pp 201). Banks seek greater market power and a reputation for quality based on the informed decisions of banking executives (Bartolin, Salle, & Trastour, 2006, pp 45). Banks in India experienced increased competitive pressures when rising cost income ratios and declining profitability were published to shareholders (. The conclusions from the analysis of these banks were that operating efficiencies must continue to increase to regain public confidence (Cater-Steel & Tan, 2005, pp 214).

**Effective Implementation of ITIL**

Wallace and Webber (2009, p. 34) and Taylor and Probst (2003, p. 260) have articulated that it may be impractical to seamlessly implement ITIL into all of an organisation’s IT processes. It takes commitment and dedication to effectively modify the way in which an IT organisation carries out its daily operations. It is imperative that organisations carefully decide where and when to begin the implementation process (Potgieter et al., 2005).

In an ideal situation, the point of onset should be based on careful assessment of the organisation’s practices and analysis of where the greatest gains can be achieved most quickly. Prior studies have documented that most IT organisations begin the implementation process with
incident management (Herold, 2007). Incident management often allows IT to rapidly restore service; by using ITIL to develop these processes, organisations can minimise downtime, ensure customer satisfaction, and improve IT staff productivity (Cater-Steel et al., 2006a). ITIL processes align the information technology components into different services as well as support and deliver those services (Vasanthi, 2001). Ensure that responsibilities, services, and roles are understood and well documented by both organisational and information technology units. Tan, and Toleman (2006c) demonstrated that if implementation is successfully completed, full benefits can be realized without having to change organisational processes, thereby assuring two of the main goals of the organisation: customer satisfaction and efficient service delivery. Organisations should be ready to implement and adopt new changes to effectively realize goals.

ITIL implementation requires considerable coordination and effort as well as cultural and communication changes.

Furthermore, in order to effectively implement ITIL, following strategies should be implemented. ITIL process implementation has significant IT-wide impacts; it is not an isolated initiative. To avoid both resource and programming constraints, implementation must be aligned with other global and regional programs, IT initiatives and sourcing or supplier initiatives. A portfolio management approach should be taken to understand the alignment and priorities of all initiatives in addition to the overall benefits to the organisation. Introducing ITIL-based processes generates requirements for new functions and roles, which could impact the current service management structure. Prior to completing process design, understand the roles and functions required to support the processes; giving specific consideration to the supplier/internal resource split. Consideration must also be given to the governance structure needed to guide and support the new IT organisation. Establishing a transformation program ensures that the structure
from which to hang ITIL is secured and operational prior to process implementation. Implementing ITIL impacts the full spectrum of the organisation’s employees. Because of this, it is critical to understand the impact at each level within the organisation and the value each brings to the program. Subsequently, engagement, communications and training are absolutely key to success; from the initial engagement of senior stakeholders to the manager-level ITIL training of new global process owners. Change within any organisation takes time to be accepted and implementing ITIL is no different. Implementation of ITIL focuses on improving customer service and as the processes mature the subsequent ROI will be recognized (Shang & Lin, 2010, pp 53).

To determine the end result, focus the strategy and focus communications on improving service quality and establishing an early baseline of key performance indicators (KPIs) from which to monitor improvements. The chosen KPIs and their associated benefits should be business-focused and clearly understood so that effort is not wasted on measuring and interpreting superfluous data. Existing suppliers and any subsequent SLA’s will be affected by the implementation of ITIL. The strategy for handling third-party engagement and establishing a robust communications plan must be clearly defined, with priorities focused on the desired supplier landscape. Early engagement with procurement and legal departments will help to support and address the ripple effect that occurs right through to existing contracts and SLAs upon implementing the new processes. An end-to-end SLA will also be ultimately required to support the operation of the new processes. The ITIL framework is comprised of ten service management processes and one service management function. Every ITIL process supports, interfaces and integrates with at least one other process (Sevcik, 2007, pp 10).
For effective development and deployment the relationship, impact and interdependencies across the ITIL framework must be clearly defined and understood. The close integration and understanding of the processes allows for the continual flow of up-to-date, critical and accurate information that in turn enables management to drill down and identify target areas for service improvement. In addition, it is also important to take a holistic view to ITIL implementation, however it is not imperative to implement all processes concurrently in order to realise operational improvements and a significant ROI (Sevcik, 2007, pp 10). Implementation of individual processes or the prescribed combination of processes can deliver the desired operational improvements. Processes should be selected based on the benefits sought by the organisation and the ones that drive the most business value. By using these strategies, organisations can reduce the challenges of implementing ITIL.

**Factors Influencing ITIL Implementation**

**Management Style**

“The starting point for all activates is the culture and environment” (Service Design OGC, 2007, 211) and thus Management styles play a key role in implementation of any process; there are always some people who resist changing and becoming a hurdle in the implementation of any process. Effective management styles can help in making appropriate decisions and analysing which process will help them in enhancing their service. It is also important for managers to understand and chose the management styles that could help them in managing and overcoming the change resistance before implementing any process. Moreover, according to the experience of managers, the larger the organisation, more difficult it is to achieve a higher level of cooperation. Scully (1987) describes the move from formal management to more informal
styles in a so called “Third Wave” Managers within Apple, that might be appropriate to modern ITIL implementations.

In the category of service support and service delivery, management styles represent one of ITIL’s key challenges. Management styles help ITIL to focus on how changes in IT services and products can be managed, controlled, and released into the business setting. It also controls the lifecycle of all changes that support risk management. To appreciate the intrinsic relationship and impact of management styles on ITIL, one must explore understand the concept of management styles in detail.

The UK Banking industry is now in a process of high flux given the economic downturn and the apportionment of blame from all sectors for the collapse of financial banking services, and thus individuals and organisations must change to keep up with advancing technology and the needs and demands of both external and internal environments. It is essential to recognise that change is not always easy, and management plays a key role in the implementation of any change. Employees need time to adjust; organisations often face conflict in terms of employee response. Implementation of ITIL process is changing tasks entail altering the structure of an organisation, where removing control from an employee can prove particularly challenging. By resisting change, employees can influence the success of a change project. Therefore, this leads to the first hypothesis in line with Kerlinger (1970), cited Walliman (2011):

$H_1$: The management’s leadership style is positively correlated to the implementation of ITIL good practice in the U.K Banking Industry.
Service Knowledge

Service knowledge is referred to developing understanding about company’s customers, their want and needs, if the company aims to build strong customer relationship by aligning its products, services, processes and above all to create value. Numerous organisations tend to know their customers very well, but often this knowledge is in fragmented form and, therefore, it becomes difficult to manage and analyse the information. Also, many times, this information is in incomplete.

Service knowledge has gained increased attention these days. In a recent study on business failures, it was concluded that often failures are let down to satisfaction which create a gap between the understanding about the needs and wants of customers compared to what customers actually want. The companies need to realise the importance of the role played by the services and products to satisfy a customer. This helps the managers in better understanding why the customers have complained, how to manage resources, handle various issues and problems and the appropriate ways in which employees can deliver best of services to customers. This leads to the next hypothesis:

H2: The service knowledge of managers is positively correlated to the implementation of ITIL good practice in the U.K Banking Industry

Conclusion

One of the critical success factors of an organisation continues to be a well-managed information technology department. Business requirements and technology are continually developed and need implementation. This also requires a reliable IT environment that handles
change in a standardised manner. Implementing the change management approach, with its standardised methods and procedures, minimises negative incidents. ITIL is the most effective, efficient, and practical approach to ensuring that all changes are controlled—beginning with submission, analysis, and approval of the change process and proceeding through building, testing, implementing, and reviewing changes. An organisation understands the benefits associated with the change management process, it must also recognise that the process cannot be implemented overnight. Organisation must communicate with all departments. Each organisation should be conscious that implementing ITIL does not represent a guaranteed solution - employees often see it as overwhelming.

The review of the literature discussed the challenges faced by organisations in implementing ITIL solutions and how management style and service knowledge can be important factors during ITIL implementation. The next chapter will discuss the research methodology and approach of the dissertation.
CHAPTER 3: METHODOLOGY

Chapter 3 will provide a detailed outline of the research design of the proposed study. This chapter also expands on the elements of the research design, in particular, and towards the research approach of the proposed study. In considering methodology for the proposed study, the researcher will consider interviewing the people. This chapter will expand on the three approaches, including the qualitative approach, quantitative approach, and mixed methods approach.

Overview of Qualitative and Quantitative Research Approaches

The most popular research approaches used to make informed scientific decisions include qualitative and quantitative methods (Neuman, 2005; Polit & Beck, 2005). Differences between quantitative and qualitative research lie in their approach to identification of the research problems and reviews of the literature. The two approaches have different strategies in specifying the purpose, data collection, data analysis, reporting, and evaluating research (Burns & Grove, 2005; Hudacek, 2008; Polit & Beck, 2005). In identifying a research problem, Creswell (2005) claimed that it is descriptive and explanatory for quantitative but exploratory for qualitative research.

Both the quantitative and the qualitative approach proved beneficial to explore and explain important issues within the different disciplines (Burns & Grove, 2005; Hudacek, 2008; Polit & Beck, 2005). Both approaches offered important scientific knowledge that answered many questions and addressed multiple issues (Creswell, 2005). Qualitative and quantitative approaches could be complementary to one another (Burns & Grove, 2005; Neuman, 2005).
Using both methods could produce stronger evidence to use within multiple fields, particularly within the subject of management sciences. The next section discusses including both approaches; the mixed methods approach.

**Overview of the Mixed Method Research Approach**

A mixed method approach can work with different strategies (Burns & Grove, 2005; Creswell, 2005; Neuman, 2005). Onwuegbuzie and Leech (2006) stated that, when analyzing both quantitative and qualitative data within a mixed-method approach, researchers could use certain stages. Such strategies included data comparison, consolidation, and integration (Onwuegbuzie & Leech, 2006). The strength of mixed method research is in its use of both induction, specifically discovery of patterns, and deduction, particularly theory and hypothesis testing (Onwuegbuzie & Leech, 2006). Another advantage is the use of its abduction, which reveals and depends on the best set of explanations on the results (Burns & Grove, 2005). Researchers increasingly use mixed methods research because it provides a bridge between quantitative and qualitative methods through greater identification and clarification of the research variables (Onwuegbuzie & Leech, 2006).

**Research Method and Design Appropriateness**

In order to address the research problem and answer the research questions indicated in Chapter 1, a mixed method approach will be the most appropriate for this study. The aim is to explore participants’ views about the implementation of ITIL in the U.K. banking industry. Data gathered will aid in developing a questionnaire to analyse and interpret the factors responsible
for implementation of ITIL within the U.K. banking industry. A different sample from the identified population will receive the questionnaire.

The strategies used in mixed method approaches include explanatory, exploratory, transformative, or concurrent strategies (Burns & Grove, 2005; Creswell, 2005; Kumar, 2007; Polit & Beck, 2005). The proposed study will employ an exploratory mixed method. This perspective reflects the purpose of the study and the research questions, which are the driving forces behind all methodological choices (Creswell, 2005; Polit & Beck, 2005).

**Justification for using Mixed Methodology**

The author decided to use mixed method research since the researcher wants statistical truth as well as the understanding of the ITIL implementation process within the U.K. banking industry. Qualitative research was vital to this study as it attempted to examine the implementation of ITIL along with the factors associated with it. This phase helped in understanding the strengths and weaknesses of the ITIL adoption to the organisation. On the other hand, the methodology in the quantitative approach is to describe and explain features of the objective reality by collecting numerical data on observable behaviours of samples and by subjecting these data to statistical analysis. The statistical analysis examined the factors that affect the implementation of ITIL within the U.K. banking industry.
Data Collection Methods

Secondary Research

The research aimed to provide realistic information. The secondary data were collected from various sources which are academic journals, e-books, newspaper, magazines and trade publications, periodic reports of companies, blogs and government publications. According to Kumar (2007), secondary data gathers more valuable data than may be gained by a limited research. Secondary research provided latest theoretical and academic information about the study. Creswell (2005) defines secondary research as a ‘desk study’ and research is obtained from other (already published) sources (p. 49). Cooper and Schindler (2003) defined secondary research as the collection of information all ready available regarding a specific topic. This can be obtained from graphs, tables or opinions made based on a collection of previous data enabling the writer to understand and analyse what others have written on the subject. The author has tabulated the advantages and disadvantages of the secondary research.

<table>
<thead>
<tr>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
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<tr>
<td>▪ Cheaper and faster than primary research.</td>
<td>▪ Does not provide up-to-date information.</td>
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<tr>
<td>▪ Accessibility to previous numeric sources.</td>
<td>▪ Large range of data make difficult to analyse.</td>
</tr>
<tr>
<td>▪ The researcher can collect only his/her needs.</td>
<td>▪ Difficult to find data that related to the topic.</td>
</tr>
<tr>
<td>▪ Takes less time than primary research.</td>
<td>▪ There is a limited control of the data.</td>
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<td>▪ Easy to find sources.</td>
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<td>▪ Provide more detailed information.</td>
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Source: Created by the author (2010)
The literature search was done using secondary research. The research encompasses the publications, articles and similar studies accessible on the internet (Cohen, Cohen, West and Aiken, 2003). Keeping in view the approach taken in earlier studies the research began with a broad analysis of the existing literature. The findings & conclusions are based on the secondary data. The methodology used for the purpose of this research is based on the secondary data (Cooper and Schindler, 2003). This research is more or less based on the literature review & the conclusions are drawn on the basis of actual resources listed in the references (Cohen, Cohen, West and Aiken, 2003).

*Primary Research*

Primary research was conducted to obtain first hand information on the affect of management style and service knowledge on the implementation of ITIL within the U.K. banking industry. The Primary research will be based on the mixed method research methodology. Analysis details that the most popular research approaches used to make informed scientific decisions include qualitative and quantitative methods. Differences between quantitative and qualitative research lie in their approach to identification of the research problems and reviews of the literature. The two approaches have different strategies in specifying the purpose, data collection, data analysis, reporting, and evaluating research.

The study will involve two research stages. A qualitative stage features face-to-face interviews, followed by a quantitative stage which employs a questionnaire. Both the qualitative and quantitative stage will determine the leadership style and capabilities as well as the service knowledge of the employees and the managers regarding ITIL implementation. This mixed method research approach is exploratory in nature, one conducted in two parts with priority
given to the earlier stage. The mixed method exploratory approach is most appropriate to address
the research questions and achieve the proposed study goals. Surveys and interviews with staff
and management are the primary methods.

**Variables**

1. Leadership Style: Autocratic, Democratic. Also looking at the balance of IT Internal
   functioning and the business together with drivers (cost, career, leadership etc)
2. Service Knowledge: ITIL Training both formal/informal, opinion, seniority, Service
   Catalogue in existence.

**Data Collection Instruments**

**Questionnaires**

One of the instruments used in this research is questionnaire. 60 employees from the U.K.
banking industry will be interviewed to obtain the quantitative data regarding the role of
leadership style and service knowledge in the ITIL implementation within the U.K. banking
industry. A representative segment of banks will be employed.

**Interview**

The second primary data collection instrument used was Semi-structured interview. A
cross section of approximately 8 CIO’s, IT Directors and Service Managers from the U.K.
banking industry will be interviewed to obtain their knowledge on the role of leadership style
and service knowledge in the ITIL implementation within the U.K. banking industry. A
representative segment of banks will be employed.
The research technique used in the study is Focused (Semi-structured) Interview. Through this technique qualitative data is collected by setting up an interview that allows respondent the time to talk about their opinions on a particular subject. The focus of the interview will be around key indicators that would tend to point to knowledge and awareness of ITIL. The main objective is to understand the respondent’s point of view instead of making generalisations about behaviour. Open-ended questions to give an opportunity to explain and allow for further question focus. The data collected will be in the form of notes taken during the interview either directly from the questions asked or observations made during the interview.

Guideline questions will be sent to all interviewees prior to the interview so they can prepare their supporting material. This will be followed by a personal interview at their premises. Emphasis will be placed on the current economic climate and the strategies each company has put into affect to deal with the industry downturn.

The data collected will be in the form of notes taken or recorded (with interviewee’s permission) during the interview either directly from the questions asked or observations made during the interview.

**Sampling Method**

Creswell (2005) amongst others emphasise the importance of selecting a sample criteria prior to conducting research to ensure bias sampling does not occur. Sampling helps to ensure accuracy of data collected as well as saving time and money.

The sampling techniques used by the author are:

- Purposive Sampling
- Random Sampling
While selecting participants for the interview, purposive (non-random) sampling technique was used. A purposive sample is a sample selected in a deliberative and non-random fashion to achieve a certain goal. Since the interview phase required managers having the best knowledge and experience in the area under study, therefore the participants were selected through purposive sampling by selecting only those managers who had enough experience.

On the other hand, the participants for the quantitative phase were selected through random sampling. In random sampling method, each item in the population has the same probability of being selected as part of the sample as any other item. Thus the participants i.e. in this case the employees were selected randomly for the survey.

**Interview Questions**

Some of the questions from the interview are as follows.

— Do you think that banks are receptive to emerging technologies?

— How can bank benefit by adopting ITIL?

— What challenges can be faced by banks while implementing ITIL?

— How can the management style of the bank affect ITIL implementation?

— How can service knowledge impact the ITIL implementation process?

— What can organisations, in particular banks, so to effectively implement ITIL?

**Data Analysis**

**Qualitative Data Analysis**

The researcher will analyse the qualitative part of the study using content analysis. This type of analysis provides an image of the participants’ perceptions, feelings, experiences, ideas,
concerns, and attitudes related to ITIL and Change. For the proposed study, the content analysis process will involve a few steps. The researcher will transcribe and carefully read the interviews for completeness. The researcher will refer to the recordings of the interview in case of vagueness in words or statements and ask participants to clarify these issues. The researcher will exert increased efforts to clarify words and phrases during the interview.

Quantitative Data Analysis

Within research, there are different statistical processes for designing a study. Statistical analysis for example, gives meaning to the numbers collected within a particular study. The categories of statistical procedures include descriptive, associative, and inferential. Descriptive statistics depict events or individuals with some predetermined characteristics. Associative statistics attempt to determine meaningful interrelationships among or between data. Inferential statistics determine and assess the characteristics or attributes of a particular sample to generate generalizations about a specific population. The meaning of statistical information depends on the clarity and precision of the problem and questions addressed within the topic under investigation. The student version of SPSS will be used for all data analysis. The data collected will be analysed by using the Chi-square test.

Appropriateness of Chi-square test

Chi-square test will be appropriate because the test is used to measure the association between independent and dependent variables. Therefore, this test will be appropriate to assess the degree of association or relationship between management leadership and frontline employee performance.
Ethics

This research was conducted so that the integrity of the company used as a case study in this research could be maintained, and contradictory effects that could undermine the promise for future research are avoided in this research. The choice of study subjects based on the best technical approach and an evaluation of the advantage of the promise of the participants and humanity in relation to the risk to be conveyed by the participants. This study is associated with issues that are considered to important.

In addition to obtaining a signed consent form prior to conducting the interview, the researcher would take steps to make sure that “genuine informed consent” has been granted by the interviewee. To accomplish this objective, information regarding the nature of the study would be presented prior to conducting the interview. Additionally, the interviewee would be informed that a debriefing session would be held at the end of the interview to allow the participant to reflect on their answers and clarify anything that they believe might be inaccurate or incomplete. Contact information for the interviewer would provide to the participant to allow them to follow up on interview questions following the interview.

To protect their anonymity, participants would be assigned pseudonyms that would be known only by the researcher and would not connect specific participants to results of the study as statements made by participants would be attributed by pseudonym. During the course of the interview, no names would be used and participants would be referred to as Subjects One, Two, Three, etc. No use of company names would be included in the interview and work setting would be identified by industry only. Electronic and paper data will be disposed of after the writing up exercise.
As a final security measure and among one year following completion and acceptance of the research study, hard copies of transcribed interviews and interview notes would be shredded. At this time, soft-copies of transcriptions would be deleted from all electronic media storage and portable forms of electronic media storage containing this data such as: CDs and memory sticks would be destroyed. While retrieval of electronically deleted documents from hard drives is possible, the cost and effort required to retrieve erased data makes this possibility unlikely. Additionally, the fact that study participants are never identified by name minimises the risk of harming them.

**Reliability**

Reliability refers to the consistency of a measure, score, or test. Reliability occurs more often in statistical quantitative studies and less frequently in qualitative studies. Since the world of research with human subjects is not perfect, researchers developed a number of techniques for estimating reliability or the degree of error in measurement. One such technique is called the reliability coefficient, a measure which ranges from $r=0$ (not reliable) to $r=1$ (perfect reliability).

Assessing reliability can be through stability, which relates to the extent to which repeated administration of the instrument produces the same results. Another method is internal consistency, which is concerned with the extent to which the items within an instrument actually measure the variable being investigated. Reliability can also be measured through equivalence, which compares the extent to which two versions of the same paper-and-pencil instrument, or two observations measuring the same event, produce the same result.
Validity

Validity assesses whether the meaning and interpretation of an event is sound or whether a particular measure is an accurate reflection of intent. The validity of data needs to be carefully checked. Classifying the data can help the researcher reach important conclusions and uncover the results that led to such conclusions.

Researchers may check for validity in several ways. These include comparing findings of one instrument with findings from other instruments and conducting joint observations or collaborative marking of the same tests. Checking validity could also include returning draft reports to respondents for accuracy checks, considering opposing explanations for the issue or question, and conducting multiple observations of the same event. The researcher can also enhance respondent validity by asking the participants to check their interpretations of the information provided or observed.

Another option to insure validity when seeking data is to use a pre-designed measurement such as an existing instrument previously tested and found valid. Ensuring validity can be difficult and should be taken seriously and carefully and to show the impact of the collected data on the business. Utilizing such methods add certainty that the data collected is valid and useful for planning and decision making processes.

Critics of questionnaires and interviews focus on poorly created questions (Smith, 1991). The researcher for the proposed study will consider measures to ensure the quality of data. Questions will focus on required assessment. The elements of language, difficulty level, and frame of reference should enhance communications between the researcher and the participants. Researchers should have an awareness of the participants’ vocabulary to ensure that questions are not oversimplified or too difficult.
Limitations

The following problems are anticipated in completing this research:

1. Selecting Sample Participants: Identifying and selecting the right participants who have experience and knowledge of ITIL together with the available time.
2. Response Failure: It is anticipated that a number of the sample will decline to participate.
3. Time Constraint: Availability of interviewees could protract the research period.
4. Limitations of the Model: Sample size could impact average results
5. Interview Construction: Consistency of interview questions could impact data

The researcher will try to minimise these limitations as much as possible in order to ensure valid and reliable results.
CHAPTER 4: RESULTS AND DISCUSSIONS

Interview Results

The following is the result of the interviews conducted from CIO’s, IT Directors and Service Managers from the U.K. banking industry. The interviews were conducted to obtain their knowledge on the role of leadership style and service knowledge in the ITIL implementation within the U.K. banking industry.

Do you think that banks are receptive to emerging technologies?

Banks are known to be very security conscious, said one of the CIOs interviewed. He further added that emerging technologies were found to actually reduce costs in some instances and well as provide in time information for better decision making. On of the IT Directors interviewed said that since the main processing application remains in one central location, there was a great reduction of overhead costs by centralising the check imaging emerging technology. Executing end of day processing for the sites in the different countries at the Toronto data centres for two banks and then making the updated reports available to the sites was found to be cost effective. Although bandwidth costs increased in those cases, but the saving of having a central execution data centre exceeded the additional network expense incurred.

Both banks were adopting new and innovative emerging technologies to reduce paper, to find green solutions, and also to electronically control the implementation of those solutions remotely. Emerging technologies that supported data compression for increased bandwidth usage or to increase the speed of processing was under review by banking technology experts.
The banks use new technologies associated with mobile banking and telephone banking. With regard to mobile banking, the banks provided the systems applications for their customers to do their banking via their mobile devices, which reduced the need to be at the branch or to be logged on to the internet via a PC. Banking transactions were completed on the mobile device of the customer, which saved the bank from having their tellers spend time with something that could otherwise be done by the individual on their phone. These new technologies forced new competitive responses that caused infrastructure costs to rise. Banks are forced to either be fast followers of this technology or risk losing customers.

Banks are receptive to IT infrastructure changes. Information technology teams reviewed new technology and, even though they were not software development sweatshops, they would provide the best technology solution that the business required for the business need that was being funded. The banks are extremely conservative when integrating new IT infrastructure changes. The banks are not typically leaders in adopting new a technology, but they were fast followers. Banks respond to competitive challenges or they are early adopters to technologies that were proven through proof of concepts. If enough data is provided to support emerging technologies, the banks adapt to the new technology, based on the perceived benefits, vendor roadmaps, and competitive advantages that was gained from moving toward or away from a strategic direction.

How can banks benefit by adopting ITIL?

This question examined the importance of ITIL to the U.K. banking sector. The ITIL can be a description of what IT does to an organisation. ITIL shows in a cyclic fashion the vision and strategies that are formed at the – between IT and the business, and how those come through
architecture, planning, and released development and implementation functions in order to deliver a service into production. The IT operations and support functions are there to ensure that all the critical issues and learnings out of that production environment are being fed back into future generations of architecture, planning, and development.

ITIL has a very similar structure. And again, when ITIL V3 was released in 2007, it immediately became relevant and useful to improving our operating model approach. Again, the operating model is a lot like the - the what IT does, and V3 can help us define how we should do those things. We can also selectively use ITIL V3 to add to our operating model and the practices, thinking, and behaviour of IT to improve ourself in a strategic fashion over the coming years. We believe that ITIL V3 and its strategic, integrated-process approach gives us a lot of bandwidth to put in improvements in the operating model that should last us, or stand us in good stead, for a decade or more.

ITIL gives us robust processes and also provided us an industry standard definition as a good starting point, a foundational starting point, which we can take and look at and apply judiciously to our own situation. It offers an integrated approach; ITIL V3 connects processes together, which is a vast improvement over ITIL V2. V2 had basically ten processes, whereas V3 has far more. But V3 also describes how those processes feed into each other, and how they form a life cycle for the service management approach for IT.

It is a framework that allows efficient delivery of services. It offers sustainable service management. And that strategic approach allows us to generate key metrics, key performance indicators around both the processes and the success of our services that we deliver, and plan for future improvements and incorporate those into the roadmaps that the business and IT have negotiated for future service capabilities.
Furthermore, ITIL improves the user experience. It has a fundamental premise that the focus is on the client or the customer. It allows us to make sure that the relationship is consistently there; that we have a recognised people who are accountable and responsible for an ongoing dialogue with our business partners; and also at this time is allowing us to address service-based costing, the ability to take a service, better define with the business what the expected adoption and utilisation of that service is, plan for those kind of future outcomes, size the service appropriately, and make sure we are managing the costs – either with our own service providers, with our own staff, and with our own datacentres to optimise the size and quality of the service according to the business needs.

*What challenges can be faced by banks while implementing ITIL?*

This question was included to allow the CIOs, IT Directors and Service Managers to identify the challenges they have faced or can face with IT infrastructure implementations. The participants who were interviewed identified challenges such as a lack of communication between banking divisions and a lack of project management skills to initiate, execute, and implement projects.

Within the domestic areas, finding windows of opportunity for testing was a challenge, and the perception from the executives was that the quality assurance teams did not have the required time to test. Indicated that the time to test was not appropriate and in some instances they were taking one step forward and two steps backwards, simply because of the pressures to meet deadlines. Data reviewed by this study revealed that only 80-90% of the code that was being implemented was tested. Executives indicated that time were not allowed for 100% test case coverage on 90% of the business requirements within projects. In some case there were too
many IT infrastructure changes being implemented simultaneously and this was found to be a challenge because priority was not given to any one particular project. It was a general perception from the executives that more time should be spent on planning and understanding the needs and requirements of the business, instead of moving to develop solutions and having to do it twice. At times there was a rush to market and the executives participating in this study perceived that more planning should be done at the executive level.

Some executives perceived that there were too many peripheral software versions to be tested and managed when a business case was developed and the best solution was not always put forward. An area of concern that manifested itself was the need to track maintenance and vendor contracts. Example provided by an executive was that their bank was being billed by a particular vendor for pieces of equipment that had been decommissioned months ago but was still on the books, and the bank continued to pay for the decommissioned equipment. IT was an example where basic governance of these enterprise level assets should be conducted and multinational global pricing should be put in place. Executives perceived that penalties for missed service level agreements were not always enforced and these should be contractually documented and enforced so that vendors would help the banks to reduce costs.

There were limits to what executives were able to manage in their departments and they sometimes had difficulty in the development, execution, and implementation of the changes being passed on to them. Challenge being faced was that IT infrastructure changes were coming in from everywhere for hardware, software, and telecommunications initiatives. There were many competitive forces from inside and outside the bank which caused time management to be a factor for being able to efficiently deal with the volume of work to be processed.
Executives perceived that there were too many meetings and not enough follow up from the outcomes of these meetings, so the impact analysis of the decisions that were being made were not fully enforced or understood. Time would be needed for the creation of test models and ensuring that these were working in accordance to the documented business requirements. Executives perceived that the banks could improve on the way in which they were able to test and deliver systems by following best practices. Overall, it was found that more time should be spent up front on properly defining the business requirements for the new IT infrastructure. In this way, less time would be spent trouble shooting in production.

From the customer’s perspective, the barriers lie mainly in the fact that there is incongruence between IT quality improvement in ITIL principle and in customer’s perception. According to ITIL, the objective of IT quality management is to record customers’ problems and the corresponding solutions into a database so that the solutions can be retrieved quickly from the database when the same problem occurs again. Following this logic, problem solving time shall be reduced so that customer satisfaction shall be enhanced. However in reality, most customers prefer direct communication with IT service supporting engineers to customer service staff. Many IT service quality initiatives have been adopted by the call center in order to maximise their customer satisfaction with their service. The problem is that ITIL program focuses on IT related problem solving and the interaction with customer after problems occurred, but the customer expects to have a good service quality starting from having a direct contact with the firm rather than after problem occurred. This implies that simply focusing on process quality and overlooking product quality, which refers to the design of software and its output such as documents, program codes or testing methods, is not enough to satisfy customer’s expectation.
Thus, each firm has to design individual ITIL practices in accordance with its business objectives, which is different from traditional large scale projects. In principle, these investments were supposed to increase employees’ skills and knowledge so as to improve IT service, reduce downtime and error costs, and increase firm performance. But in practice, the direct link between increased efficiency in IT service and firm performance was difficult to be identified in short-run, due to the needs of long term learning about new quality service processes. Budgets that had been put into employee training and other internal process improvement are easy to measure, but the direct outcomes generated from enhanced quality, increased service level and organisational flexibility are hard to measure.

It is also true that the improvement on the level of service quality and increased flexibility in organisations is difficult to measure from a financial perspective, and therefore the immeasurable nature of quality improvement, in terms of financial outcomes, could lead to the misperception of no return on investment. In addition, the companies in the case study expected that, after implementing ITIL, employees could follow the standard problem solving procedures, leading to enhanced employees’ satisfaction. However, some employees prefer more autonomy at work to formalized standard processes in dealing with IT related problems and, as a result, employee turnover rate was slightly increased due to incapability of adapting to the new working processes. This is where the imbalance between the investment in ITIL and direct performance link has casted some doubts in the three companies to devoting more investments in ITIL.

*How can the management style of the bank affect ITIL implementation?*

The executives perceived that communications and collaboration can be improved between organisations. Some of the projects being initiated at different branches already had
solutions, which caused a duplication of effort and additional costs which could be avoided. It was additional effort because common portals for sharing products and designs were not developed, published or maintained. Recommendation for a common portal for new products and technical designs as a means of communication needs to be developed to identify common technology that is already in use. In some cases there was a lack of information, and when information was available the details were not completely understood.

Business strategies chart the course for the IT infrastructure to follow. For example, if the business anticipated a 20% growth on a particular product line over the course of a year based on historical metrics, then the IT infrastructure would have to be guided by this roadmap and prepare for this growth. Without business and technical alignment additional costs were incurred because project delays. ITIL must always produce roadmaps on their technical products that would allow the business lines and banking experts to look at their complete IT infrastructure environment to coordinate changes and package the delivery of multiple changes.

The IT infrastructure executives perceived that in some cases the business requirements did not match the combination of software, hardware configuration, and communications networks that was tested in the quality assurance testing environments. Implementing the correct solution starts with understanding the original requirements of the business. Business analysis must be completed to ensure that the right solution is documented and implemented to avoid production incidents and customer impact. Overall, the perceptions by the executives was that the banks were receptive to changes and delivering quality but would only implement the technology that was necessary, or the bare minimum, to sustain a business case. Researcher recommends that more forward planning be done to allow for the implementation of more robust IT infrastructure solutions.
Another factor that was identified by the participants was that leadership can play a very important role in the implementation of ITIL within the U.K. banking sector. If there is an autocratic leadership style followed by the bank then, the leadership responsibilities require leaders to be realistic in dealing with issues and other members of the organisation. Accumulation of power and methods used to sustain leaders in their leadership positions can lead to selfishness in sharing decision making. One of the participant mentioned that the goal of the autocratic leader is the domination of others, and the winners revel in it, savouring what the sweetness of domination. The power to control access of wealth and social resources add material nature to the autocratic dictatorship. But this kind of leadership cannot be suitable for the implementation of ITIL. Since each and every employee of the organisation needs to be engaged in the ITIL process, therefore, democratic leadership seem appropriate for ITIL implementation. The democratic leadership style can influence the participation of individuals in matters affecting their daily lives. Invoking collaboration amongst factional groups, the leader is expected to help groups define problems and find a common ground that can lead to satisfaction. Meeting with stakeholders can reinforce the ability of a leader to influence change and get some feedback before the implementation of the goal strategies. The inclusion of majority of members of the organisation in decision making is an expected phenomenon in a democratic or decentralised organisation. In order for true democracy to exist in an organisation, one of the service manager mentioned that top management needs to involve people to practice what is important to them. Voting is a common method of exercising democracy. ITIL requires a democratic way of leadership, where every employee of the organisation can properly adopt ITIL and also provide information for the knowledge database.
**How can Service Knowledge impact the ITIL implementation process?**

The participants were then asked about the impact of service knowledge on the implementation of ITIL within the U.K. banking industry. One of the factors that can enhance service knowledge is by training employees. These trainings are provided by two ways: formally and informally.

Formal training is learning based on discrete planned events or experiences that help people learn how to perform specifically determined objectives. Formal training is a planned or systematic approach that sets the learning objectives first, and then designs and conducts the appropriate procedures that enable employees to master predetermined outcomes. Formal learning has been interchangeably used with training and development. Formal training and development used to be termed as employee development. Employee development is distinguished from other components such as organisational development and career development, mainly by addressing the development of employee competence. Formal learning is conceptualised using a systematic instructional model. Formal learning begins with identifying the needs of the organisation, job or task, and persons. The identification of training objectives resulting from a needs assessment provides critical inputs to ITIL instructional design process, and influences the overall effectiveness of training programs.

Formal training activities refer to learning activities that are officially designated that can facilitate ITIL adoption throughout the organisation. Most formal training activities are organisationally implemented through specific learning and development programs or opportunities that an employer provides or supports for employee development. These activities can be categorised according to the location of learning, such two ways of on-the-job and off-
the-job. The ITIL foundation courses can be provided through on-the-job training process rather than off-the-job. Advanced courses can be provided on-the-job after cost-benefit analysis.

On the other hand, the concept of informal training has been referred to as learning by doing. All genuine education comes about through experience. The context enacted in performing a certain activity has an impact on the individual or group learning that occurs. The context serves as the organising circumstance for learning. In the organising circumstance, self-directed learners tend to choose learning activities or courses from limited alternatives which casually happen within the environment, and which affect their learning projects. Learning with others refers to “sharing and reflecting on others’ practices and experiences” and collaborating with others. The term knowledge sharing may be limited to the meaning of the exchange, but “learning with others” implies the extended role of others. Since adopting ITIL is not an easy process, it is important that a foundation level training should be provided so that employees know how to use the system and then can start learning by doing.

Another major factor that increases service knowledge is managing Service Catalogue. The purpose of Service Catalogue Management is to provide a single source of consistent information on all of the agreed Services. Access to this information should be widely available but only to those who are authorized to access it. By ensuring that all areas of the business have this visibility, within a customer facing view, expectations in terms of business processes used, service levels, and quality of service can be more effectively managed. The Service Catalogue should be integrated into the Service Portfolio and contain details of all the Services being prepared for transition to the live environment as well as those Services currently being provided. The Service Catalogue should contain 2 aspects; The Business Service Catalogue and the Technical Service Catalogue.
• Business Service Catalogue: Contains details of all IT Services delivered to customers together with the relationships to other business units and business processes that rely on the IT Services.

• Technical Service Catalogue: This view is typically the customer view of the Service Catalogue. Contains details of all IT Services delivered to customers together with the relationships to supporting services, shared services, components, and CI’s that are necessary to support the provision of the Service to the business.

Visibility and communication is therefore key, and one of the primary purposes of a Service Catalogue is to provide a ‘shop window’ to internal business customers and end users on what Services the IT Organisation provides to help them do their jobs. The Service Catalogue should also clearly state agreed Service Levels, costs, delivery dates, descriptions etc to facilitate expectation with customers and end users. Differences in expectations can then be more easily managed and feedback and reviews managed in the Service Portfolio (i.e. if quicker delivery times are needed investigate into the demand, business need, cost justification etc can be made).

The Service Catalogue can also enable consistent Service delivery and Service quality as having standard templates within the Service Catalogue for Service Requests (office moves, new software etc) allows the IT Organisation and its staff to handle these requests in a repeatable manner, preventing each from being treated uniquely and ‘whoever shouts loudest’ scenarios.

Flexibility should also be inbuilt however to allow different business customers or end users the ability to choose differing tiers of service based against either their roles or pre-defined criteria. A ‘one size fits all’ Service Catalogue will inherently be not fit for use simply due to different business requirements (The CEO for example would need to have a different delivery time for an office move for example). Different tiers may also have different costs associated to
them and therefore this needs to be visible, or maybe even require approval, should this be available.

This multi-tier and multi-role approach to the Service Catalogue can assist with other ITIL disciplines (Capacity/Demand Management). Through providing metrics on the differing costs of Service provision at different times, and shaping user behaviour based on costs and service level options, the IT Organisation can further meet Business requirements while improving quality of service provision at the same or even reduced costs. Thus, formal training and service catalogue is very important for effective ITIL implementation. Furthermore, opinions and seniority can also play a very important role in improving service knowledge. Seniors of the organisation have experience that they can share with others, while opinion of all the employees can benefit better decision making.

What can organisations, in particular banks, so to effectively implement ITIL?

Global IT operations has been an advocate of ITIL for many years, and it’s become something that now is generally used and accepted from the CIO level, all the way through to the individual contributors in the organisation. In the past, organisations were often reactive, and it was found that improvements came mostly as a result of operational learnings. Service managers would end up sometimes in fire fights in an effort to fix things, not quite sure who was doing what. What they have found now is that ITIL has made them more planned, and they have a process-based strategic approach to incidents, problems, change, service continuity, etc.

Moreover, these days, we have measures, and thus, measurable plans and results. We know better when we succeed, and not just when we fail. In the future, we wish to get to more proactive improvements, be able to do better trending and predictive analysis of where services
are going and where the service management processes need to improve in support of that. So, we expect to mature our capabilities and processes as we go forward.

Perhaps the most important capability or program that we have in place today is a service management strategy. This takes the people of IT, the process that are used to manage IT internally, and the services that IT offers, and the technology, and makes sure that we’re moving all three of those elements forward synchronously in lock step with each other, so that other resources in the organisation do not end up with too much manual effort not being supported by technology, or process being managed, but people without the skills to go and adhere to those processes effectively, and then make sure that the right data, tools, and skills are in place at the right time in order to improve overall the experience of being a staff member inside a bank, and being an employee or a partner interacting with the bank.

One of the most challenging aspect of inserting ITIL into a corporate culture is that one has to get buy-in at all levels. The real challenge is that if management can focus on just one segment of the IT population, say the people who are working on architecture, or just the people who are working on projects, and they do not have a comprehensive understanding of the whole life cycle of service management that ITIL prescribes, then you end up with segmented advances in their approaches, but not a holistic improvement overall. This can only happen if the organisation is following democratic leadership style and has high service knowledge at each level of the organisation. People find segments of that pipeline that was described above. One segment may be improved, but the overall experience and benefit to the business is not improved because the rest of the pipeline is not operating effectively.

When asked what steps can be taken to increase ITIL adoption in the U.K. banking sector, a CIO said that early planning around the training and the foundations training and the
service manager training for ITIL can make it possible for a large percentage of the organisational population to understand the processes. This increases their knowledge base.

**Survey Results**

The following are the survey results obtained after surveying employees from the U.K. Banking industry:

**Management Style**

1. An autocratic leadership style should be preferred while implementing ITIL

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<thead>
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<th>N</th>
<th>Valid</th>
<th>Missing</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<td>Variance</td>
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</table>

According to the survey, the mean value for choosing the autocratic leadership style is 1.87, which means that majority of the respondents, disagreed for choosing autocratic style while implementing ITIL.

2. A democratic leadership style should be preferred while implementing ITIL

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<thead>
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<td>Variance</td>
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</tbody>
</table>
According to the survey, the mean value for choosing the democratic leadership style is 3.45, which means that majority of the respondents agreed for choosing democratic leadership style while implementing ITIL.

3. The balance between IT Internal functioning and Business is very important for successful ITIL implementation

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</table>

| Mean      | 3.216667 |
| Std. Deviation | 0.691147 |
| Variance   | 0.477684 |

According to the survey, the mean value is 3.40, which means that majority of the respondents strongly agreed that the balance should between IT Internal functioning and Business plays an important role in successful implementation of ITIL.

Service Knowledge

1. Formal training should be given to employees while implementing ITIL

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<td>Missing</td>
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</table>

| Mean      | 3.45    |
| Std. Deviation | 0.699273 |
| Variance   | 0.488983 |
According to the survey, the mean value is 3.45, which explains that majority of the respondents strongly agreed that formal trainings should be provided to the employee while the implementation of ITIL.

2. Employees can adopt ITIL by themselves through informal training

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<tr>
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</tr>
<tr>
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</tbody>
</table>

According to the survey, the mean value is 1.77, which means that majority of the respondents disagreed that employee are capable of adopting ITIL by training them informally.

3. While building a knowledge database opinion of the employees should be considered in order to facilitate decision making

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<tr>
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<tr>
<td>Variance</td>
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<td>0.473446</td>
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</tbody>
</table>

According to the survey, the mean value is 3.37, which means that majority of the respondents agreed that during the development of knowledge database, it is important to take opinion of the employees to facilitate decision-making.
4. While building a knowledge database seniority of the employee or manager should be considered to increase decision making

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<td>Variance</td>
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</table>

According to the survey, the mean value is 3.05, which means that majority of the respondents agreed that while building a knowledge database, seniority of the employees or managers should be considered to increase decision making.

5. Service Catalogue should be maintained and managed in order to improve service knowledge of the users and customers

<table>
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<tr>
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<tbody>
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</tr>
<tr>
<td>Variance</td>
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</table>

According to the survey, the mean value is 3.25, which explains that majority of the respondents agreed that for improving service knowledge of customer and users it is important to maintain and manage a service catalogue.
**ITIL Implementation Strategy**

1. ITIL implementation should be an organisation wide strategy and should be used to guide other strategic initiatives

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<tr>
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</table>

According to the survey, the mean value is 3.40, which means that majority of the respondents strongly agreed that implementation of ITIL should be an organisation wide strategy and should be used to guide other strategic initiatives.

2. Post-ITIL organisation should be considered before completing the process design

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</table>

According to the survey, the mean value is 3.20, which explains that majority of the respondents agreed that Post-ITIL organisation should be considered before completing the process design.
3. For a successful ITIL implementation continuous communication is required at all levels of the organisation.

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<td>Variance</td>
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</tbody>
</table>

According to the survey, the mean value is 3.35, which mean that majority of the respondents agreed that for implementing ITIL successfully, continuous communication is required at all levels of the organisation.

4. Set realistic expectations about benefits realisation

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<tbody>
<tr>
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<tr>
<td>Variance</td>
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</table>

According to the survey, the mean value is 3.30, which explains that majority of the respondents agreed that organisation should set realistic expectations about benefits realisation.
5. Establish a baseline from which to monitor improvements

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<td>Variance</td>
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</table>

According to the survey, the mean value is 3.10, which means that majority of the respondents agreed that organisation should establish a baseline from which it monitors improvements.

6. Engage stakeholders early

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<tr>
<td>Variance</td>
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</table>

According to the survey, the mean value is 3.18, which explains that majority of the respondents agreed that engage stakeholders early.
7. Maximum benefit of ITIL can only be achieved if the impact each process has on another is understood

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<tr>
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</table>

According to the survey, the mean value is 3.33, which means that majority of the respondents agreed that maximum benefit of ITIL can only be achieved if the impact of each process on another is understood.

8. Prioritise process selection based on current resources

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<tbody>
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<td>Variance</td>
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</table>

According to the survey, the mean value is 3.27, which means that majority of the respondents agreed that organisation should prioritise process selection based on current resources.
**Chi Square Tests**

**Hypothesis 1**

H₁: The management's leadership style is positively correlated to the implementation of ITIL good practice in the U.K Banking Industry.

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>71.865*</td>
<td>54</td>
<td>.052</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
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<td>.633</td>
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<tr>
<td>Linear-by-Linear Association</td>
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<td>.587</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>60</td>
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<td></td>
</tr>
</tbody>
</table>

*a. 70 cells (100.0%) have expected count less than 5. The minimum expected count is .02.*

A chi-square test was carried out to examine relationship between management style and ITIL implementation (X²= 71.865, df = 54, p .052). Since the sig value is greater than 0.05, we do not reject this hypothesis. Therefore we are in a position to say that we accept the hypothesis and conclude that management style seems to impact ITIL implementation.
Hypothesis 2

H₂: The service knowledge of managers is positively correlated to the implementation of ITIL good practice in the U.K Banking Industry

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
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<td>54</td>
<td>.230</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
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<tr>
<td>N of Valid Cases</td>
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<td></td>
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</tbody>
</table>

A chi-square test was carried out to examine relationship between service knowledge and ITIL implementation ($X^2 = 61.321$, df = 54, p .230). Since the sig value is greater than 0.05, we do not reject this hypothesis. Therefore we are in a position to say that we accept the hypothesis and conclude that service knowledge seems to impact ITIL implementation.
Discussion of Findings

ITIL fundamentally allows employees to develop their knowledge and skills. ITIL courses, of course, are a knowledge base and readily available globally. So, bank IT staff can find themselves easily able to take the ITIL foundations class, practitioner class, or even become an IT service management expert. The common language that is offered by ITIL is extremely useful.

Now, compared to years ago, when we talk about incident management or problem management, people know the difference. They realize that an incident is something that leads to a problem and the need for root cause and long-term fix, and that worrying about root cause and long-term fix may not be appropriate during an incident, when the focus is on recovering a service.

Those are examples of how that both the terms and definitions of ITIL are extremely useful to get everybody in IT on the same page, so to speak, when they’re talking with each other. A point on taxonomy: Taxonomy is the mapping of that language into how it’s used – not just what it means. And that’s very important in that it allows the technologists in IT, who are building the service management tools that we will use, to map out what are called data models.

In other words, to – when we talk about an incident or a problem – to capture the right data behind the scenes and make sure that during an incident or a problem we’re seeing the right data to make better decisions. So, it reduces communications frustrations and allows us to build better tools that support our processes and the people behaviours that we wish to achieve.

It supports certifications and career growth. Having formal ITIL certifications for somebody who is a career-minded service manager is very important, as it would be for any other career. And service management and process approach is proactive, and it helps prevent
reactive fire fighting. Having people think about the implications of the life cycle. Whether they’re performing architecture, or they’re writing code, or they’re performing a change in a production environment, that life cycle allows some forethought to occur and to think about the other roles and responsibilities that are involved in that life cycle.

Regarding the process aspect of implementing ITIL, most interviewees felt that implementing ITIL simplified the existing processes and met quality requirements which led to maximising firms’ resources, although it, at the same time, required more time in checking and designing new processes. However, the design of the ITIL process was considered neither flexible nor effective in response to the change of business environment. According to ITIL, a firm needs to set up various processes in accordance with the level of customers, type of services, and the steps of solving problems prior to the implementation of ITIL service support program for the frontline staff to follow, these processes may not have enough coverage in meeting different customers’ needs.
CHAPTER 5: CONCLUSION

Conclusion

Implementing the ITIL process is a learning experience and an evolving process. It takes time and upfront investment. When done correctly, it makes an organisation more efficient and IT more valuable to the business leaders. Continual improvement is the practical end goal because it has the greatest economic impact. Implementing ITIL ensures standardisation and consistency in the methods and procedures for changes while causing minimum disruption to the organisation’s routine and ongoing IT services. Management implementation’s success takes the strong, steady commitment of executive management to get through these growing pains. Organisations need subsequent commitment of the ITIL team members and, finally, approve an organisation change management processes.

The ever-increasing customer demands and the heightened global competition necessitate a re-examination of the role that improved IT service process plays in creating business value and shaping firm’s competitive capability (Weill and Broadbent, 1998). In response to the competitive pressure, many firms devoted lots of resources into information technology to enhance customer satisfaction, especially the typical service firms such as those studied in this paper. Successful implementation of ITIL requires top management commitment to information technology, a greater sense of co-operation and involvement of both call center staff and IT support staff, and an attitude change from everybody that is not my job to what I can do to help. The somewhat immeasurable nature of the effect of investment in ITIL on firm’s performance has led to the reluctance to support long-term IT process changes and continuous IT improvement.
Evidence from this study suggests that implementing ITIL is by no means an easy task, which is heavily burdened by some barriers. These barriers will be even less surmountable without a strong backing from the top management. Also, the communications between both internal and external customers, designing reward systems that encouraging the adoption of the quality project and crating the culture that emphasising continuous improvement are all crucial.

The interview and survey results show that management style and service knowledge can affect ITIL implementation in the U.K. banking industry. Therefore, if these factors are used properly, they can definitely help the banking sector to adopt ITIL at a faster rate.

**Assumptions**

The researcher assumed that targeted participants responded to the request to participate in the interviews in a candid, unbiased manner. Taking part in the study they were expected be forthcoming with information on research, development, and emerging technologies at their organisations. It is expected that recommendations made to the banking sector will be reviewed and accepted once the recommendations are determined to be beneficial. The interview participants who were targeted as experts were expected to meet the criteria of having more than 10 years banking and IT infrastructure experience to provide the information requested during the interview process. They were expected to complete the interviews independently, without outside consultation or interference.
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APPENDIX

Employees Consent Form

January 20, 2008

Dear employee,

The purpose of this research study is to see how management style and service knowledge can affect ITIL implementation in the U.K. banking sector. You are being invited to participate in this study because you are an employee at a bank.

If you agree to participate in this study, your participation will last for approximately 15 minutes. Your participation in this study is completely voluntary and you may refuse to participate at any time. Return of a completed questionnaire indicates your willingness to participate in this study. During the study you may expect the following procedures to be followed. You will fill out the subordinate questionnaire about your supervisor. After completion, please place the questionnaire in the envelope provided, seal it, and a researcher will collect them in the envelope provided for return to the researcher.

To ensure confidentiality to the extent permitted by law, the following measures will be taken: 1) questionnaires will remain completely anonymous and no personal identification will be asked 2) no hotel will be identified by name in the published research, rather pooled data will be reported 3) only the identified researchers will have access to the study records 4) all questionnaires will be placed in a sealed envelope by the person filling them out, and not opened except by the identified researchers and 5) study records will be kept in a locked office. There are no foreseeable risks at this time for participating in this study. You will not incur costs by participating in this study and you will not be compensated.

We hope that the information gained in this study will benefit society by helping to identify what are the important factors while implementing ITIL within the U.K. banking sector. If you have any questions regarding this questionnaire or if you would like a summary of research findings, please contact [Your Name] at [Your Contact Number].

Thank you for your assistance with this project.

Sincerely,

[Your Name]
[Designation]
[Email Address]
DIRECTIONS: The following questionnaire is designed to fill out about the factors that affect ITIL implementation in the banking sector and the ITIL implementation strategy. Please check the appropriate response for each statement.

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<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<td>0</td>
<td>1</td>
<td>2</td>
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1. Management Style

- An autocratic leadership style should be preferred while implementing ITIL
- A democratic leadership style should be preferred while implementing ITIL
- The balance between IT Internal functioning and Business is very important for successful ITIL implementation

2. Service Knowledge

- Formal training should be given to employees while implementing ITIL
- Employees can adopt ITIL by themselves through informal training
- While building a knowledge database opinion of the employees should be considered in order to facilitate decision making
- While building a knowledge database seniority of the employee or manager should be considered to increase decision making
- Service Catalogue should be maintained and managed in order to improve service knowledge of the users and customers

3. ITIL Implementation Strategy

- ITIL implementation should be an organisation wide strategy and should be used to guide other strategic initiatives
- Post-ITIL organisation should be considered before completing the process design
- For a successful ITIL implementation continuous communication is required at all levels of the organisation
- Set realistic expectations about benefits realisation
- Establish a baseline from which to monitor improvements
- Engage stakeholders early
- Maximum benefit of ITIL can only be achieved if the impact each process has on another is understood
- Prioritise process selection based on current resources