FINANCIAL STRATEGIC PLANNING AND
KNOWLEDGE MANAGEMENT:
A COMPARATIVE CASE STUDY ON TURKISH BANKING SECTOR

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Approval of the Graduate School of Social Sciences

Prof. Dr. Meliha ALTUNIŞIK
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science.

Prof. Dr. Erkan ERDİL
Head of Department

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science.

Dr. Nusret GÜÇLÜ
Supervisor

Examining Committee Members

Prof. Dr. Erkan ERDİL	(METU, STPS)	
Dr. Nusret GÜÇLÜ	(METU, II)	
Dr. Tunç MEDENİ	(METU, BA)	

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Lastname : CANAN PELİN DURTAŞ BAŞPINAR

Signature :

ABSTRACT

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DURTAŞ BAŞPINAR, Canan Pelin
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It is not easy to set up a knowledge management system (KMS) in banking due to the size of large services, the variety of products, dealing with large information, serving under high cost pressure and highly competitive market conditions. This thesis proposes that strategic management is a knowledge processing outcome, and should be an integral part of the financial strategic planning (FSP), which is essential in the agility of financial organizations..

This thesis will explore a FSP model that is developed by merging and integrating the two models "The new knowledge management" (Firestone & McElroy, 2003) and "APQC Process Classification Framework" (APQC, 2011). In light of the merged models a measurable indicator set is defined based on the literature and the researcher's personal experience. To validate the thesis, two case studies have been carried out by using qualitative and a participatory approach in one foreign owned and one jointly controlled bank in Turkey in order to validate the model. Since the case studies consist of specific information on the studied banks, the details are presented separately in a technical paper.

The main findings of the case studies show that two different knowledge management (KM) approaches "The new knowledge management" and "APQC Process Classification Framework" can be combined in a unified model which can be used to increase agility in turbulent economic environments.

Keywords: Financial Strategic Planning, Knowledge Management, banking, finance, agility.

ÖZ

BANKACILIKTA FİNANSAL STRATEJİK PLANLAMA
VE BİLGİ YÖNETİMİ:
TURKIYE BANKACILIK SEKTÖRÜ ÜZERINE KARŞILAŞTIRMALI BİR VAKA ANALİZİ

DURTAŞ BAŞPINAR, Canan Pelin
Yüksek Lisans, Bilim ve Teknoloji Politikası Çalısmaları
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Bankacılık sektöründe bir bilgi yönetimi sistemi kurulması bankaların çok büyük ölçekte hizmet veriyor olmaları, ürün çeşitliliğindeki fazlalık, malumatın genişliği, yüksek maliyet baskısı ve yüksek rekabetçi piyasa koşulları nedeniyle zordur.
Bu tez stratejik yönetimin bir bilgi yönetimi süreci olduğunu ve bilgi yönetiminin finansal stratejik planlamanın bir parçası olması gerektiğini, bunun finansal kurumlardaki çeviklik için gerekli olduğunu önermektedir.
Tez çalışmasında, "Yeni Bilgi Yönetimi Modeli" ve APQC'nin bankalar için "Süreç Sınıflandırma Çerçevesi" modelinden yola çıkarak bir finansal stratejik planlama modeli geliştirilmiştir.
İki modelin birleştirilmesinın ışığında araştırmacının kişisel tecrübesine ve literatüre dayanarak ölçülebilir bir veri seti tanımlanmıştır.
Tezde vaka çalışması yaklaşımı benimsenmiş ve geliştirilen model Türkiye'de yabancı ortaklı iki bankaya nitel ve katılımcı bir yaklaşım ile uygulanmıştır.

Anahtar Kelimeler: Finansal Stratejik Planlama, Bilgi Yönetimi, bankacılık, finansal yönetim, çeviklik

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LIST OF ACRONYMS AND ABBREVIATIONS

PCF APQC Process Classification Framework

AFR Available Free Resources Ratio

BMO Bank of Montreal

BRSA Banking Regulation and Supervision Agency

BCBS Banking Supervision

CRM Benefits of KM in Customer Relationship Management

CMM Capability maturity model

CAD Capital Adequacy Ratio

CBRT Central Bank of Turkey

DBU Deutsche Bank University

DOKB Distributed Organizational Knowledge Base

ECAP Economic Capital

FSP Financial Strategic Planning

FC Foreign Currency

GDP Gross Domestic Products

HR Human Resources

IS Information Systems Istanbul Stock Exchange (ISE)

KPI’s Key Performance Indicators

KCF Knowledge Claim Formulation

KC Knowledge Claims

KLC Knowledge Life Cycle

KM Knowledge Management

KMS	Knowledge Management System
EHS	Manage Environmental Health and Safety
MRBP	Management Reporting and Budgeting & Planning Group
O/N	Over Night
PM	Performance Management
ROAA	Return on Average Assets
ROAE	Return on Equity
SP	Strategic Planning
TNKM	The New Knowledge Management
VaR	Value Add Risk

CHAPTER 1

INTRODUCTION

In the banking industry, it is not easy to set up a KMS mainly due to size of the services, variety of products, quantity of information to be processed, pressure for cost reduction and highly competitive market conditions. In this new era of banking, financial institutions face many challenges such as liquidity and funding needs, compliance with regulations, and being agile in competitive market conditions. To overcome these challenges, banks are consistently placing more emphasis on managing their profitability. (IBM, 2012).

In general, strategic planning (SP) aims to define measurable goals and strategies to achieve these declared goals in SP, banks must increase the efficiency, reduce the costs, obtain customer, product, and channel profitability, manage and reduce the risk, and address the compliance issues of the banks. “In today's changing banking industry, a profitability management process must include planning, measurement, and interpretation based on solid, accurate and reliable data.” (IBM, 2012).Since the financials of a bank provides most reliable and objective data, financials are used while building the strategies. The more banks develop their financial planning and controlling systems it becomes easier to overcome their challenges and improve their profitability. SP system monitors the progresses against the set targets, interpret and review the current and future situation of a bank.

All organizations in different maturity levels have their own strategies and which are managed according to a strategy. However, it is crucial that organizations know how to ensure the agility and continuity. Therefore, KM should be one of key elements of SP. APQC Process Clarification Framework (PCF) modeling in banking suggests KM should be a part of strategic management. (APQC, 2011)

It is experienced that the KM literature is not discussed on financial reporting and KM in banks that much. However, financial reports include the most trustable information about a bank. In KM trustworthiness is one of the most essential requirements in the “knowledge economy” (Drucker, 1998, pp. 1-21) ages. Hence the financial statistics provide the most trustable and objective information about strategic business plans should be mostly based on the financial statistics. “*Bad knowledge leads to bad practice, and bad knowledge is the product of bad knowledge processing. Even strategy must be accountable!”* (Firestone & McElroy, 2003)

KM in strategic management enables knowledge to be more “fluid” (Davenport T.H ; Prusak L, 1998) and easier to put into practice in the banking industry.

1.1 Thesis Objective

The overall objective of the thesis is to asses if and how KM can make a difference to FSP by developing a model based on PCF developed by APQC and to integrate the framework to Knowledge Life Cycle (KLC) endorsed by The New Knowledge Management (TNKM). (Firestone & McElroy, 2005) PCF emphasizes KM as a part of SP (APQC, 2011) and on the other hand TNKM reveals a distinction between the knowledge processing environment and business processing environment in order to emphasize the knowledge process separately. (Firestone & McElroy, 2005),

In order to arrive at the stated purpose the researcher will focus on five distinct points: firstly, the study area of knowledge; what it is and where it comes from. Secondly, the researcher focuses on KM and its desires to explain the benefits of KM in the banking sector and in SP. Thirdly, the researcher discusses both KLC and PCF processes and then, adapts and merges the two frameworks to a financial SP model. Fourthly, in order to measure the accomplishment levels of the targets a Knowledge Management Maturity Model, K3M (Liebowitz & Beckman, 2008) is suggested. In addition a measurable key performance indicator (KPI’s) set is defined based on the literature and the researcher’s personal experience to follow and monitor the business and the economy proactively. Finally, a case study approach was followed in order to assess the model in a real life context in two private banks in Turkey by applying the model and using the measurable indicator set.

1.2 Thesis Scope

A SP alignment model for banks is developed by focusing on banks’ financials based on the findings of the literature survey and analysis. The reason behind focusing on financials is to frame the study within a general planning perspective supported by generally accepted measures. All types of banking activities certainly require a business plan, however; some of them remain in more operational levels and some are in more managerial levels. Since an overall business plan of a bank mostly focuses on managerial level items, this study covers relevant processes of PCF.

PCF presents thirteen business processes that apply to almost any business, regardless of industry, size, or location. The researcher preferred to analyze PCF customized for banking sector. The first five are the operating processes that companies follow in order to develop and move products to the market. The last eight are the management and support processes that enable companies to operate effectively and to control the risk. These last eight processes can be considered as management and the support tools of a company while performing the operational processes. (APQC, 2011)

In this thesis, “TNKM” (Firestone & McElroy, 2003) and “Process Classification Framework” (APQC, 2011), models are investigated and merged in a unified model. Based on these studies a measurable indicator set is defined in order to validate the model, two case studies have been carried out using qualitative and participatory approach in one foreign owned and one jointly controlled bank in Turkey. Since the case studies consist of specific information pertaining to firms, the details of the case studies which gave specific information are presented in a technical paper.

1.3 Thesis Outline

This thesis is organized in five chapters.
In Chapter 1, an introduction is presented to clarify the background of the research.
In Chapter 2, a survey of the literature is provided on knowledge, KM, benefits of KM in the banking industry, FSP and KM, application of KM in banking, KLC and the APQC process classification framework.

In Chapter 3, a FSP model is developed by merging and integrating the two models “TNKM” (Firestone & McElroy, 2003) and “APQC Process Classification Framework.” (APQC, 2011). Based on these studies a measurable indicator set is defined.

In Chapter 4, two case studies have been carried out using the qualitative and participatory approach in one foreign owned and one jointly controlled bank in Turkey. Since the case studies include specific information that outlines the details of the firms, the tables of the case study are presented in a technical paper.

Finally in Chapter 5, the outcomes of this research are summarized, limitations are discussed and a direction for future research is provided.

CHAPTER 2

THEORETICAL and EMPIRICAL BACKGROUNDS on KM

2.1 Knowledge

The early theoreticians in KM discussed the differences among data, information and knowledge. However, knowledge has been a subject of debate in philosophy for many ages. Plato, Aristotle, Descartes, Kant, Locke, Kirkegaard, Nietzsche, Heidegger, Wittgenstein, Foucault, Habermas, and Paul Feyerabend, Husserl, Heiddeger and Searle are a few of them.

In philosophy, theory of knowledge or the theory of how it is that people come to knowledge of the external world is called epistemology. (Abercrombie, Nicholas; Hill, Stephen; Turner, BryanS., 2006). In other words, the science that studies the idea of knowledge is epistemology. *"Empiricism is an epistemology that asserts that all our knowledge is derived from the foundation of our experience, and knowledge is justified true belief"*. (Firestone & McElroy, 2003).

In most of the organizations, the corporate epistemologies are fundamentally *justificationist* which measures how knowledge should attempt to justify our knowledge as infallibly true by demonstrating that it is. (Firestone & McElroy, 2003).

Firestone and McElroy (2003) cites the work of Popper (Popper, 1994 cited in McElroy, 2003 p.36) regarded as Fallibilism. According to Popper's all knowledge is fallible and should be open to criticism. "Critical rationalism stands in opposition to foundationalism and justificationism, and is broader than falsificationism, which relates to empirical testing of knowledge claims (KC) only." (Firestone, 2012)

In general epistemologists ask three questions: (Abercrombie N, 2000)

- what is the meaning of knowledge?
- how is knowledge acquired?
- how do we know what we know?

In order to respond to what is knowledge and what is not; it is important to present existing ideas in literature.

According to Davenport and Prusak (1998), knowledge is neither data nor information, but it is related to both, and the differences between these terms are often a matter of degree.

> Organizational success and failure can often depend on knowing which of them you need, which you have, and what you can and can't do with each. When these three terms are compared, knowledge is the deepest one. Knowledge derives from information as information derives from data. (Firestone & McElroy, 2003)

Data

"*Data is a set of discrete, objective facts about events. In an organizational context, data is most usefully described as structured records of transactions*". (Davenport T.H ; Prusak L, 1998). Usually, financial institutions like banks and insurance companies manage a great amount of data. In general terms, Information Technologies (IT) process data is neither information nor knowledge. (Schwartz, 2006)

Data may be devoid of context, meaning, or intent but can easily be captured, stored, and communicated via electronic or other media. (Becerra-Fernandez & Leidner, 2008)

Peter Drucker defines information as "data endowed with relevance and purpose." (Drucker, 1998) as cited in (Tobin, 1998).

Data are necessary inputs into information and knowledge which are defined as a series of observations, measurements, or facts in the form of numbers, words, sounds and/or images. Data have no meaning, but provide the raw material from which information is produced. (Roberts, 2000)

Data is based on observation, easy to structure, storable in technological equipment, countable and measurable. The transfer of data is the easiest when compared with information and knowledge.

In financial industry, a huge part of IT investments are made to manage record, classify, and keep track of the data.

Information

When the data is processed by a system or by a human, it is transformed into information. Information gives an idea about the job or the process. According to Davenport and Prusak (1998)

> *information is a message, usually in the form of a document or an audible or visible communication. Information is meant to change the way the receiver perceives*

> *something, to have an impact on his judgment and behavior*. *Think of information as data that makes a difference.* (Davenport T.H and Prusak L, 1998, pp. 3-5)

"Information has been described as data that possess context, relevance, and purpose. Information involves the manipulation of raw data to obtain a more meaningful indication of trends." (Becerra-Fernandez & Leidner, 2008, pp. 5-10)

According to Tobin (1998), when the individual seeks a meaning in some data and finds that it has some function/ objective related to the work, the data becomes information.

Information is defined as data that have been arranged into meaningful patterns. Data may result from conducting a research, information results from the analysis of the data in a concrete form that give meaning to the data as reports, charts and graphs. (Roberts, 2000)

In the financial industry information systems (IS) data is specialized according to realm of authority. The raw data is transformed into information to better understanding of the data. Information is goal oriented when compared with data.

Knowledge

There is a hierarchy between knowledge, information and data. Knowledge means to create, and includes experience.

> *Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information".* It originates and is applied in the minds of knowers. *In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices, and norms* (Davenport T.H ; Prusak L, 1998, pp. 3-5)

Knowledge is a differentiated from data and information in that knowledge assigns to information that entitles action and decisions, or information with a specific point. Western philosophers have in general accepted Plato's definition of knowledge as a "justified true belief." More recent perspectives cover knowledge as a transformation process, enabling the transition of data into information or information into settlements. (Becerra-Fernandez & Leidner, 2008)

"The relationship between knowledge and information is interactive. Knowledge creation is dependent upon information, yet the development of relevant information requires the application of knowledge". (Roberts, 2000, pp. 429-443). Knowledge has more value and

includes more human contribution when it is compared with information, and because of that, it is not easy to transfer knowledge.

One of major aspects of information is how it matches the reality. Therefore, "*knowledge is a tested, evaluated and surviving structure of information*". (Firestone & McElroy, 2005, pp. 189-212)

Some (Robert D Galliers ; Sue Newell, 2001) suggest to refocus on the KM-IT efforts on the better management of data since IT processes data - not information and certainly not knowledge. The reason behind this suggestion is based on that an IS cannot deal with the fundamental elements of truth and knowledge; it can be counterproductive to create IT-centric KM initiatives.

Knowledge is typically described as being either tacit or explicit (Polanyi, 1966). To better understand knowledge, it is important to review the definition of tacit and explicit knowledge.

2.1.1 Explicit Knowledge vs Tacit Knowledge

The intuition coming from experience called as "tacit knowledge" by Nonaka and Takeuchi (1995) can also be defined as skills and craft knowledge (techne)

> *Explicit (or codified) knowledge is based on more tangible assets which can be expressed in words and numbers, and it can be easily codified and shared. Explicit knowledge can be defined as scientific knowledge (episteme). Tacit knowledge, on the other hand, includes more intangible assets which cannot be measured easily and cannot be codified. Knowledge that is difficult to express and share, such as intuitions and insights.*(Becerra-Fernandez & Leidner, 2008, pp. 5-10)

> *Knowledge can be codified if it can be recorded or transmitted in the form of symbols or embodied in a tangible form. Tacit knowledge is non-codified knowledge that is acquired via the informal take-up of learning behavior and procedures; it is often referred to as knowhow.* (Roberts, 2000, pp. 429-443)

Lundvall and Johnson (B., Lundvall B.-A. and Johnson, 1994) suggest a taxonomy of knowledge based on four categories: know-what, know-why, know-how and know-who.

(Roberts, 2000) defines these four categories as:

- know-what, referring to knowledge about ‘facts’;
- know-why, referring to scientific knowledge of principles and laws of motion in nature, in the human mind and in society;
- know-who, referring to specific and selective social relations;
- know-how, referring to skills.

Know-how which refers to skills can be explicit to some extent but important part of it still remains tacit.

Nonaka (1994) describes how knowledge can be converted from an explicit and tacit form in a model called SECI as follows:

- Socialization: from tacit knowledge to tacit knowledge
- Externalization: from tacit knowledge to explicit knowledge
- Combination: from explicit knowledge to explicit knowledge
- Internalization: from explicit knowledge to tacit knowledge

The conversion of tacit knowledge held by individuals into organizational knowledge is when knowledge goes up, both in scale and at ontological levels. (Nonaka et al. 2001:27)

Tacit knowledge includes creating and experiencing processes so that it can be codified and expressed as a tangible production of tacit knowledge. While tacit knowledge is possessed by itself, explicit knowledge must rely on being tacitly understood and applied. Hence all knowledge is either tacit or rooted in tacit knowledge. (Roberts, 2000) A wholly explicit knowledge is unthinkable. (Polanyi, 1966)

2.1.2 KM

“The collective knowledge of a company is almost immeasurable and certainly priceless.” (DeTienne, K.B. and Jackson, L.A., 2011, pp. 1-11). Although, defining KM is not easy, it can be defined as the strategies, the work processes and the technologies which help to obtain, to product, to create, to share knowledge for a company in order to achieve its aims. As the data transforms into information and the information interacts with knowledge, the value added knowledge increases. Technologies support knowledge with information.

A simple definition of KM may be *doing what is needed to get the most out of knowledge resources*. Usually, KM is associated with decision making. (Becerra-Fernandez, Gonzalez, & Sabherwal, 2004)

“*Acceleration in market volatility, increasing domain complexity, intensified speed of responsiveness and diminishing individual experience forces driving KM*.” (Becerra-Fernandez & Leidner, 2008, pp. 5-10)

Gurteen (1998, pp. 5-13.) defines KM as*:*

> ***an emerging set of organizational design and operational principles, processes, organizational structures, applications and technologies that helps knowledge workers dramatically leverage their creativity and ability to deliver business value.***

KM is also related with intellectual capital.

Since knowledge is an organized structure of facts, relationships, experience, skills and some part of it is tacit and some part of it is codified, only limited part of KM can be automated. To this respect, KM systems are separated from information-processing systems. (Becerra-Fernandez & Leidner, 2008)

A successful KM Project should include KM and information management. *“KM is the organizational policy and set of practices aimed at recognizing, creating, categorizing, maintaining, sharing, and applying the collective knowledge of people assisted by IT.”* . (Becerra-Fernandez & Leidner, 2008)

According to Peter Drucker *“Converting data into information thus requires knowledge.”* (Drucker, 1998, pp. 1-21)*.* Regarding this Cambell and Renee (2001) state that the literature offers four dimensions on KM:

- The process of cognition
- The type of knowledge (tacit or explicit)
- The level of activity (individual, group or organizational)
- The context in which knowledge is used.

A successful KM requires a well-defined written knowledge strategy that is in accordance with the business strategy and the shareholder’s and client’s needs based on an integrated approach with technology, people and processes. (Gwin, 2003)

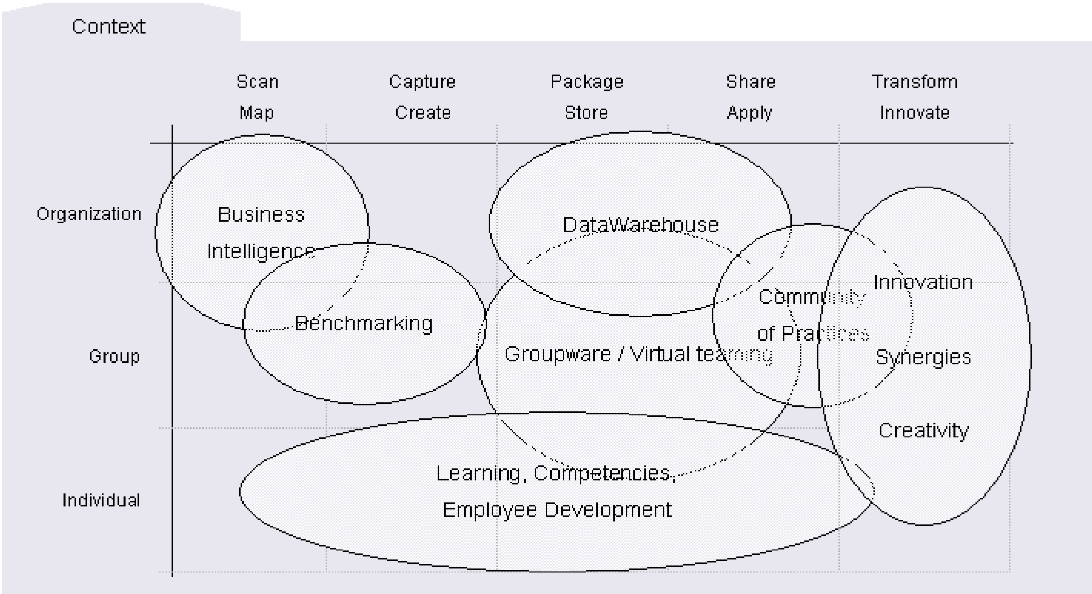

Figure 1- Seven clusters of KM Activity

Source: The Thinking Behind the Action in KM (Chauvel, 8-9 November 2001)

Chauvel (8-9 November 2001) derived the seven clusters of activity in Figure 1 above to build a classified approach which allows people to position the company KM practices commonly. Moreover, these classifications situate the services and products provided by suppliers. The majority of the KM practices may be located in these classifications above. However, KM practices should not be perceived or managed as an information or human resource. The KM is shifted from resource management to an organization management. The seven clusters provide a map for KM.

KMS's can be classified as (Becerra-Fernandez, Gonzalez, & Sabherwal, 2004)

- Knowledge discovery systems: Intelligent algorithms such as data mining and through the inference of data relationships
- Knowledge capturing systems: Formalize knowledge in models such as concept maps, which allow others to learn the domain.
- Knowledge sharing systems: organize and distribute knowledge.
- Knowledge application systems: Assist in solving problems.

2.1.3 KLC

The KLC is one the models of which the researcher used in order to develop a FSP model for banks. Therefore, this chapter will examine this data in detail. McElroy and Firestone built a new approach on KM called "The New KM or Second Generation KM" (Firestone & McElroy, 2003). The first generation KM (supply-side KM) based on Taylorism and it assumes that valuable knowledge already exists and places an emphasis on technology, sharing and the allocation of knowledge. On the other hand, the TNKM approach argues that knowledge does not preexist, both production of new knowledge (demand-side KM) and integration of the knowledge (supply-side KM) should be considered. Knowledge is produced by people and TNKM focuses on sustainable knowledge processes and its outcomes, as well as how knowledge is produced and integrated in human social systems. (McElroy, 2002).

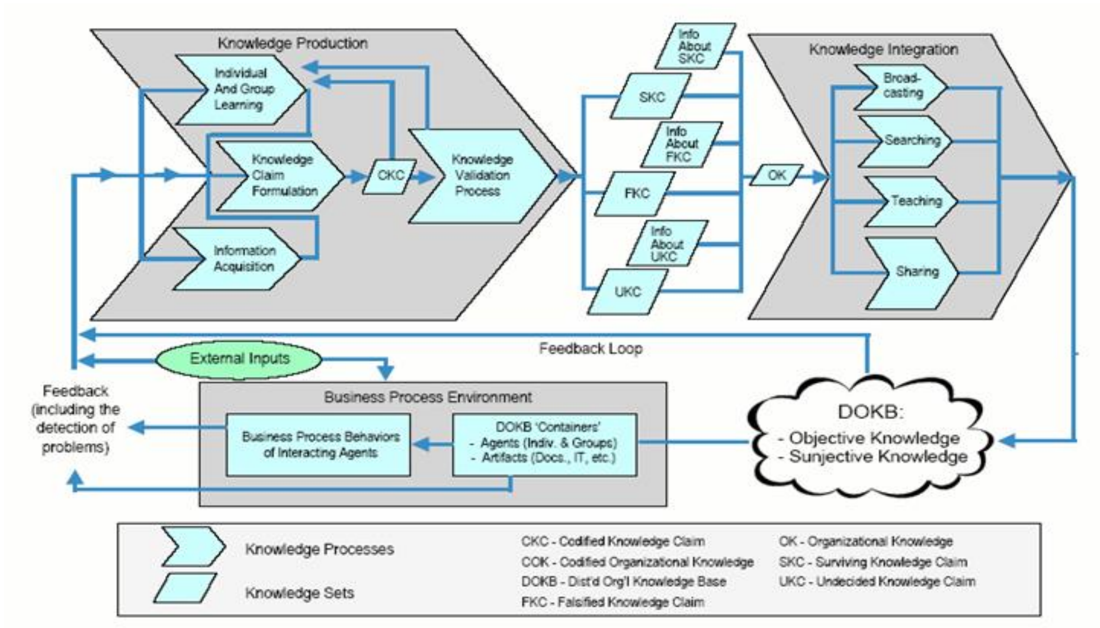

Figure 2- The KLC and the Business Processing Environment

Source: The KLC Model of McElroy (2003)

The KLC Model of McElroy (2003) illustrated above in Figure 2 reveals a distinction between *knowledge processing environment* and *business processing environment* in order to emphasize the knowledge process separately. According to this approach, KM consists of three phases: Knowledge Production, knowledge integration and experiential feedback loops.

The process starts with the detection and formulation of the problem. The first phase of the life cycle is **Knowledge Production**; of which organizational new knowledge is created. It is also synonymous with organizational learning. Knowledge production contains the following sub-processes:

- **Individual & Group Learning:** A producing input process to KCF process involving human interaction, KCF, and validation at higher levels of analysis. It is the first step in organizational learning and it is influenced by feedback from prior validated efforts. (Firestone & McElroy, 2005)
- **Knowledge Claim Formulation (KCF):** A potential knowledge production or codification process involving human interaction by which new organizational KC are formulated in order to reach desired outcomes. KCF consolidates outside sources such as conjecture and KC derived from individuals or organizations such as argument. It is influenced by feedback from prior validation efforts. Knowledge to some is only information to others until it is validated. Some of KC will remain; some of them will be invalid or under the status of currently undecided. (Firestone & McElroy, 2005)
- **Information Acquisition:** A process by which an organization acquires KC or information produced by other external systems to the organization. (Firestone & McElroy, 2005)
- **Knowledge Validation**: A process by which KC are subjected to organizational criteria to determine their value and veracity. KV is a managed function which formally evaluates competing KC when put forth by the KCF process. KV is a process which precedes the transformation of organizationally held knowledge in cases where new KC are deemed to be of a higher value to the firm than currently held rules. (Firestone & McElroy, 2005)

The second phase is called **Knowledge Integration;** the output of the production. This process introduces new KC to its operating environment and changes or removes the prior KC's. Knowledge Integration includes all knowledge sharing, teaching and transmission processes. It may also include the transmission and integration of information. The integrated knowledge held by people in minds and also held/recorded by system level. The combination of these two knowledge integration (objective and subjective) is called as **'Distributed Organizational Knowledge Base'** (DOKB). DOKB consist both mental and artifact-based contents like IS, other cultural artifacts, individuals, teams, groups, other agents, documents, and communities of practice. (Firestone & McElroy, 2005) (Macro Innovation, 2012)

The last process of the cycle is **Experiential Feedback Loops**; of which information concerning the outcomes of organizational learning activities is fed back into the Knowledge Production phase of an organization's KLC as a useful reference for future action.
The whole KLC repeats itself endlessly.

Business Processing Environment; when knowledge is integrated to DOKB, claims and metaclaims become subject to use in Business Processing results that are outcome in that process may satisfy the expectations (match) or may not (mismatch).In business processing environment, according to McElroy (2003) work can be considered as "knowledge in use".
TNKM theory asserts a framework for the entire KLC instead of implementing KM. It has developed strong boundaries with organizational learning, intellectual capital, continuing knowledge process and innovation. Although, TNKM provided different view and many advantages for enhancing the aims, implementation of the theory is also very critical for the success. Democratizing the knowledge process and to be open for criticism are crucial for organizational learning and sustainable innovation.

2.2 KM In The Banking Sector

2.2.1 KM in the Banking Sector

Increase in liquidity and funding needs and overheads, compliance regulations and competitive market conditions force especially the big institutions to organize knowledge. Knowledge is one of the foremost competitive advantages in the new business world. (Nonaka I. , 1998). The shift in business focus requires that banks become more knowledge-oriented organizations. This allows knowledge to become a strategic management tool, a source of innovation, customer satisfaction and loyalty as well as a competitive advantage. (Vincent Ribière, 8-9 November 2001). The developments in web-based services in the banking sector and the increase in fluidness of information like investments, market, financial data, and other services have forced banks to become more price-cost-sensitive. (Vincent Ribière, 8-9 November 2001)

According to Harold M. Campbell and René Pellissier (8-9 November 2001, pp. 61-77) the main reason for the institutions to become knowledge oriented is

- "*The shift away from capital assets as the basis for market supremacy in favor of knowledge-based intangible assets.*

- *The emergence and convergence of a number of technologies capable of capturing, managing and disseminating vast quantities of information.*

- *The move towards the virtual organization."*

Vincent Ribière and Claire Chou (2001) explain the changing forces in the banking industry in four categories:

- **Mergers and Acquisitions**: Banks look for new fields and demographics to increase their market share. The mergers and acquisitions are viewed as a strategy to fend off competition by being "big".

- **Changing Workforce**: Competition fuels the banking industry to work more effective and increase the efficiency. The workforce is changing rapidly and technology fostered the change in the qualification requirements of employees.

- **Consumer Power:** Consumers are becoming more sophisticated and more aware of their needs and demands.

- **Online Banking:** The Internet has created a new generation of consumers and businesses.

Strategic Management in banking industry makes knowledge more "fluid" (Davenport T.H ; Prusak L, 1998) and easier to put into practice (Nonaka I. , 1998). By this means employees understand the business, learns about the vision and mission of the company.

For the past 20 years, banks are automating their manual processes by building IS. Without a proper management information system, plans and procedures and tools information has become a serious problem for banks. (Ali & Ahmad, 2006)

> *"Especially with online banking, organizations are collecting data that include personal and behavioral information that were unavailable before. With information overload, companies face the challenge of data filtration and synthesis that are necessary to transform data into actionable information (knowledge). They need to turn data and information into decision-making tools or risk losing this advantage to their competition*. (Vincent Ribière, 8-9 November 2001, pp. 541-557)

This shows a major shift in trend from simple data manipulation to trying to manage tacit knowledge as explained in previous section.

The main areas that knowledge creates value in are business strategy management, customer relationship management, and intellectual asset management. (Ribière & Chou, 8-9 November 2001) (Becerra-Fernandez, Gonzalez, & Sabherwal, 2004)

The function of KM is not only using, storing or distributing the existing knowledge but also creating new knowledge/value.

KM in the banking industry includes almost the same processes with other industries. However, it is not easy to set up a KMS in banking mainly due to size of the services, variety of products, amount of enormous information to be processed, pressure for cost reduction and highly competitive market conditions.

> *KM is not only about managing knowledge assets such as knowledge regarding markets, technologies, products, and organizations, which facilitates business processes to make profits, add value, etc; but also managing the processes that act upon the assets. Developing knowledge; using knowledge, and sharing knowledge; preserving knowledge are a few examples of these processes.* (Jayasundara, 2008)

According to the researcher, the desire for KM in banking industry is based on factors for

- Increasing efficiency, reducing costs and improving staff productivity
- Improving process control and higher productivity and reduce errors
- Managing the lifecycle of a process starting from definition, to execution, measurement, optimization and redeployment
- Maximizing profitability by risk management

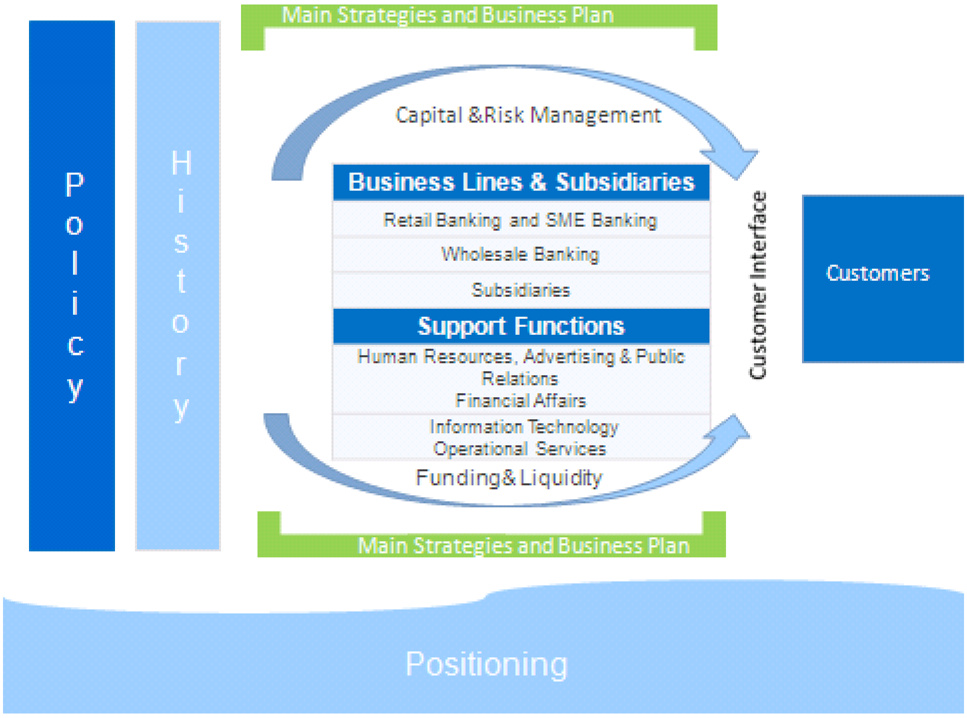

Figure 3- Value Chain Policy Model in Banking Industry

Source: Derived from Vincent Ribiere's value chain model

The researcher modified Figure 3 above from Vincent Ribiere's value chain study. (8-9 November 2001) Although the original value chains figure of Vincent Ribiere (8-9 November 2001) provided a systematical approach to KM in banking sector. The original figure does not contain a **historical, positioning** or a **policy** approach. Therefore, the researcher added these headings to the value chain. Historical overview, global, sectoral and local positioning are very important for banks in decision making processes. Besides, in order to capture potential in market shares strategic and geographical positioning is crucial to analyze the potential in the market, the niche sectors, the weaknesses and the strengths of the market. Policy overview provides the model of a macro outlook for banking industry to improve and expand their economic and social plans. In addition since KM is a process of policy making all the information flows in the model can be accepted as a policy.

Concerning the recent global crisis in Eurozone and the necessity of being in accordance with Basel regulations the researcher also added **"capital management"** to the original value chain in order to stress agility. Due to the rapid changes and competitive market conditions the main strategies and business plans of banks are considerably dependent on macroeconomic indicators. Legal and regulatory rules generate the infrastructure of the activities. The recent financial crisis proved that funding and liquidity concerns are currently as important as risk management.

The Figure 3 above shows that lines of businesses and the subsidiaries are the basic profit centers for banks. Most of the time, the creation of a product and marketing are done by these centers. The researcher also added subsidiaries to the original value chain to emphasize the synergy between the head company and its subsidiaries.

Support functions provide infrastructure and support business lines. A prudent, scalable human resources (HR) mechanism is important as well as skilled and stable workforce. HR costs are also cost saving center for most of the banks. Intensive training facilities are also important. Moreover, a long term success requires a combination of both service quality and brand image. The financial affairs department monitors the evolution of P&L, balance sheet & off-balance sheet items and ratios and analyses the change in the quality and the composition of assets and liabilities. The consolidation of the budgets and strategic business plans are also developed with financial affairs department in cooperation with all business units.

In terms of technologic support, the complexity of the banking systems supported by the complex IT structures both at operational layers and business intelligence layers, in order to obtain an agile platform with powerful Customer Relationship Management (CRM), BPM and BI functionality across all layers. IT investments are also shared services in terms of data and information which enables continuous cooperation for agility.

Internally, firms need to integrate data collected from different delivery channels and business units in order to establish a single database that is accessible to all functions within the organization. (Ribière & Chou, 8-9 November 2001)

According to the survey of Financial World (2001) financial institutions face problem while implementing KM. The main reasons are (Dore, 2002)

- Suffering from lack of time to share knowledge, to sift and analyze information
- Information overload
- Inadequacy in the technology
- Difficulties in capturing tacit knowledge
- Lack of understanding of how knowledge is acquired
- KM typically focuses too much on recycling existing knowledge, rather than on generating new knowledge and

- Most KM techniques look like traditional techniques.

2.2.2 Benefits of KM in The Banking Sector

KM can also be defined as a way of learning how to effectively manage organizational knowledge has many advantages as follows: (Becerra-Fernandez & Leidner, 2008)

- Leveraging core business competencies,
- Accelerating innovation and time to market,
- Improving cycle times and decision making,
- Strengthening organizational commitment and,
- Building sustainable competitive advantage.

Additionally, KM improves the performance of an organization through increasing the efficiency and the productivity and raises the financial value of an organization by treating human capital as a knowledge value like other facilities. (Ali & Ahmad, 2006)

The purpose of KM in organizations is to provide new knowledge, to enhance collaboration, to achieve effective practices, to build customer relationship management, to enhance bank's webpage, improve operations quality and network communications and manage intellectual assets legally. (Alwari, Elkhatib, & Al-Ain, 2009)

Literature shows that most common KM applications identified in the banking industries are customer relationship management, capital & risk management and liquidity funding and human capital management.

2.2.2.1 Benefits of KM in CRM

"Customers are changing; they are becoming more knowledgeable about the bank's products and services….they want better and customized products and services at lower costs." (Ribière & Chou, 8-9 November 2001)

Keeping or increasing the market share of the loans and the assets is one of the most essential challenges for a bank. In order to achieve this, banks put effort in developing innovative distribution channels, opening new branches, creating new products, finding niche segments, increasing and using the internet and social mediums with a more personalized relationship.

The majority of KM initiatives launched in the banking industry can be described as CRM attempts focusing mainly on technological approaches. “Codification approach” (Ribière & Chou, 8-9 November 2001)is intended to collect, codify and disseminate information. It relies heavily on IT. …The “personalization approach” is more of a person-to-person strategy that emphasizes development networks for linking people so that tacit knowledge can be shared.” (Vincent Ribière, 8-9 November 2001)

According to Jayasundara (2008) the banks have great deal of knowledge about their customers. However, they are faced with difficulty in putting the customer knowledge to practical usage. In order to meet this requirement neural network technology can be used to identify patterns in consumer behavior that can help banks to exploit cross-selling to other required services.

Due to the heavy competition of the financial sector developing strong and trusting relationships with customers is sine qua non. The strength of the relationship is often the only thing that prevents a customer switching to another institution. (Dore, 2002)

2.2.2.2 Benefits of KM in Capital & Risk Management and Liquidity Funding

Risk Management in banking is distinguished between credit, operational and market risk.

- **Credit Risk:** Credit risk refers to the possibility that a borrower may fail to repay a loan. (Oxelheim & Wihlborg, 2008)
  A diversified loan portfolio with high asset quality is very important for banks Loan pricing, collateral and loan diversification decreases the credit risk. Credit scoring helps to monitor-manage the portfolio and to assess the existing clients.
  - Diversification in terms of sectors
  - Diversification in terms of group concentration
  - Diversification among segments
- **Operational Risk:** Operational risk is caused by possible deficiencies in the operational procedures to control inside the bank, while legal risk is caused by uncertainty about the interpretation of contractual term. (Oxelheim & Wihlborg, 2008) Emergency Action Plan, Crisis Management and Business Recovery Plans.
- **Market (Interest Rate) Risk**: Market risk is caused by uncertainty about the market value of tradable securities. (Oxelheim & Wihlborg, 2008)Both internal and regulatory measures are defined for sensitivity which gives the effect of an increase in interest rates on the net present value of assets and liabilities to calculate the potential loss in time buckets indicating when it will be reflected in profit and loss.

- **Solvency:** To measure to strength of the capital Strong Stress Tests should be done continuously
- **Funding and Liquidity Risk**: A well-diversified mix mainly based on deposits and strong liquidity.

"One way that KM could help in the risk management process is through the use of knowledge map." (Vincent Ribière, 8-9 November 2001).

2.2.2.3 Benefits of KM in Human Capital Management

Organizations with significant intellectual capital require eliciting and capturing knowledge for reuse in solving new problems as well as recurring old problems. (Becerra-Fernandez & Leidner, 2008) To capture knowledge, organizations must first encourage the sharing of knowledge through the construction of a learning organization where people constantly learn from one another and share good and bad experiences." (Vincent Ribière, 8-9 November 2001)

Knowledge sharing in organizations has significant importance specifically while capturing knowledge. However, power relationships between organizations or actors can influence both the character of beliefs that actors treat as knowledge, and the conditions under which they will share knowledge. The organizational culture might be a barrier against knowledge sharing. The employees and managers might refuse knowledge sharing or know-how in order to keep power in their own hands. (Ekbia & Kling, 2003)

Encouraging employees by their organization for knowledge sharing is the starting point in building a strategy and achieving objectives. (Alwari, Elkhatib, & Al-Ain, 2009)

2.2.3 FSP and KM

2.2.3.1 SP

A successful strategic plan requires well defined, understandable, accessible and progress-traceable plans in accordance with long term vision and mission of a company. SP is a process which comprise the preparation, the application and the evaluation processes including feedbacks. On the other hand strategic plan is the outcome of these processes.

Since defining a long term vision derives from the strategic direction and it is a high level activity, it needs to be a top down approach. Vision intandems different parts of the organization. Therefore, it needs to appeal the long-term interest by being realistic and be accessible, clearly defined, communicable, imaginable and flexible. (Kotter, 1996) Prior

(2009) identify the vision as a desirable state that a company wishes to attain at some time in the future. He also adds that mission is a company's objectives, and the approaches while competing to reach its objectives.

SP builds complex interconnections concerned with the objectives and long-term mission of a company. Top management and owners define the future of a company in terms of vision and mission and strategic goals. An effective SP should be an ongoing and living process and it should define the strategic goal and objectives in an actionable and measurable framework. (IIBA, 2006) (Kaplan & Norton, 2004). (Prior, 2009)

Kaplan & Norton (2004) suggests the balance scorecard - a strategy map- to visualize a framework for strategic goals in addition to financial measures. These performance measurements quantify intangible assets, such as brand image, reputation and clientele. They have developed four perspectives which are ordered from top to bottom: **financial, customer, internal and learning and growth**. Each of these four perspectives provides leverage for the one above it. (Kaplan & Norton, 2004) (Prior, 2009) Learning and growth indicates a company's learning and improvement perspective to achieve the vision in terms of human, information and organization capital. Internal perspective focuses on customer satisfaction. Customer perspective discusses the ways of approaches to the customers. Financial perspective supports overall business strategy and presents the success for shareholders.

Additionally, a SP includes the opportunities available for the organization and assessment of its ability to exploit those opportunities. (Prior, 2009)

2.2.3.2 SP in Banking

It is observed that there is a lack of discussion on KM on financial reporting and KM in banks. However, financial reports include the most trustable information about a bank. In KM, trustworthiness is one of the most essential requirements in the "knowledge economy" ages. (Drucker, 1998)

Banks must think strategically in order to keep or grow in market size by increasing efficiency, reducing costs, improving staff productivity and maximizing profitability. Moreover, they must focus on creating knowledge based products to distinguish themselves from competition. (Neef, 1997)

An effective business strategy is a set of complex cause-and-effect relationships. (Kaplan & Norton, 2004)

Effective KM needs to be linked to the bank's core business strategy with integration to technology, people and process. (Gwin, 2003)

According to Kaplan & Norton (2004) an intangible asset is the knowledge that exists in an organization to create differential advantage. The intellectual and other intangible assets are the key to sustainable competitive advantage and long-term growth. (Liebowitz & Beckman, 2008). *"Intangible assets consist of things like employee capabilities, databases, IS, customer relationships, quality, responsiveness, and products or services."* (Kaplan & Norton, 2004, pp. 52-63) A company is a living organism which has a collective sense of identity and fundamental purpose. (Nonaka I. , 1998)

APQC (2011) modeling in banking suggests KM should be a part of strategic management. APQC Process Classification Framework (PCF) allows objective comparison of performance with in organizations.

According to Neef (1997) there are six strategies for competing in the world of knowledge-based business

- Knowledge-based strategy which organizations focuses on their global strategy and knowledge based products.
- Knowledge-based Process Planning which helps organizations to take advantage of the collective knowledge logical sequence of what needs to be known at each step.
- A Knowledge-Sharing Culture which KM, promoting a knowledge-sharing culture. Besides provides a knowledge map which identifies what knowledge is needed and available by whom and when, on a global basis.
- A Technical Support Infrastructure which capture, organize and transfer information and knowledge.
- Knowledge Stewardship which is critical for firms to develop a consistent and well-organized method for the information on the knowledge web.
- Content and Corporate Memory which the organization performance information, key lessons learned, and sources of internal skills and expertise need to be identified.

Performance Management (PM) helps companies to identify these processes. PM is a type of business process model which enables companies to achieve its goals constantly by

planning, monitoring and controlling its business processes and activities. PM diagnose, analyses and forecast on business processes by measuring it. (S.A.R.L, 2009)
Liebowitz and Beckman (2008) suggest a Knowledge Management Maturity Model (K3M) approach for strategy formulation consisting of unified disciplines and integrated components, as well as synchronized development and implementation of these strategies to ensure formulation of a robust, achievable business strategy, improved execution of the vision and strategy using the latest enabling disciplines, and more effective utilization of organizational resources.

In the times of economic crisis period requires agility. "*Agility means the ability of an organization to be constantly innovative and to adjust its own business models and processes to suit market and customer dynamics "* (S.A.R.L, 2009)

A strategy is an outcome of knowledge processing. (Firestone & McElroy, 2003) KM in banks increases the awareness of the banks while developing a strategy to provide agility and advantages in the competitive environment. In the knowledge economies competition is conducted by intangible assets rather than tangible assets. An organization who knows what it knows provide an advantage against the competitive economy and enhance producing higher quality knowledge frames. Also KM is important in terms of compliance. If you do not know your customers you might make wrong decisions.

> *Strategy and operating models, in turn, are claims—claims about what markets to pursue, how to organize, what investments to make, and how to operationalize and do business with customers. These claims are, in turn, produced as a consequence of knowledge processing.* (Firestone & McElroy, 2003)

A strategic business plan should include not only planning, execution, monitoring and controlling but also governance and a risk management overview.

In general, risk management and governance are not taken into account in models but the researcher takes into account while exploring the model. Risk identification, assessment and mitigation strategies are the key issues of risk management. In SP credit risk analyzes should be done in order to set down a road map for diversification of the portfolio which enables decreasing the credit risk. The asset quality is another indicator for credit risk analysis. Using an automated decision model (like scorecards) also increases portfolio quality. New production vintages, roll rates, scorecards are used for monitoring credit risk. Operational risk plan defines all necessary actions that should be taken into account to minimize operational risk which is also important for business continuity. In addition, market risk monitors interest rate sensitivity closely in terms of internal and regulatory measures. On the other hand corporate governance emphasizes not only development but also communicating the strategies to stakeholders.

2.2.3.3 FSP

KM should also be applied to FSP. FSP and budgeting is basically concerned with a bank's accounting information based on financial analysis for the current and future situation consistent with the vision and the mission statement of the banks.

Hence the financial statistics provide the most trustable and objective information strategic business plans should mostly be based on the financial statistics. Also it should be shared with shareholders openly. "*Bad knowledge leads to bad practice, and bad knowledge is the product of bad knowledge processing. Even strategy must be accountable!"* (Firestone & McElroy, 2003)

The author's experience shows that SP in banks should include

- Information and analysis about the macroeconomic environment: current and forecasted economic growth rates, inflation, foreign and domestic currency exchange rates estimations. Monetary policy, global market, current account deficit and GDP evaluations and expectations.
- Banking sector analysis: Potential and historical growth in the assets size, loans of the sector. Funding and lending policies.
- Main strategies and business model: Main strategies of the bank's growth on balance sheet, funding needs planning and deposit growth strategies. Business line activities and margin expectations. Liquidity management and risk management .Cost and performance efficiency strategies. Capital management
- Market share analysis: Basically benchmark analysis concerning the assets, loans, deposits, equity and profit
- Financial Highlights: Historical and future overview of the financials mostly based most important items of a balance sheet such as loans, deposits, borrowings, equity, and profit & loss table such as gross operating income, operating expenses, provisions, taxes and net profit and KPI's such as capital adequacy ratio, risk weighted assets, net interest margin, return on equity (ROE), return on assets (ROA), cost of risk, non-performing loans ratio, cost/income, cost/per employee, loans/deposits and loans/per branch.
- Risk Management: Risk identification, reduction and prevention strategies.

- Compliance and Audit: Legal and regulatory requirements and controlling and prevention strategies of the activities.

According to Ekbia and King (2003) there are boundaries in the financial sector which affect knowledge sharing and “trueness” of knowledge. They are the regime of financial reporting, investment analyst reports and business-press reporting. These three regimes are established to create “true” statements. However; each of these regimes systematically manipulate their statements because of the expected influence of economic power:

> *lucrative consulting by the big auditing firms, the prospects of new lucrative investment deals for firms whose stocks a banks' analysts treated favorably, and the expectation of important advertising revenues by creating a stream of business stories that were -- on balance -- extremely favorable to large businesses and their managers*. (Ekbia & Kling, 2003)

In the FSP for development of effectiveness thorough analytical capacity and a systematic, reliable and timely data is required. SP is a major KM process.

“The development model of KMMM is used to assess the current position of an organization” (Liebowitz & Beckman, 2008) Companies develop their KM processes over time until they reach the optimized level.

Maturity models describe the development of KM stages in an organization. Capability maturity model (CMM), which most of the KMM models copy, divides the KM into four sub-processes: knowledge creation, knowledge storage, knowledge sharing, and knowledge application. (Hung & Chou, 2005) The CMM maturity levels are ranked based on in five levels of maturity: initial/ad hoc, repeatable, defined, managed and optimized. (Hung & Chou, 2005) (Liebowitz & Beckman, 2008)

All firms have strategies as they are managed in one way or another. However, it is important to identify and try to improve what extent strategy is transformed into formal knowledge or penetrated within the organization. Since a FSP is a recurrent process; as the maturity level increases, the success of building a better FSP increases.

Although there are various maturity models in the literature, the K3M model of Liebowitz and Beckman is stressed in this study. The main reason behind this emphasize is that K3M model is compatible with all levels of the suggested FSP model and can easily integrated with the PCF model of APQC.

With their K3M model, Liebowitz & Beckman (2008) try to determine an organization's KM maturity level based on its KM, learning, competency, and business strategies. The maturity level in the model ranges from being unaware of KM to understanding the full utility and value of KM to the organization. The maturity levels in Liebowitz & Beckman (2008)'s model are as follows:

Table 1- Liebowitz & Beckman's Maturity Levels

0	Nonawareness	Organization has not heard of KM
1	Awareness	Organization is introduced to KM and knowledge sharing concepts
2	Initiation	Small KM pilots are developed and sprinkled throughout the organization
3	Intrigue and interest	KM pilots spark enthusiasm and interest and give way to full-blown KM projects
4	Penetration	The discovery phase leads to mass appeal and employees are embracing knowledge sharing tenets and are embedding KM activities into their daily work lives
5	Utility	The organization (and its people) realizes the collective value of knowledge sharing and can assess the utility and resulting impact of KM on the organization

Source: Moving Toward a KM Maturity Model (K3M) (Liebowitz & Beckman, 2008)

2.2.4 Application of KM in Banking

2.2.4.1 Application of KM in Global Banking

There are several, but limited examples of KM application implementations in banking sector.

Nattapol, Peter, & Laddawan (2010) have investigated the determinant of KM System (KMS) success in the context of Thai banking industry. Their study indicates that Use and User satisfaction relate significantly to the success of KMS. The knowledge and service quality and trust lead to system application which supports the study of Halawi (2005) that social factors can be relevant and influential on KMS Use and User Satisfaction.

According to Jayasundara (2008), in banking it is very important to make information and knowledge available at the right time in the right place without any delay as banking is an information-based industry, although banks do not take it seriously except for IT.
World Bank, a leading KM institution, decided to launch KM in 1996, in order to improve the quality of the work and to enhance the capacity of developing countries to meet development goals. (Gwin, 2003) The relevant know-how was determined and captured and codified so that it was accessible by all staff, clients, partners and stakeholders around the world. (Ali & Ahmad, 2006).

They defined the KM process as *"The systematic capture of knowledge from research and experience; organization and storage of knowledge and information for easy access; and transfer/dissemination of knowledge, often as a two-way exchange."* (Ali & Ahmad, 2006, pp. 1-13). They studied three financial institutions as follows:

> ***In Swedish Insurance company Skandia*** *senior management began looking for a more effective and efficient manner of transferring knowledge and increasing its use throughout its global operations. It has leveraged internal know-how to dramatically reduce start-up time for new ventures to seven months, compared to an industry average of seven years.*
>
> ***Bank of Montreal (BMO)*** *is a leader in customer centric knowledge based solution. This bank wanted to change the status quo of the traditional knowledge discovery lifecycle and capture the potential benefits of improving the efficiency of turning models into production. As a result, during 2000/2001 the Bank of Montreal participated in a multimillion dollar project that would help make the knowledge discovery process more economical, error-free and faster.*
>
> ***Deutsche Bank*** *has embraced the strategy of continuous, concentrated corporate learning and intellectual capital branding through its creation of the Deutsche Bank University (DBU). DBU is in initial stage of development and to a large degree follows the thinking of what are recognized by industry experts as best practices in developing a corporate university as an umbrella organization for learning.*

Although each of the banks cases above provide a general overview on KM applications. It is not possible to convert these "best practices" into a FSP model. However, the process classification framework build by APQC gives a general framework and as the researcher suggested in the next chapter, it might be applicable.

2.2.4.2 APQC Process Classification Framework (PCF)

The PCF (APQC, 2011) is one the models which the researcher used in order to develop a FSP model for banks. In the next chapters the researcher will try to present the details of the model with KLC framework. However, before setting the model it is important to understand APQC model in banking.

The question of how KM has impact on business value is critical for presenting that KM should be a part of strategic management. APQC (2011) modeling in banking suggests that KM should be a part of strategic management. APQC Process Classification Framework (PCF) allows objective comparison of performance with in organizations. The researcher preferred to take into account in KM in banking sector since the framework is assessed from the banking point of view.

The PCF indicates business processes which are critical in an organization with a horizontal viewpoint, rather than a vertical functional viewpoint.

PCF was originally expanded as taxonomy of business processes in 1991. In 2003 APQC revised the PCF to reflect the new business models and dynamics. (APQC, 2011)
It is important for a company to measure its KM capability in order to achieve the desired outcomes. A KM process framework provides a conceptual guide for companies to show the relevance and impact on organizational results. To develop a KM strategy formulation methodology, the first step is identifying the stakeholder's segments and defining the value propositions for each targeted stakeholder. The second step is measuring the operating and strategic performance and finally the last step is analyzing the performance indicators in terms of KM outcomes, business process outputs and organizational outcomes.
PCF presents thirteen business processes that apply to almost any business, regardless of industry, size, or location. The researcher preferred to analyze PCF for banking sector. The first five are operating processes that companies follow to develop and move products to the market. The last eight are management and support processes that enable companies to operate effectively and in order to control the risk. These last eight processes can be considered as management and the support tools of a company while doing the operating processes. (APQC, 2011)

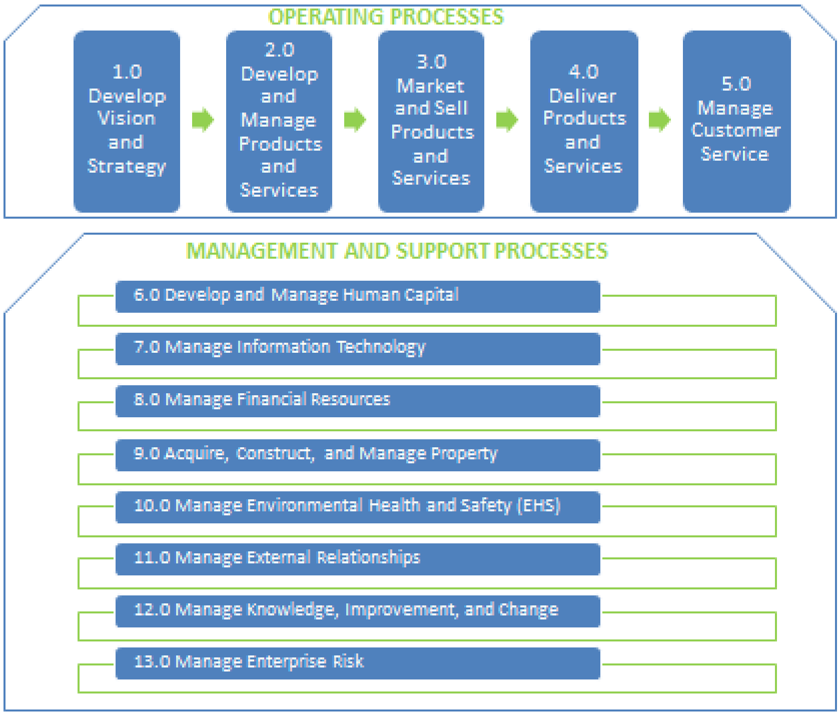

Figure 4- APQC Process Classification Framework

Source: APQC Process Classification Framework (APQC, 2011)

The figure 4 above shows the categories of PCF. Operating processes, management and support processes are the two main processes in PCF. Although the researcher not focused all of the categories indicated in the PCF document a summary of the all categories are indicated below.

1-Operating Processes

According to the PCF **Operating Processes** contain five main categories as follows: (APQC, 2011)

1.0 Develop Vision and Strategy: A category focuses on building and developing the vision and the strategy of a bank.

2.0 Develop and Manage Products and Services: This process group comprises all processes related with product and service portfolio management including identifying and controlling.

3.0 Market and Sell Products and Services: This process group contains all processes required to research and analyze customers and the market, develop specific offerings, pricing plans, and channel strategies and develop sales strategy such as concrete sales plans, including forecasts, budgets, partnerships, goals, and measures.

4.0 Deliver Products and Services: This category includes all processes that are involved in planning for products and services.
5.0 Manage Customer Service: This category includes all processes required for understanding and segmenting customers, creating customer policies, planning and manage customer service operations, measuring and evaluating customer service operations.

2- Management and Support Processes

PCF describes **Management and Support Processes** in eight categories as follows
6.0 Develop and Manage Human Capital: This process basically includes HR planning, policies, and strategies, recruitments, managing employee performance and employee promotions.
7.0 Manage Information Technology: This process mainly comprises all managing, defining, developing and controlling of information technology activities, policies
8.0 Manage Financial Resources: This process group mainly encompasses all financial related processes including financial planning, accounting, projections, recording/reporting such as, income, expenses, provisions and taxes and management of treasury policies and procedures.
9.0 Acquire, Construct, and Manage Property: This process basically encompasses managing the physical risk and designing and acquiring productive-nonproductive assets.
10.0 Manage Environmental Health and Safety (EHS): This process basically encompasses training of employees, monitoring and managing efforts to manage environmental health and safety.
11.0 Manage External Relationships: This process basically includes all management activities for building investor relationship, managing the government and industry relationships and legal and ethical topics.
12.0 Manage Knowledge, Improvement, and Change: This process basically includes all KM activities, all KM projects and all change implementing and sustaining processes.
13.0 Manage Enterprise Risk: This process basically includes all risk management such as, setting risk frameworks, monitoring and managing financial, operational and market risks.

2.3 Findings from the Literature Survey

This chapter has attempted to provide a deep understanding of knowledge, KM on a theoretical level. How knowledge differs from data and information; how traditional versus second generation KM theories focus on KM and how KM can be used in the banking sector.

It is evident that knowledge has been a matter of debate from the ancient times and there are different definitions of knowledge. Taking into account the absence of the unique definition of KM, the traditional KM theory focuses on knowledge sharing by placing emphasis on data mining and codifying information. On the other hand New KM also focuses on the demand-side knowledge creation by concentrating business processes and knowledge processes.

Despite above, the value of knowledge is recognized by theoreticians and the practitioners who added substantial studies to the literature. Some of theoreticians accepted knowledge as a potential asset to manage organizations and companies and developed various KM theories. Some of these theories are also supported with the technological developments and evolved into management models or standards such as TNKM frameworks (Firestone & McElroy, 2003) of which the researcher takes into account as a base.

It is evident that KM provides a competitive advantage for banks. The increasing volatility and uncertainty in the market conditions and the competition force banks to become increasingly KM oriented. Due the shift away from capital assets to intangible assets banks become more knowledge oriented. On the other hand technological developments accelerate this process.

Many benefits of KM in the banking sectors have been asserted in the literature. However, it is observed that the literature mainly focused on benefits of CRM, Risk and Capital Management, IT and HR. The CRM literature in the banking sector asserted that banks focus on more diversified products and services, innovative distribution channels, and lower costs with in a technological approach in order to increase productivity, efficiency and profitability. On the other hand, the banking sector want a controlled organic growth in their activities. Therefore, the sector focuses on risk, capital and liquidity management both in terms of regulations and activities. Banks closely monitor their credit, market and operational risks. In addition financial markets seem to give importance to their intellectual capital in order to capture knowledge and to make a better KM.

It has been seen that a strategic plan should be an ongoing process and it should define the strategic goals and the objectives in a measurable process. The financial reports provide the main trustable and objective information about a bank. Therefore, the financials can be utilized to create a strategic plan. A strategy is an outcome of knowledge processing. (Firestone & McElroy, 2003) KM in banks increases the awareness of the banks while developing a strategy and provides agility and advantages in the competitive environment. In the knowledge economies competition is conducted by intangible assets rather than tangible assets. Although the KM literature provides a substantial content in general, the researcher does not encounter specific empirical studies about the use of KM as a tool for developing a model for FSP in the banking industry. One of the underlying reasons of the lack empirical study could be that this information is kept as a valuable and competitive corporate asset which is not open to public.

On the other hand, KM theories might focus on IT based knowledge which has direct impact on knowledge processes outcomes but has indirect impact on business outcomes. In addition, collecting a data about the strategies of a bank is not easy touchable and variety of data make difficult to set a KM process. However, financial controlling and SP perspectives should be two of the main issues of KM theories. These two perspectives/or departments mainly consolidate a bank's SP and provides refined information (knowledge) about the financial performance and evaluates the financial structure whether it is close to the mission of the bank or not. Also future forecasts and budgets are done / consolidated by these departments. Therefore, financial planning / SP are a KLC processes either performed by an IT system or done by a human resource. It provides a systematical approach for the bank. Also it feeds the company for corporate sharing, feedback it and provides a room for the bank in order to transform into a learning organization.

Despite the information above, it is important for a bank to measure its KM capability. PCF (APQC, 2011) standards provide a conceptual guidance for the companies to develop a KM strategy formulation methodology. The model focuses on processes with a specific customized version for banks. However, it does not define a cycle. On the other hand KLC contributed to the literature especially on its discourse on intangible assets. However, KLC model is generic and does not provide sufficient level of detail for financial sector. Concerning the weakness in the literature and taking into account that also the researcher did not encounter an integrated model during the research. The researcher believes that these two models can be merged in order to enhance a unified model. These two models can be combined to provide a more comprehensive model and these combined models can be utilized in the FSP.

CHAPTER 3

A MODEL PROPOSAL FOR FSP AND KM ALIGNMENT FOR BANKS

In this chapter, a SP alignment model for banks, by mostly focusing on banks' financials will be developed based on the findings of the literature survey and analysis. The reason behind focusing on financials is to frame the study within a general planning perspective. All types of banking activities certainly require a business plan. However; some of them remain in more operational levels and some are in more managerial levels. An overall business plan of a bank mostly focuses on managerial level items. Therefore, the first category of the operational processes in APQC's PCF for banks document; "develop strategy and vision" (APQC, 2011) are completely included in the proposed model. As a result, the remaining four, namely, "develop and manage products and services", "market and sell products and services", "deliver products and services" and finally "manage customer service" are not included directly in the model framework; rather they are included as KPI's. (APQC, 2011) In the model, a similar approach for the "management support" process of the PCF is presented. The three processes are "manage financial resources", manage knowledge, improvement, and change and manage enterprise risk are directly included in the model, whereas the other five; develop and manage human capital, manage information technology, acquire, construct, and manage property, manage environmental health and safety, manage external relationships are indirectly included in the model. (APQC, 2011)

KM ensures organizing knowledge and information sets in order to get position, to set the work and to achieve the desired aim in the highly competitive and complex world of the banks. A FSP provides a management approach and a simplification method for these knowledge and information sets.

In general, banks prepare their strategic plans annually. A FSP should be measurable, understandable, comparable, transparent, interpretable, publishable, sharable and transferrable; principally, it is a strategic plan based on financials. In practice there is no considerable difference between SP and FSP. It is important to note that, in the PCF for banking, many nonfinancial and qualitative indicators are also included in the framework.

In terms of KM theory, APQC PCF for banking is almost the unique and the detailed framework that the researcher encountered during the study. Since the aim of this thesis is to develop a KM model for FSP the study is limited in a financial framework. The researcher will present a map between banking PCF (APQC, 2011) and TNKM life cycle (Firestone & McElroy, 2003) in this chapter. The first operating process “develop vision and strategy”; (APQC, 2011) is taken into account and matched with a TNKM life cycle (Firestone & McElroy, 2003) by using the management and support processes. Specifically, by utilizing “Manage Knowledge, Improvement, and Change, Manage Knowledge, Improvement, and Change and Manage Enterprise Risk” (APQC, 2011) processes which directly refer financial management. Following that, a FSP model for banks in the light of PCF (APQC, 2011) and TNKM life cycle (Firestone & McElroy, 2003) will be suggested.

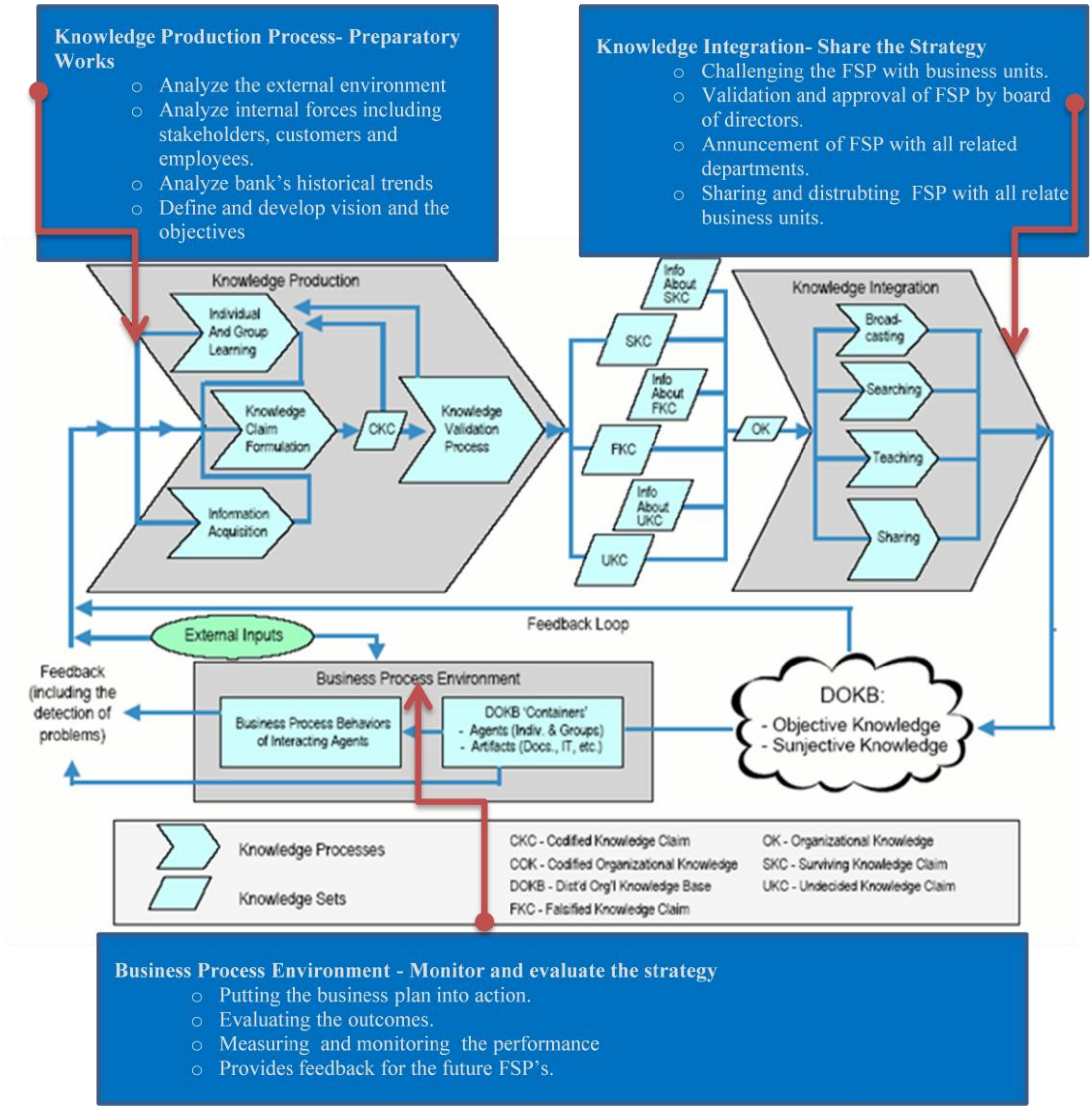

Figure 5- An integration of TNKM and PCF Models.

Source: Derived from The KLC Model of McElroy (2003)

Figure 5 illustrated above shows an integration of TNKM and some featured processes of FSP which the researcher developed in order to enhance a systematical approach. Matching the first operating process category of PCF **“Develop Vision and Strategy”** (APQC, 2011) with “**TNKM Life Cycle”** (Firestone & McElroy, 2003) figure shows that developing a vision and strategy predominantly a **“knowledge production**” process.

The first process group of the category is **defining the business concept and the long term vision of the bank**. (APQC, 2011) Assessing the external environment in terms of socio-economic and political structure, identifying the macroeconomic environment and legal and regulatory issues, analyzing demographics, researching on new innovative technologies, researching on market and customer needs and wants, performing internal analysis including financial highlights, business line performances, financial risk analysis, asset and liability reports are the key processes and activities of defining a long term vision. Additionally, establishing the strategic vision in accordance with the stakeholder’s desire is a major process before developing a financial business strategy.

The second process group of the category is **developing the business strategy.** (APQC, 2011) Developing the overall mission and evaluating the strategic options by building scenarios for the future. Developing, formulating models for business activities and capital and money markets and creating the organizational designs, such as reporting and governance.

The last process group is **managing strategic initiatives.** (APQC, 2011) Developing, evaluating, selecting and establishing the strategic initiatives.

Conversely, if whole process is evaluated from the TNKM life cycle point of view; most of these processes and activities contain **individual and group learning** (McElroy, 2002) and high level analysis where people expand their capacity to achieve the desired results and experience new ways of thinking and learn to think together. (Senge, 1993) Additionally, all processes require in-depth analysis of **information acquisition** (Firestone & McElroy, 2003) both internal and external systems such as, benchmarking analysis, macro-economic and political environment analysis. While producing the two knowledge processes organizational based claims are created and while some of the claims are accepted the others are rejected. Finally within the scope of vision and mission produced knowledge validated by the top management of the bank and shared with employees by making announcements, organizing workshops, training programs or meetings. After the **knowledge integration process,** the “knowledge in use” transferred to **business process environment**. Evaluating the outcomes, measuring and the monitoring the performance and providing feedback for the future FSP's are the main processes of business process environment. The TNKM life cycle is an endless and living process. (Firestone & McElroy, 2003)

The Table 2 below illustrates a merge of PCF for Banks (APQC, 2011) and KLC integration (Firestone & McElroy, 2003) in order to achieve a unified model. With this integration the researcher aimed to generate a map to develop a KM model for FSP.

Table 2-PCF and KLC integration for Bank

Unique APQC Identifier	Process Category	Process Group	Process	Activity	KLC Process	KLC Sub-Process	Banking Practice
10002	1.0 Develop Vision and Strategy						
10014		1.1 Define the business concept and long-term vision			Knowledge Production	Individual Group Learning & KCF & Information Acquisition	All levels of knowledge production processes.
10017			1.1.1 Assess the external environment		Knowledge Production	Individual Group Learning & KCF & Information Acquisition	Assessing the external environment in terms of socio-economic, political, regulatory issues. Also assessing technological and innovative development in the banking sector.
10021				1.1.1.1 Analyze and evaluate competition	Knowledge Production	Individual Group Learning & KCF & Information Acquisition	Analyzing and evaluating the sector and the market where banks collects information about the history and the potential future of the sector from outside with involving human interaction.

Table 2 cont'd

Unique APQC Identifier	Process Category	Process Group	Process	Activity	KLC Process	KLC Sub-Process	Banking Practice
10022				**1.1.1.2 Identify economic trends**	**Knowledge Production**	**KCF & Information Acquisition**	**Identifying the macroeconomic environment: current and forecasted economic growth rates, inflation, foreign and domestic currency exchange rates estimations. Monetary policy, global market, current account deficit and GDP evaluations and expectations**
10023				**1.1.1.3 Identify political and regulatory issues**	**Knowledge Production**	**KCF & Information Acquisition**	**Legal and regulatory requirements and controlling and prevention strategies of the activities.**
10024				1.1.1.4 Assess new technology innovations	Knowledge Production	Knowledge Claim KC & Information Acquisition	Assessing the new technologies and innovative products to increase market share
10025				1.1.1.5 Analyze demographics	Knowledge Production	KCF & Information Acquisition	Identify the demographics to capture potential in the Periphery.
10026				1.1.1.6 Identify social and cultural changes	Knowledge Production	KCF & Information Acquisition	Identify the social and the cultural changes

Table 2 cont'd

Unique APQC Identifier	Process Category	Process Group	Process	Activity	KLC Process	KLC Sub-Process	Banking Practice
							to capture, to increase and to keep the market share or to asses new potential markets
10027				1.1.1.7 Identify ecological concerns	Knowledge Production	KCF & Information Acquisition	Identifying the ecological concerns to foresee the potential income or losses.
10018			**1.1.2 Survey market and determine customer needs and wants**		**Knowledge Production**	**KCF & Information Acquisition**	**Product based market surveys and assessment of the potential customers, new segments and niche sector, technological and innovative development. Analyzing the current customers' profile.**
10028				1.1.2.1 Conduct qualitative/ quantitative assessments	Knowledge Production	KCF & Information Acquisition	Market surveys on customer trends, brand awareness analysis.
10029				1.1.2.2 Capture and assess customer needs	Knowledge Production	KCF & Information Acquisition	Customer questionnaires and complaint type investigations
10019			**1.1.3 Perform internal analysis**		**Knowledge Production**	**Individual Group Learning &**	**Analyzing the internal structure,**

Table 2 cont'd

Unique APQC Identifier	Process Category	Process Group	Process	Activity	KLC Process	KLC Sub-Process	Banking Practice
						KCF &Internal Information Acquisition	**business and support unit processes and performances, financial position of the bank.**
10030				1.1.3.1 Analyze organizational characteristics	Knowledge Production	Individual Group Learning & KCF &Internal Information Acquisition	Corporate governance structure, line of businesses performances
10031				1.1.3.2 Create baselines for current processes	Knowledge Production	Individual Group Learning & KCF &Internal Information Acquisition	The ongoing business process analysis
10032				1.1.3.3 Analyze systems and technology	Knowledge Production	Individual Group Learning & KCF &Internal Information Acquisition	Operational infrastructure and IT analysis, cost and efficiency analysis.
10033				1.1.3.4 Analyze financial positions	Knowledge Production	Individual Group Learning & KCF &Internal Information Acquisition	Financial highlights, profitability analysis and financial ratio analysis.
10034				1.1.3.5 Identify enterprise core competencies	Knowledge Production	Individual Group Learning & KCF &Internal Information Acquisition	Highlighting the core competencies of the bank.

Table 2 cont'd

Unique APQC Identifier	Process Category	Process Group	Process	Activity	KLC Process	KLC Sub-Process	Banking Practice
10020			**1.1.4 Establish strategic vision**		**Knowledge Production**	**Individual Group Learning & KCF &Internal Information Acquisition**	**Establishing the strategic vision in accordance with the stakeholders**
10035				1.1.4.1 Align stakeholders around strategic vision	Knowledge Production	Individual Group Learning & KCF &Internal Information Acquisition	Aligning the desires and request
10036				1.1.4.2 Communicate strategic vision to stakeholders	Knowledge Production	Individual Group Learning & KCF &Internal Information Acquisition	Communicating the strategic vision
10015		**1.2 Develop business strategy**			**Knowledge Production**		
10037			**1.2.1 Develop overall mission statement**		**Knowledge Production**	**KCF & Information Acquisition**	**Developing and stating KC on overall mission of the bank.**
10044				1.2.1.1 Define current business	Knowledge Production	KCF & Information Acquisition	Defining the focused areas, niche sectors, service perceptions
10045				1.2.1.2 Formulate mission	Knowledge Production	KCF & Information Acquisition	Developing and setting the mission claims.
10046				1.2.1.3 Communicate mission	Knowledge Production	Individual Group Learning & KCF & Information Acquisition	Communicating the mission with individuals and groups to get feedbacks and to make high level analysis.

Table 2 cont'd

Unique APQC Identifier	Process Category	Process Group	Process	Activity	KLC Process	KLC Sub-Process	Banking Practice
10038			**1.2.2 Evaluate strategic options to achieve the objectives**		**Knowledge Production**	**Individual Group Learning & KCF & Information Acquisition**	**Evaluating the core strategies to achieve the objectives.**
10047				1.2.2.1 Define strategic options	Knowledge Production	KCF	Defining KC on strategic options.
10048				1.2.2.2 Assess and analyze impact of each option	Knowledge Production	Individual Group Learning & KCF & Information Acquisition	Assessing the each claim and making high level analysis to achieve the best options.
10039			**1.2.3 Select long-term business strategy**		**Knowledge Production**	**Knowledge Validation**	**Selecting the most suitable business strategy among the invalidated strategy claims in accordance with the mission and the vision of the bank**
10040			**1.2.4 Coordinate and align functional and process strategies**		**Knowledge Production**	**Knowledge Validation**	**Coordinating and aligning the process strategies after selecting the long-term strategy.**
10041			**1.2.5 Create organizational design (structure, governance, reporting, etc.)**		**Knowledge Production**	**Individual Group Learning & KCF & Information Acquisition**	**Creating the organizational design in accordance with the selected short and long term strategy.**

Table 2 cont'd

Unique APQC Identifier	Process Category	Process Group	Process	Activity	KLC Process	KLC Sub-Process	Banking Practice
10049				1.2.5.1 Evaluate breadth and depth of organizational structure	Knowledge Production	Individual Group Learning & KCF & Information Acquisition	Designing and evaluating the organizational structure.
10050				1.2.5.2 Perform job-specific roles mapping and value-added analyses	Knowledge Production	Individual Group Learning & KCF & Information Acquisition	Mapping of the tasks
10051				1.2.5.3 Develop role activity diagrams to assess hand-off activity	Knowledge Production	Individual Group Learning & KCF & Information Acquisition	Developing and defining the role activities
10052				1.2.5.4 Perform organization redesign workshops	Knowledge Integration	Training & Sharing	Training and sharing activities
10053				1.2.5.5 Design the relationships between organizational units	Knowledge Integration	Training & Sharing	Designing and evaluating the relationships within the organizational structure.
10054				1.2.5.6 Develop role analysis and activity diagrams for key processes	Knowledge Production	KCF & Information Acquisition	Mapping the activities and developing the roles.
10055				1.2.5.7 Assess organizational implication of feasible alternatives	Knowledge Production	KCF & Information Acquisition	Organizational implicational alternatives
10056				1.2.5.8 Migrate to new organization	Knowledge Production	Knowledge Validation	New organization migrating after validating the claims

Table 2 cont'd

Unique APQC Identifier	Process Category	Process Group	Process	Activity	KLC Process	KLC Sub-Process	Banking Practice
10042			1.2.6 Develop and set organizational goals		Knowledge Production	Knowledge Validation	Developing and setting the goals in accordance with the strategy
10043			1.2.7 Formulate business unit strategies		Knowledge Production	KCF & Information Acquisition	Developing the main strategies of the business units.
10016		1.3 Manage strategic initiatives			Knowledge Production & Knowledge Integration	KCF & Information Acquisition	Developing, evaluating and selecting the strategies initiatives
10057			1.3.1 Develop strategic initiatives		Knowledge Production	KCF & Information Acquisition	Developing the strategies initiatives
10058			1.3.2 Evaluate strategic initiatives		Knowledge Production	Knowledge Validation	Evaluating the strategies initiatives
10059			1.3.3 Select strategic initiatives		Knowledge Production	Knowledge Validation	Selecting the strategies initiatives
10060			1.3.4 Establish high-level measures		Knowledge Integration	Broad-casting	Establishing the selected measures

Source: Personal experience, PCF Model (APQC, 2011) and KLC Model Integration (Firestone & McElroy, 2003)

Based on the PCF and TNKM (APQC, 2011) (Firestone & McElroy, 2005) and the merged table above, it can be stated that a financial strategic plan consists three main processes.

1. Knowledge Production Process- Preparatory Works
2. Knowledge Integration- Share the Strategy
3. Business Process Environment - Monitor and evaluate the strategy

The researcher developed an integration under TNKM with some featured processes of FSP. These three processes will be assessed in more detailed below within the scope of FSP.

Additionally, the researcher consolidated an indicator list based on the literature and her personal experience and suggested the list to follow, and to monitor the business and economy. Although, the indicator list can be widened easily the researcher prefer to keep the list limited in order to focus on FSP.

3.1 Knowledge Production Process- Preparatory Works

The knowledge production processes are as follows:

1. Analyze the external environment,
2. Analyze internal environment,
3. Risk Management, Compliance and Audit Analysis,
4. Define and develop vision and the objectives.

According to the KLC, analyzing the external and internal environment is an information acquisition and KCF process. Risk management, compliance and audit analysis are information acquisition, KCF and validation process. Developing vision and strategies are a part of the KCF processes.

These processes will now be further elaborated in this chapter.

3.1.1 Analyze the External Environment

3.1.1.1 Assessing and Analyzing Macroeconomic Environment:

SP requires a well-defined and an in-depth analysis of the external environment in terms of global and local financial conjecture. Assessing both current and forecasted macroeconomic and financial indicators is a starting point for defining the business concept and long term vision. In order to analyze the macro-economy, banks utilize some indicators, such as :

1. Geopolitical position and demographical assessments.
2. Potential and expected economic growth analysis.
3. The structure of the economy, such as open economy or diversified.
4. Demand and supply analysis in terms of business investments and foreign or local investor interests to the economy. Imports distribution and foreign capital inflows are some key indicators.
5. Gross Domestic Products (GDP) evaluations and forecasts, such as public debt to GDP, household debt to GDP, investment to GDP and nominal and real GDP growth rates.
6. Inflation forecast and evolution analysis.
7. Foreign and domestic currency exchange rates evaluations and estimations.
8. Monetary policy structure analysis and forecasts.
9. Global market conditions, financial crisis overviews and expectations about the sector and business environment.
10. Current account deficit evaluations and budget and current account balance analysis.
11. Identifying the ecological concerns to foresee the potential income or losses and assessment of the social and the cultural changes to capture, to increase and to keep the market share or to take the new opportunities in potential markets.

3.1.1.2 Banking Sector Analysis:

In the competitive environment of banking, assessment of the sector is sine qua non to define and develop a business strategy. Banks perform analysis about the structure of the sector and they follow the developments and the regulatory conditions. Potential sectoral growth expectations are also assessed. The quality of the assets, potential and historical growth in the assets, technological and innovative developments in the sector, capital agility and the sectoral breakdown of the loans and the deposits, the evolution of the non-performing loans, distribution of the liabilities, funding policies are some of the major key indicators for the assessment. Besides, some ratios are also used for the sectoral analysis, such as average deposit duration, ROAA, ROAE, assets to employees, and employees per branch.

Benchmark analysis in terms of assets, loans, profit, capital, number of branches and other financial ratio analysis are done by analyzing the evaluation of the peers and other banks.

3.1.1.3 Surveys and Customer Needs Analysis:

Market surveys and determining customer needs and wants are one of the major feedback procedures. During knowledge production and defining the long term vision processes; banks research on market and customer needs and wants. They perform brand awareness analysis. Surveys on bank’s advertisement also provide effective feedbacks.

3.1.2 Analyze Internal Environment

Developing a successful business strategy also requires an in-depth analysis of the internal environment. Most of the time, revealing the knowledge/experience in managers’ minds and capturing it as part of the corporate knowledge are achieved during the definition and development of the business concept, the long term vision and the business strategy processes.

3.1.2.1 Analyze Internal Forces Including Stakeholders, Customers and Employees:

Analyzing the corporate governance emphasizes not only development but also communicating the strategies to stakeholders. Additionally, establishing the strategic vision in accordance with the stakeholder’s desire is a major process before developing a financial business strategy. Since knowledge is an organized structure of experience, skills and facts the experience of the management team is also very important. Most of the time information that is built up during the life time of a company is sustainable; however, knowledge can be easily transferred out the bank by the release of the employees. Therefore, banks strive to provide the continuity of the employees and decrease turnover rates; especially, the senior management.

3.1.2.2 Analyze Bank's Historical Trends

3.1.2.2.1 Main Strategies and Business Model:

Assessing of ongoing line of business and organizational performance or performing historical analysis of the bank is not only based on financials, but also on the storytelling of the major events in history provides information for developing and evaluating the strategy. A careful study of the historical evolution of the bank helps formulating the visions and the goals.

Describing the products and services and analyzing the business models of all lines of business separately in terms of managing clients and segments (mostly bases on revenue), creating new products, developing self-serving services on the net and distribution channels, strategy approach have to be examined in order to develop long term vision and strategies. In terms of business model analysis, number of active - in active customers, cross sell ratios, volume of loans and deposits, by product and business lines are major KPI's. Creating synergy with lines of business and measuring the synergy is not that much easy. Line of businesses acquires new customers to the bank by increasing the synergy. Cross sell ratio is an example for the created-synergy. Cross sell ratio, measures the depth of the relationship with the existing customer. It can be either measured based on number of additional products/services sold or additional revenue. For instance, a credit card customer may also benefit from the private pension plan of a bank.

Defining the planned investments and planning the financing of the investments and its expected effects.

3.1.2.2.2 Analyze Support Functions:

Support functions are basically HR, advertising and public relations and IT platforms.

1. **HR**: Analyzing the scalable mechanisms, the evolution of recruitments by years, qualification requirements, the distribution of the employees to the regions, branches and head office; turn over ratios, engagement surveys and salary expenses.
2. **IT platforms:** Assessing the functionality and the agility of the IT platform; the continuity and the computerization of the operating, reporting, marketing and sales processes, operational costs, service quality, integration to the multi-channel delivery and user-friendliness of the system. IT platforms also provide the uniqueness of the data and

information. Producing Dashboards and analytical data and CRM are also important. In order to present the management an up-to-date picture for situation awareness and capture customer related performance.

3.1.2.2.3 Analyze Selected Financial Highlights and KPI's:

In general, financial highlights focus on

1. Historical, current and forecasted balance sheet (such as, total assets, securities, loans, deposits, borrowing and equity) analysis.
2. Historical, current and expected income statement analysis (such as net income, commissions, expenses, salaries, provisions and taxes)
3. Historical, current and future overview of the selected ratios, such as net interest margin, cost/income, loans/assets, loans/deposits, loans/per branch, securities/assets, non-performing loan ratio, cost of risk, ROAA, ROAE, capital adequacy ratio, liquidity ratio, cost/per employee and some other KPI.

The researcher classified the KPI's into two groups as follows

1. **External Environment KPI's**
2. **Internal Environment KPI's.**

1. **External Environment KPI's** are mainly used to assess and analyze macroeconomic environment and banking sector which are reviewed in 3.1.1.
The table 3 below illustrates the External Environment KPI's

Table 3-External Environment KPI's

Macroeconomic Indicators	Financial Indicators	Banking Sector Indicators
Population Growth (%)	Over Night (O/N) TL (Average, simple)	Assets
Population (mn)	(O/N) TL (Average, compound)	Assets (% Δ)
	Central Bank 1 Week Repo (Year End, Simple)	
Unemployment (YE, ILO definition)		Turkish Lira Deposits
	Benchmark T-Bond Yield (Year End, Compound)	
Central Govt. Budget Balance		TL Deposits (% Δ)
		Foreign Currency (FC) Deposits
Central Govt. Budget Bal. (% GDP)	Repos	
	1-3 Month TL Deposit Interest Rate (Average, simple)	
Central Govt. Primary Balance		FC Deposits (% Δ)
Central Govt. Primary Balance (% GDP)		
	Real TL Deposit Rate	TL Loans
	1-3 Month USD Deposit Interest Rate (Average, Simple)	
Public Gross Debt		TL Loans (% Δ)
	1-3 Month EUR Deposit Interest Rate (Average, Simple)	
Public Gross Debt (% GDP)		FC Loans
GDP	SWAP Rate	FC Loans (% Δ)
		Corporate+Commercial Loans
GDP per capita	Interest Rate Swap	
		Corporate+Commercial Loans (% Δ)
Nominal GDP Growth (%)	Libor	
Agriculture	Credit Default Swap	SME Loans
Manufacturing	USD/TL (YE)	SME Loans (% Δ)
Services	EURO/TL (YE)	Consumer Loans
	USD/EURO (YE)	Consumer Loans (% Δ)
Real GDP Growth (%)		Housing Loans (TL bn)
Agriculture		Housing Loans (% Δ)
Manufacturing		Credit Cards (TL bn)
Services		Credit Cards (% Δ)
Inflation (year-end, CPI-%)		Vehicle Loans (TL bn)
GDP Deflator		Vehicle Loans (% Δ)
Inflation base for salary increase year on year		General Purpose (TL bn)
		General Purpose (% Δ)

Source: Internal Bank Report and Banking Regulation and Supervision Agency (BRSA) yearly reports (BRSA, 2011)

1. **Internal Environment KPI's** are mainly used to assess and analyze internal forces including stakeholders, customers and employees, banks' historical trends, main strategies and business models, selected financial highlights and KPI's and assessment of the previous Year's Accomplishment which are reviewed in 3.1.2.
   The Table 4 below illustrates the Internal Environment KPI's

Table 4-Internal Environment KPI's

Activity Ratios	**Profitability Ratios**
Interest Earning Assets / Total Assets	Net Interest Margin
Interest Bearing Liabilities / Total Liabilities	Net Fees & Commissions Received / 'Interest Earning Assets
Total Loans/Total Asset	Personnel Expenses / Average Assets
Total Loans/Total Deposits	Operating Expenses / Average Assets
Total Deposits/Total Asset	Personnel + Operating Expenses / Average Assets
Cash Loans / Deposits	Cost / Income
Deposits per branch	Net Fees & Commissions / Operating Expenses
ROAA	Cost of Risk
ROAE	Operating expenses/ Total Assets
Value Add Risk (VaR)	Operating expenses/ Employee
Sensitivity	Personnel expenses/ Employee
Assets Quality Ratio	**Line of Business Performance Ratios**
Coverage ratio	Activity Level
Capital Adequacy Ratio (CAD)	Churn Rates
Available Free Resources Ratio (AFR)	Cross Sell Ratio
Economic Capital (ECAP)	Turnover
AFR/ECAP	Brand Awareness
Tier 1 Ratio	Market Shares
	Share of Doors
	Return on Allocated Capital

Source: Internal Bank Report and BRSA yearly reports

Both internal and external KPI's are based on the personal experience and the FSP documents of some of the banks.

3.1.2.2.4 Assessment of the Previous Year's Accomplishment

It is important to make an analysis of the previous year both in terms of the FSP and actuals. The variations from the plan and the reasons leading to the discussion should be analyzed in a detailed way. This process should be done for the whole processes described in the model above.

3.1.3 Risk Management, Compliance and Audit Analysis

3.1.3.1 Risk Management Analysis:

Risk identification, assessment and mitigation strategies are the key issues of risk management. Diversification of the portfolio decreases the risk. Asset quality is another indicator for credit risk analysis. Using an automated decision model (like scorecards) also increases portfolio quality. New production vintages, roll rates, scorecards are used for monitoring credit risk. Operational risk plan defines all necessary actions that should be taken into account to minimize operational risk which is also important for business continuity. In addition, market risk monitors interest rate sensitivity closely in terms of internal and regulatory measures.

Capital bases are measured by stress tests. Capital adequacy ratio, Tier I ratio should be compliant with Basel Accords. (Basel I, Basel II and now extended by Basel III) Basel Accords are issued by Basel Committee on Banking Supervision (BCBS) to recommend laws and regulations on banking. (BCBS, 2011) Currently, Basel II applies to most of the countries. According to BRSA regulation, In Turkey Basel II will be implemented by banks as of July 2012. (BRSA, 2011) While Basel I set a minimum capital requirement for banks, Basel II developed a comprehensive set of rules mainly with a risk management overview. BCBS will bring out new rules with Basel III especially in capital, liquidity and leverage ratios. Basel III will have significant impacts on the European sector in terms of Tier 1 capital, short term liquidity and long term funding. (Härle, Lüders, Pepanides, Pfetsch, Poppensieker, & Stegemann, 2010)

3.1.3.2 Compliance and Audit:

Compliance and audit process contain legal and regulatory requirements and controlling and prevention strategies of the activities. Audit and internal control ensures compliance of banking operations with existing laws and regulations amongst other things, such as protection of assets, operations alignment, reliability of reporting with vision and objectives. Moreover, it supports organizations to sustain and improve performance with agility, confidence, clarity which provides feedback to the shareholders, management, and related branches / departments about their customers / transactions / operations / achievements /

risks. (COSO, 2011) Compliance mainly focuses on market abuse prevention, incident reporting, new product service activity and approval process, banned people-monitoring procedure, corporate responsibility information, rules applicable to persons in possession of inside information, gifts benefits and invitations, insider trading transactions, market manipulation risk, compliance group organization, outsourcing services procedure, client relationship general principles, conflicts of interests.

3.1.4 Define and Develop Vision and The Objectives

In light of the assessments and analysis that the banks mentioned above develop and define their strategy, vision and mission. In general FSP includes a very detailed analysis of the following year and an overview of the coming five year. It is important to define a clear value proposition and ensure the stakeholder's requirements are covered in SP (Güçlü, 2011). The most suitable scenario due to the expectations of the stakeholders, customers and employees are selected to determine the strategy. Later on, the selected strategy is distributed to the lines of businesses as objectives. The objectives mainly demonstrate the products and sales amounts, funding needs, capital management, interest rates, provisions and costs and expected income for the following years. Since the determined objectives include a wide variety, they are set as measurable outcomes in terms of volumes and profit. Due to the FSP will distributed to all levels of business units the strategy and the goals should be developed as simple as possible. Defining and developing the strategy and objectives provide a solid understanding of the business and the strategy.

3.2 Knowledge Integration- Share The Strategy

Banks develop and define their strategy, vision and mission. The outputs of these knowledge production processes, namely the FSP, are challenged with all business units and after the approval board of directors, are validated and transferred to the knowledge integration processes as defined in the TNKM (McElroy, 2003). Although a FSP is a top-down process, the success of a strategy can only be achieved by employees. Therefore, all financial strategic plans announced and shared with all related departments distributed to such as regions and branches. The knowledge sharing is done by organizing meeting, publishing announcements and organizing training programs. Moreover, understanding and believing in the FSP is as important as sharing the FSP to bring the new strategic plan to life. Create a strategy map and by locating perspectives / politics ensure strategic objectives are evenly distributed between perspectives. (Güçlü, 2011)

3.3 Business Process Environment - Monitor And Evaluate The Strategy

Later on, all business units put the business plan into action where business process starts. The produced knowledge now is in use (McElroy, 2003) and the outcomes may satisfy the expectations or not.

Therefore, it is essential to track strategic measures both on financial and non-financial metrics. PM in banks measure and monitor whether the current situation of the bank is in line with the FSP or not. Concerning the complexity of KM in the banking sector and the instability of the market it is difficult to build a successful FSP. However, during the business environment process monitoring and evaluating the FSP and comparing it with the realizations provides an early warning system for the possible problems and feedback for the future FSP's.

Banks should monitor and evaluate the FSP frequently. Monthly Dashboard reports or governance reports can be prepared to measure the accomplishment. In these reports, an executive summary of the current and forecasted financial situation should be included. Besides, these reports should include detailed analysis. Hence, building a constant monitoring system requires both human capital and IT based reporting systems.

CHAPTER 4

A COMPARATIVE CASE STUDY ANALYSIS OF FSP AND KM IN TWO TURKISH BANKS

4.1 Introduction

As mentioned in earlier chapters, this research on the FSP production launch originated with two banks used in the case study of Turkey. In this chapter the author will be discussing these two banks' FSP processes to validate whether the proposed model is applicable in banks and to better understand in what circumstances and how the FSP was accomplished. In the first section the framework of the case study will be discussed. In the next section the case study of the First Bank be called as X Bank and in the third section the case study of the Second Bank be called as Z Bank will be assessed by analyzing how FSP administrated and produced in these banks compared with the suggested model.

In the fourth section, validity and generalizability of the case studies are discussed.

In the last section, case study finding will be discussed. Since the case studies took place in Turkey and the case study is on FSP the researcher discusses a brief background of the economic outlook of the country and the global market conditions.

The final part of this section makes a comparison of the two FSP processes and the proposed model.

4.2 The Framework of The Case Study

The overall objective of the case study is to assess and analyze the applicability and validity of the model asserted in the study. Since this research is particularly concerned with assessing how well the banks performs at applying TNKM (Firestone & McElroy, 2005), in addition to integrating PCF for banks (APQC, 2011) as a framework in order to create a FSP. The case study is based on FSP departments of two banks in Turkey. The first bank is one of the fifth largest foreign owned private bank in Turkey in terms of net profit; herein after referred to as X Bank.

The second bank is one of the biggest banks in Turkey and jointly controlled by one foreign and one local company herein after referred as Z Bank.

Both banks shares are traded on the Istanbul Stock Exchange (ISE) and consist of domestic and international subsidiaries.

The primary segments of both banks are mainly focuses on retail, small and medium size enterprises, public and project finance, corporate and commercial banking.

Z bank is greater than X bank in terms of assets size and profit. Both banks gave significant importance to innovation and technology.

X bank culturally gives particular importance to FSP. The Bank has a separate division, called Management Reporting and Budgeting & Planning Group (MRBP). The department is responsible for consolidating the business plan, preparing the strategic plan and the budget of the bank including subsidiaries. Besides, MRBP controls the consistency of the budget with actualized financials and directly reports to top management. Although, X bank gives particular importance to FSP processes, bank builds its FSP by using less KM tools and technological support. However, Z bank is one of the most technologically developed bank in Europe and builds its FSP by using KM tools intensively.

The researcher was an employee at MRBP for six years and had worked as a manager in X bank and continues work at joint company of the Z bank for 9 months.

Concerning the competitive market conditions banks usually do not publishes their strategic plans and gathering data of the other banks is not possible. Therefore, the FSP data of the both bank is confidential. However, the FSP which constitutes the base of the research is approved by the Board of Directors of the two banks. Also, observations have been documented based on daily interaction with managers.

In the first case study, the evidence will be presented about the knowledge production processes in TNKM as processes and process categories/group and processes of PCF as sub processes performed.

Secondly, the finding on the knowledge integration processes findings relating to knowledge sharing and distribution policies will be presented.

Then business processes environment relating with monitoring and evaluating FSP will be discussed.

And finally, the case study findings will be discussed. 2012 FSP processes are taken into account for two banks in order to assess the same macroeconomic and global environment.

4.2.1 TNKM and PCF Model Approach to Assessment

The research can be summarized as the framework and the dimensions of the model are developed from the earlier studies by adapting and modifying them to the application of FSP in the banking. More specifically the framework referred to as FSP in this study is mapped from the study by (APQC, 2011) called PFC for banks and then the study of (Firestone & McElroy, 2005) called TNKM is adapted to FSP. Finally, a model for FSP is designed to develop a KM base FSP model for banks.

4.2.2 General Information about the FSP Process in X and Z Bank

X bank develops FSP and the budget in together. The FSP is produced at the end of the summer and following that the budget is produced. While the FSP in X Bank covers a three year period, the budget covers a one year period. Both FSP and the budget is presented and approved at the Board of Members. At the end of the financial year, banks have to deliver the results achieved together with the budget and the objectives set in the FSP. In general, the bank finalizes the process first month of the following year. As X Bank is a foreign owner bank the FSP should be validated by both local and global board of directors.

Z bank develops FSP and the budget together every third quarter of the year. While the FSP in Z Bank covers a three year period, the budget covers one year period. Usually, both FSP and the budget is presented and approved by the Board Members at the beginning of November and finalized at year-end which is two months earlier than X bank. Firstly, The FSP process starts with the current financial year end estimation and continues with the following years. At the end of the financial year, banks have to deliver the results achieved together with the budget and the objectives set in the FSP. As Z Bank is a jointly controlled bank the FSP should be validated by both local and a global board of directors. Even though the market conditions varied during the budgeted year revising the approved budget is an unusual situation in Z bank. However, Z bank may revise its budget several times by the approval of Board of Directors. For example, Z bank revised its budget in 2011 due to the impact of the unprecedented developments in European & US markets on Turkish economy and the Turkish banking sector.

The organizational structure are different in two banks. Therefore, unlike from X bank Z bank prepares the bank only and consolidated budgets separately.

4.3 The Presentation of The Case Study Findings In X Bank

In this section the actual FSP processing in X bank are examined. Since this study assess how well X Bank performs at developing a FSP. KLC and PCF phases are taken into account as a framework and the model developed in Chapter 3 are used for assessing the performance.

In order to present the case study finding all the sub processes of the model are reviewed in the actual FSP process of X Bank. The researcher operates within a positivist and participatory approach. The case studies are mainly based on the FSP documents of the two banks.

4.3.1 Knowledge Production Process-Preparatory Works

4.3.1.1. Analyze the external environment

4.3.1.1.1 Assessing and analyzing macroeconomic environment:

X Bank's assumptions on analyzing macroeconomic environment and financial indicators

The economic research department in X Bank studies the current economic environment and makes some assumptions regarding the analysis they produce some macro and financial indicators, such as GDP, inflation, overnight, repo and libor rates, foreign currency exchange rates, deposits rates.
The SP processes in X Bank usually start in September and ends in January. All the data assumptions for the budgetary process are based on previous year actuals and the current year-end estimated data.

According to the X bank's estimations the economy is expected to grow by 4.5%, 5.5% and 6.0% in order between 2012 and 2014.

Inflation should remain within the range of 5.0%-6.0% starting from next year, in line with the Central Bank of Turkey (CBRT) targets. Inflation expectations should behave well given high unemployment rate and the slack in the economy easing the central bank's job in targeting inflation.

TL is expected to remain competitive with a slight depreciation. Floating exchange rate regime will remain effective but the central bank is likely to resist significant TL depreciation to control inflation by selling foreign exchange reserves and/or increasing interest rates.

Monetary policy will be conducted proactively until 2014. Policy rate will tend to remain relatively low when global markets stabilize to discourage TL speculation while bank lending will be controlled with adjusting reserve requirements. With recognition to budget discipline, rising tax revenues due to high growth and structural reforms in tax collection, and falling interest payments due to historical low bond yields, the public debt to GDP is expected to gradually decelerate around 30% in 2014 from current 40%. With such a fiscal performance, authorities should also have a chance to increase the duration of total debt stock.

Current account deficit will remain high due to the strong foreign capital inflows expected to continue into the economy. Yet, the current account deficit to GDP is not likely to fall below 7% before 2014.

On the other hand, the repo rates will remain at of 5.0%-6.0% levels for the three year period.

Although, the indicators consists of a great variety the bank mainly focuses on the Turkish economy. Neither on geopolitical position and demographical assessments, nor demand and supply analysis is done by the bank.

X Bank's assumptions on FX rates and Consumer Price Index

The year-end inflation estimates (annually) are allocated every month by taking into account seasonality which is strong in Turkey. The inflation is expected to be around %5 for 2012, 2013 and 2014.

For the following years, in line with the purchasing power parity theory, i.e. assuming a constant real exchange rate, X Bank determine the monthly TL exchange rates (vis-à-vis USD).

It is assumed that €/$ exchange rate follows random walk with drift and determine the monthly figures accordingly ($Yt=\alpha+Yt-1+\beta t+\varepsilon t$). X Bank dynamically update their estimates with actual figures. USD/TRY is expected to be around 1,85, 1,95 and 2,0 in 2012, 2013 and 2013 respectively. EUR/TRY is expected to be around 2,60, 2,80 and 2,90 in 2012, 2013 and 2013 respectively.

While The CBT policy rates are projected according to a fundamental analysis of the Turkish economy with reference to inflation targeting, the FED and ECB policy rates are deducted from futures markets and market expectation surveys.

According to the assumptions of the X Bank beginning from 2012 the compound yield of benchmark of TL securities moved in parallel to the policy rate thanks to the CBRT's dedication to switch to single rate instead of an interest rate corridor. So do the deposit rates in line with the related central bank policy rates.

The IRS and CCS swap rates are derived from future libor rates of the respective currencies and currency forwards.

4.3.1.1.2 Banking Sector Analysis:

The bank performs very close outcomes compared with the model. However, in terms of capital structure and expected or forecasted regulations in the banking sector the FSP document of X Bank do not contain analysis.

X Bank's assumptions on banking sector

The bank make assumptions on the banking sector in terms of assets, deposits and loans. The loans are also broke down according to lines of businesses such as corporate, commercial, retail and small and medium enterprises.

Having proven its resilience during the crisis, the banking system is well positioned to provide the required financing for the economy to gradually reach c. 5% potential growth 14.6% increase in asset size in 2012 to 97% of GDP.

The Banking sector is to increase lending by 27% in 2011. Strong growth is expected to continue in 2012 such that the total assets are to increase by 14.6%, loans are expected to grow by 17.5%. 19% in TL loans in TL terms, while 11% in FX in $ terms, meaning the sector will continue to provide FX funding mostly to those companies which generate FX income.
Similar to 2010, loan growth will outpace deposit growth, which is likely to stay at 9%. The difference will be funded through two main sources:

There will be greater reliance on foreign wholesale markets such as syndications, securitization and bond financing as to decrease deposit/assets ratio to 56.7% in 2012 and 55.6% in 2014.

When and if wholesale funding remains limited given the Euro crisis, fiscal discipline will allow banks to secure resources to lend. The public debt rollover ratio is projected to be 83% in 2012 and the government will in fact be crowding in the private sector. Accordingly, there will continue to be an asset switch from bonds to loans in banks' balance sheets.

Consumer finance, from mortgage to general purpose, along with SME lending should remain main drivers of balance sheet expansion and diversification.

The share of consumer lending (including credit cards) in total is to increase slightly to 34.2% in 2012 from 33.3% in 2011 and in 2014 to 34.9%

4.3.1.1.3 Surveys and Customer Needs Analysis:

X bank develops market share customer profitability analysis. Concerning the customer needs and wants although lines of business workouts on it. However, in the FSP a well-coordinated compact analysis about the customers are not presented.

Banking sector analysis is also a roadmap for the surveys and customer needs analysis. Customer surveys are not only a base for the analysis but also the sectoral trend gives an idea about the customers' needs.

X bank aimed to increase its market share according to the FSP. However, the banking sector analysis represents that the loan growth of the sector will be lower than the growth in funding. Therefore, the market share of X bank is not increases as much as the previous years.

X Bank's market shares forecasts on banking sector

The bank also makes analysis on its market share in terms of loans, deposits and assets. The analysis reflects the current and future market share of the bank.

Market shares are projected according to loans, deposits and assets size by line of businesses

Market share of loans of X Bank is projected to increase by %2,0 in 2012 and %4,0, in 2013 and %3,8 in 2014
Market share of deposits of X Bank is projected to increase by %13,2 2012 from 2011 and %7,0,%6,5 in 2013 and 2014 respectively.
Market share of assets of X Bank is projected to increase by %5,3 2012 from 2011 and %2,5,%2,4 in 2013 and 2014 respectively.
In the budget study of X bank there is not any customer analysis except market shares.

4.3.1.2 Analyze Internal Environment

4.3.1.2.1 Analyze Internal Forces Including Stakeholders, Customers and Employees.

Since the majority of the shares of X Bank belong to a foreign owned bank, the desires of the stakeholders are very important. In the FSP presentation of X bank prepared for the Board of Directors, the summary of overall business strategy reflects these desires. However, neither in FSP nor in other mediums a separate analysis is observed.

From the stakeholder's point of view it is important to display a global picture of the business. Therefore X Bank summarizes overall business strategy and the assumptions are made during budgetary exercise.

According to the X bank's budgetary study the business strategy is as follows:

1. Continue a controlled organic balance sheet growth in line with the improving economic outlook.
2. Be attentive to creating and diversifying own funding sources for growth.

3. For foreign funding, financing through Supranationals, Securitisation, Syndicated Loan.
4. Prioritize retail deposit growth while emphasizing long-term financing from supranational, development banks/agencies and others.
5. Remain focused on higher spread and diversified lending, primarily in Retail, SME, Agriculture and lower-end Commercial. Offset pressure on margins by increasing volumes while keeping the risk profile within prudence.
6. Continue to use TR sovereign security portfolio as an effective, and at times lucrative, tool for liquidity management.
7. Insist on cost efficiency and taking the necessary measures and restructuring to seek relatively low cost/income ratios compared to sector.
8. Emphasize synergy from subsidiaries to optimize their respective strengths. Continue to emphasize the portal approach for the whole X Bank for greater synergy and cost efficiency.

In addition to the overall business strategy X bank presents a global picture of the needs. In the case of X Bank, the bank wanted to grow faster than the sector with a strong capital growth. Therefore, X Bank assumed a capital increase and asked for an additional capital to the main holder of the company.

4.3.1.2.2 Analyze Bank's Historical Trends

4.3.1.2.2.1 Main Strategies and Business Model:

Lines of businesses prepare their presentations separately in terms of income and some outstanding details. Also, KPI's are stated to show the evolution of line of business and cross sell ratios refer the synergy between them. However, storytelling of the major events in the history provides both positive and negative terms which are not presented in the FSP. All lines of businesses mostly focus on the achieved success.

X Bank's lines of business profitability and shares forecasts

According to FSP of X Bank's, the total profit is also forecasted by lines of businesses. Accordingly, the gross income shares are %20 corporate banking, %20 commercial banking, %30 SME banking and %30 retail banking. The bank does not plan a major change in the strategy of the lines of businesses and the evaluation of the lines of businesses is expected to be flat.

The overall budget is consolidated by MRBP. Therefore, all lines of businesses are supervised by them during the budgetary processes. The lines of business fill the templates which are built by MRBP. The templates consist of the activity figures of the lines of business like loans and deposit by product type with the interest rate expectations. The interest rates are forecasted according to the economic assumptions. After receiving the forecasted activity figures of Lines of Businesses MRBP, calculates the margins of the loans according to an internal cost of funding methodology. Although internal models include a variety according to the product type which mainly depends on the Turkish Lira and Foreign Currency deposit rates. In addition to the activity lines of business also forecast commission incomes.

The consolidated activity figures are also presented in the budget presentation.

X Bank's cash loans evolution by lines of business estimates

X Bank also analysis the cash loans lines of businesses. X bank planned to increase foreign currency cash loans by ~%23 in TL and ~%24 from 2011 to 2014. The loan volumes represents that in TL loans bank mainly focuses on retail business whereas in FC loans in corporate and commercial businesses. The fastest growing line of business till the end of 2014 was SME banking by 26% growth.

4.3.1.2.2.2 Analyze support functions:

Both HR and IT platforms are taken into account as a cost oriented approach in X Bank. Neither qualification requirements nor engagement surveys are presented in the FSP document.

X bank's budgetary processes were mainly based on balance sheet and profit and loss studies. Therefore, the IT investments and the increase in the number of staff have budgeted during the study with in limited cost based point of view.

However, both IT investments and staff requirements are determinative in the KM process. According PCF processes both of them are separately. X Bank's IT investments strategy was mainly based on opening new branches.

X Bank's Branches Evolution

Major strategy of X Bank was to be one of the biggest bank in Turkey in the coming five year period. Therefore, they are planning to be open new branches rapidly by 10% growth till the end of 2014. The new branch openings require new employee needs and the expected growth %10 in the number of the employees till the end of 2014. However, both the new branch openings and the new employee need are the cost increasing investments. Hence, it is very important for the bank to keep under control the costs.

4.3.1.2.2.3 Selected Financial Highlights and KPI's:

X Bank publishes a historical trend and forecasted balance sheet and income. They use some KPI's as well. In addition, the document contains a detailed analysis of the cost and salaries. However, in the FSP there is lack of explanations of these items. Therefore, commenting on financial in order to develop a strategy depends on the managers. The knowledge/experience in managers' minds and capturing it as part of the corporate knowledge are achieved during definition and development of the business concept, long term vision and the business strategy processes. Indeed, tacit knowledge should be converted to explicit knowledge to the greatest extent possible.

X Bank's selected financials and KPI's

X Bank's selected financials represent the balance sheet, the profit and lost and the ratio analysis. The financials are presented according the expected amounts, the growth rates with comparison to the previous years.

The balance sheet represents that the bank was not planned to grow as fast as the previous years. The bank grew fast in 2011 by above 30% in 2011. However, the bank's growth expectation in asset size 20%, 19% and 18% in 2012, 2013 and 2014 respectively.

According to the balance sheet study the key driver of the bank are the loans. The Bank estimated to grow by 22% in total loans whereas 34% in 2011. The sector expectation on loan growth was by 17.5% which presents how the bank aimed to continue a controlled organic balance sheet growth in line with the improving economic outlook but more ambitious than the sector in order to increase its market share.

On the funding side the budget exercises expressed that the bank forecasted to grow mainly in TL deposits and the total deposit was expected to grow by 22% in 2012 whereas 40% in 2011. Another borrowing indicator of the bank was the banks borrowing amount that expect grow as much as deposits by 23% in 2012 whereas 18% in 2011. The increment change in bank borrowings indicates that 2012 was expected to be tough year for collecting customer based deposits. Therefore, the bank aimed to be attentive to creating and diversifying own funding sources for growth meaning that the bank will continue to provide foreign currency funding in line with sector.

Although the bank's security was lower than the sector average, the balance sheet exercise showed that the bank aimed to use TR sovereign security portfolio as an effective, and at times lucrative, tool for liquidity management.

According to the profit and loss exercise of the bank, 2012 profit was expected to be around -25% lower than 2011. The main reason behind this downtrend was an one-shot income booked in 2011.

Although the profit and loss exercise was one of the most important parts of the budget process the bank did not underline the one-shot income in their presentation. Therefore, 2012 profit was expected to be lower by %26 which might not reflect the real operating income increase and might cause a result that X Bank was expecting an extraordinary loss in 2012. However, in X bank case almost all of the top managers knew about the one-shot income as a tacit knowledge.

In addition to the profit and loss and balance sheet X Bank made ratio analysis of the bank of which some of the ratios are related to financial performance and some part was related to legal perspective. According to BRSA (based on regulations of Basel) the capital adequacy ratio should be higher than 8% and if a bank wants to open new branches CAD should be higher than %12. According to the ratio analysis in order to grow by 20% and ensure the regulatory requirements for each year X banks needed additional capital.

In addition, the cost income ratio was under control and after 0,5% increase in 2011. The main reasons behind the increase were that the bank booked a big one shot income in 2011. On the other hand, the bank is planning to invest on new branches, IT infrastructure and HR However; the gross income does not expand as much as to cover the gap between income and the expense growth. The net interest margin is expected to expand by 0,3% in 2012.

The non-performing loan ratio increases by 0,4% in 2012 and remained flat. Non-performing loans is expected to adding up the new additions and low recoveries in 2012. On the other hand, due to the new regulation on the credit cards the minimum payment band and the minimum payment rates are assigned according customers' limit band had changed. (BRSA, 2011) The new regulation is expected to increase the non-performing loans in credit card business negatively.

4.3.1.2.2.4 Assessment of the Previous Year Accomplishment:

In order to forecast the future financials it is important to create an analysis of the previous and the actual years. Defining the strengths and weaknesses or one-off gains or losses, analyzing the effects of the regulations on financials provides a better understanding of the strategy and increase the corporate knowledge level. However, in X bank although these effects discussed between top management levels, they are not written and published in the FSP.

4.2.1.3 Risk Management, Compliance and Audit Analysis

4.2.1.3.1 Risk Management Analysis:

The risk management's point of view in the FSP document of X Bank is presented in three approaches. Firstly, the asset quality analysis, secondly, liquidity, funding and capital management and finally, the sensitivity analysis are presented. On the other hand the document neither contains operational risk nor detail analysis of the future regulations such as Basel II or Basel III.

Risk management and MRBP had a well-developed coordination during the budgetary process. In general all departments in X Bank works with a unique server but they are not able to reach the other departments' folders. However, in MRBP and RMG case both departments are able to reach to their folder with a read-only authorization which increase the speed of data transfer and increase knowledge share.

RMG participated at the budgetary process by doing risk oriented analysis.

In terms of liquidity RMG calculated bond portfolio evolution and cross currency analysis.

Bond Portfolio & CCIRS Reserves of X Bank

RMG assumed that according to the economic assumptions there will be minor changes in the outstanding amount of Bonds till 2014.

RMG also had calculated gap analysis of by years which showed total balance sheet compliance according maturity and margins and the expected gain.

The Gap Analyses of X Bank.

RMG also had calculated the gap analysis of by years which showed the total balance sheet compliance according to the maturity and margins and the expected gain. According to the data the open was expected to decrease by 20% in 2012 and then increase by above 50% in 2013 and 2014.

4.2.1.3.2 Compliance and Audit:

Compliance and audit process contain legal and regulatory requirements and controlling and prevention strategies of the activities. However, in the FSP of X Bank a strategy about compliance and audit is not presented.

4.2.1.4 Define and develop vision and the objectives:

In light of the assessments X Bank develops the FSP for the coming three years. However, the FSP is mainly prepared as a summary of the financials. The shortage in explanatory information and details are covered by mostly in challenge meetings. Since the turnover is low, especially in top management level the deficiency of the explicit knowledge is covered by tacit knowledge.

4.3.2 Knowledge Integration-Share the Strategy

In X Bank there is a top down approach followed during FSP process. The MRBP group both consolidates and works on the strategy. Since there is no availability for the IT system to produce a budget processes all FSP processes are prepared in excel sheets.

Firstly, MRPB prepare excel sheets are to be filled by all business lines and send them by email to top management of line of business. In the email also a calendar of the process and financial indicators is attached. The calendar must include the end and the final dates, data collecting, challenging meeting and approval days are shared with line of businesses. Following the email all lines of businesses organized their financial strategic processes internally and then they fill the excel sheets. The excel sheets contains outstanding and new production amounts, interest rates, fees and commissions expectations by products. After receiving the excel sheets MRBP works on the database, as they control the data and then calculate the expected profit and consolidated balance sheet and KPI's by line of businesses.

Secondly, the first results of study are presented to the local Board of Directors by the Chief Financial Officer as a presentation. The presentation prepared as a summary of the work. The FSP is discussed during the meeting with all lines of businesses. According to the decisions are taken in the meeting MRBP revises the FSP.

Thirdly, the revised FSP is again presented to the local Board of Directors. If any revision is required challenging meetings with the main company starts. The CEO and CFO present the FSP to the global Board of Directors. If any revised is asked the FSP is updated if not both global and local Board of Directors approves the FSP.

Finally, after the approval of the FSP, bank starts distributing the next year budget to the branches by using an IT based system. All lines of business separately distribute budget to the branches and MRBP controls the consistency of the distribution.

Neither an announcement nor trainings programs are organized in X bank for sharing the knowledge.

4.3.3 Business Process Environment-Monitor and Evaluate The Strategy

After the approval and sharing processes of FSP all business units put the business plan into action. X bank monitors the outcomes frequently. Three tools are used for monitoring and controlling processes.

- **Weekly Asset and liability Meetings**: Weekly Asset and Liability Reports mainly focus on the line of businesses with outstanding accomplishments as well as the interest rates, fee and commissions and the costs. Variances between the budget and realized financials are presented. During the meeting lines of businesses explain the reasons of the variances. However, there are no written documents.

- **Monthly Dashboards:** The dashboard presentation mainly gives attention of the performance of line of businesses and total bank performance. Volume evaluation by product, cost analysis, NPL evolution, line of business profits and KPI's are presented in the dashboards. The dashboards are also more explanatory than the Asset and Liability reports.

- **Management Board Presentations**: The presentation is prepared quarterly which shows the summary of the quarterly performance of the bank in terms of balance sheet, income tables and KPI’s. Besides, line of business details are also presented in terms of loans, commissions, expenses and profit.

The three reports mentioned above are prepared by MRBP department in the excel sheets.

X Bank follows the actual figures regularly. When the next FSP process starts MRPB starts the whole process from the beginning with the feedbacks of the previous year FSP.

4.4 The Presentation Of The Case Study Findings In Z Bank

In this section the actual FSP processing in Z bank are examined. Since this study assess how well Z Bank performs at developing a FSP. KLC and PCF phases are taken into account as a framework and the model developed in Chapter 3 are used for assessing the performance.

In order to present the case study finding all sub processes of the model are reviewed in the actual FSP process of Z Bank.

4.4.1 Knowledge Production Process-Preparatory Works

4.4.1.1. Analyze the External Environment

4.4.1.1.1 Assessing and Analyzing Macroeconomic Environment:

The Z bank assessed macroeconomic environment by remarking the main issues for the current year which affected the banks and the markets. 2011 was with unprecedented developments in European & US markets on Turkish economy and Turkish banking sector therefore the banking sector faced regulatory changes characterized by additional TL reserve requirements, additional cap on fund management fees and higher than projected reduction in cap on credit cards. Also, CBT’s new policy mix characterized by widening interest rate corridor, diminishing repo facility, easing reserve requirements increased the cost of funding. These unprecedented developments in the markets were expected to affect 2012. Therefore, the economic research department takes into account the market conditions during the budgetary process. The economic research department in Z Bank studies on the current economic environment and make some assumptions regarding the analysis the produce some macro and financial indicators, such as GDP, inflation, libor rates, foreign currency exchange rates, deposits rates.

Z Bank's assumptions on analyzing macroeconomic environment

The SP in X Bank usually start in July and ends with in October. All the data assumptions for the budgetary process are based on previous year and the current year-end estimated data. The FSP processes ends in Z Bank earlier than X Bank thanks to the technology. The macro-economic parameters presented in FSP are GPD, Consumer Price Index, Current Account Balance, Exports, Imports and Primary Balance/ GDP.

According to the Z bank's estimations the economy is expected to grow by 2.7%, in 2012. Although, the bank makes estimations on 2013 and 2014 the macro-economic indicators is not presented in FSP for 2013 and 2014. Even though, both banks are taken into account the government targets; Z bank and shares the knowledge with all management different from the X bank. According to the Z bank's estimation economy was anticipated to continue its growth but with a slower pace.

Z Bank's assumptions on FX rates and Consumer Price Index

Inflation was expected to remain significantly lower than 2011 but higher than the government target by 6.1% in 2012. Current Account Balance deficit was forecasted to narrow to 63.2 bn USD whereas the government target was 65.4 bin USD. Similar to many other emerging markets' currencies, TL depreciated against USD during recent turmoil ~13% since July 2011 & overall 2011 expectation is 21.5%. However TL is expected to appreciate by 4.4% against USD in 2012 following the meaningful depreciation in 2011.

Monetary policy assumed to remain unchanged throughout 2012. CBT policy rate and lending rate to remain at 5.75% and 12.5% respectively. Average Reserve Requirement Rate on TL liabilities is 10.5% . TL average reserve requirement rates assumed to stay at current levels. Banks are assumed to be able to maintain up to 40% of TL Reserve Requirements in FX and 10% in gold in 2012.

Banks are assumed to be able to maintain up to 40% of TL Reserve Requirements in FX and 10% in gold in 2012.

4.3.1.1.2 Banking Sector Analysis:

Although Z bank had very detailed analysis of the macro economy, the bank did not created detailed estimations for the macro outlook of the banking sector, instead performed a more smattering analysis. According to the FSP Z bank expected a challenging year ahead for the banking sector. The main reasons behind this expectation were the global macro picture as the highest risk factor, decelerating pace in GDP growth which moderated lending growth, CBT's tight monetary policy which increases cost of funding and the regulatory changes supporting financial stability and put pressure on profitability.

According to the Z bank FSP process CBT was assumed to continue its roles a key policy maker and assumed to remain unchanged throughout 2012.

Z Bank's assumptions on banking sector

The real GDP growth was expected to be between 2,5 and 3 %. The inflation is expected to be are around 6%. CBT's policy rates were kept as the same as 2011 by 5,75% and 12,5% (TCMB, 2012). The benchmark interest rates are expected to decrease by 2% and USD/TL is forecasted as around 1,75.

4.3.1.1.3 Surveys and Customer Needs Analysis:

Although Z bank monitored its markets shares actualization on a weekly basis, the FSP study of the bank did not include any market share analysis.

4.4.1.2 Analyze Internal Environment

4.4.1.2.1 Analyze Internal Forces Including Stakeholders, Customers and Employees.

Since Z bank is a jointly controlled bank by a foreign and local company, the desire of the stakeholders' is a very sensitive issue. Since the shares of the banks are traded on Istanbul Stock Exchange (ISE) the bank organized a meeting for analysts and investors to present the 2012 budget. The presentation was represented by the chief financial officer and the investor relations manager. During the presentation along the 2012 business plan of the bank the banking sector forecasts and the expectations for the macro economy was also presented. After the meeting analysts wrote their analysts' reports including their comments which consisted of their ratings, comments and price targets. The reports were not publish to public and sold by analysts companies to the top investors to manage their shares in the stock exchange.

4.4.1.3 Analyze Bank's Historical Trends

4.4.1.3.1 Main Strategies and Business Model:

Different from X bank, in Z bank did not prepare presentations for the lines of businesses during the budgetary processes. However, the overall budget was consolidated by MRBP and the lines of businesses filled the templates and set their own target related their business. The templates consisted of the activity for the figures of the lines of business like loans and deposit by product type with the interest rate expectations separately in terms of income and some outstanding details. Therefore, the Board approved the financial strategic plan with bank only and consolidated figures. After the approval MRBP prepared the budget by lines of businesses and distributed to the regions and branches. Following the distribution of the business plan. The SP committee organized a meeting to go through the expected business performance with the participation of CFO and lines of businesses executives.

Also, KPI's are stated to show the evolution of line of business and cross sell ratios refers the synergy between them.

The analysis for the lines of businesses at Z bank is more comprehensive than the analysis of X bank. Moreover, they summarizes the major events with the historical data both in positive and negative terms for the budget and actual figures.

Z Bank's assumptions on banking sector

On the contrary of X Bank, Z Bank also active on treasury business. The bank caries on the business also by trading gains, securities income and efficient asset and liability management. The gross income is composed of accordingly 40% byCorporate and Commercial business, 30% Retail and Small and Medium Enterprise, and 30% Treasury.

4.4.1.3.2 Analyze Support Functions:

Most of the support functions rather than being the profit centers are cost centers from the financial point of view. Since Z bank is one of the biggest banks in Turkey to manage the investment and HR required a comprehensive analysis. Therefore, Z bank had a different operational cost budget which included not only profit and loss effects of the capital and human investments but also the plan of all investments took part in the study and provided all qualification requirements which is line with PCF processes.

Z Bank's investment strategies

The Z Bank presents its investment in a very detailed way in FSP document such as in addition to the number new opening branches and the HR need, the number of the server, printer, router, modem, router, scanner, kiosk, ATM machine need are also budgets and presented.

On the other hand, software, project, security and the third party investments are also budgeted and shared in FSP document.

4.4.1.3.3 Selected Financial Highlights and KPI's:

Compared to X Bank Z bank built a more comprehensive FSP which covers all details of the balance sheet and profit and loss with a historical trend. The balance sheet was budgeted according to TL, USD and EUR. In addition to the financials the one off incomes of the actual year and the expected impacts of the regulatory changes to the projected year profitability was also included to the analysis. The ratio analysis of the bank was also more comprehensive than the X bank. Also the document contains a detailed analysis of the cost and salaries.

The FSP of the Z Bank contained more explanations and details. Therefore, it was more transparent –and in terms of the comments about the financials was simple and manageable for the lines of businesses and top management. The knowledge/experience in managers' minds and capturing it as part of the corporate knowledge are achieved during definition and development of the business concept, long term vision and the business strategy processes. Therefore, tacit knowledge was converted to explicit knowledge to the greatest extent.

Z Bank balance sheet and profit and loss table.

The lending performance of the bank was expected to be grow by approximately 15% year on year. TL loan growth will moderate to 20.0% in 2012 from approximately 35% in 2011 in line with the economic slowdown. Consumer & SME segments continue to be drivers of growth at annual pace of 25% and 20% respectively. FX loan growth will resume at 10% in $ terms after a mere 5.0% growth in 2011.

Securities continue to follow an almost flat trend 3% year on year, mainly with replenishments at maturity. 'Securities to assets' continue to decline to approximately 20% in 2012 from 23% in 2011.

Asset quality is under control. NPL ratio remains essentially flat which is below 2% in 2012. Despite Retail and SME oriented growth net cost of risk rises by 0,03% but still below 1% in 2012 due to anticipated decline in collections.

The Bank had a solid funding base and actively seek to increase share of customer deposits in funding; TL customer deposits up by approximately 20%, FX customer deposits up by approximately 10% in $ terms. The share of customer deposits in total assets increasing to approximately 55% in 2012 by approximately 1,5% increase; the customer deposits total up by 12% year on year. Hence, loan-to-customer deposits gradually increasing to 104% in 2012.

The opportunistic utilization of wholesale funding like repos and money market borrowings to support margin was expected to continue. However, yet to a lower extent than 2011; share of 'repo, money market, securities issued and bank deposits' in total assets diminishing by 1% to approximately 20% in 2012.

Solid capital base maintained despite significant risk weighted asset growth. Consolidated CAR declines by 0,03% to between 13-14% in 2012 despite absorption of Basel II regulations put in place still maintained way above recommended 12% CAD by BRSA.

Z Bank's analysis of the one offs and regulatory impacts on the net income

In addition to the profit and loss tables Z bank also presented the one offs impacts on the net income such as sales of a stake, sales of a bad debt sale. On the other hand, the profit and loss effect of the regulatory changes is also analyzed such as accounting change effect of accruals of file handling fees, cap on fund management fees, TL reserve ratio changes, additional general provisions for general purpose loans which are utilized after 18/06/2012.

(BRSA, 2011) The analysis of the one offs and the regulator impacts are used to compare the profit and loss table with the previous year and provides a healthy approach for analyzing the income.

According to the profit and loss exercise of the bank, despite the regulatory auctions 2012 profit was expected to be just approximately 1% lower than 2011. The main reason behind the annual drop in stated bottom-line principally due to base effect of 2011, namely one-offs and regulatory actions weighing on 2012 profitability. Comparable adjusted bottom-line figures indicate a hike of between 20-30% in business profitability in 2012. The bank was expected to improved balance sheet margins on the back of timely loan repricings TL loan yield up by 1,3% to between 15-16%. FX loan yields are also rising by 0,07% to between 5-6%. Z Bank forecasted a strong growth in high margin products and closely monitored cost of funding heading north at a slower pace than loan yields.

Net fees and commissions remain almost flat despite regulatory measures on this front. The bank continued commitment to strict cost discipline and continued investment in distribution network.

In addition to the profit and loss and balance sheet Z Bank made ratio analysis of the bank of which some of the ratios are related to financial performance and some part was related to legal perspective. According to BRSA (based on regulations of Basel) the capital adequacy ratio should be higher than 8% and if a bank wants to open new branches and CAD should be higher than %12.

The ratio analysis of Z bank

The ratio analysis of Z bank mainly focuses on profitability, asset quality, liquidity and capital adequacy. Return on average equity of the bank declines by 2% to between 15-17% and cost income ratio increased by around 5% due to one shot income booked in 2011. In addition the net interest margin is expanding to between 3-4% due to loan pricing. Non-performing loan ratio remained flat by 2% levels. According to the loans to deposit ratio all loans are funded by customer deposits

4.4.1.3.4 Assessment of the Previous Year Accomplishment:

Z bank compared the actual with budget for the actual year.

Net income realization compared to the budget

In addition to the detailed profit and loss analysis of 2012 budget; the current year is also examined comprehensively. The profit and loss effect of the inflation which was realized higher than the expected, regulatory change effects of the reserve requirement ratios and general provisions, the actualized unexpected costs and loan utilizations, the unexpected foreign currency gains are all explained in FSP presentation.

4.3.1.3 Risk Management, Compliance and Audit Analysis

4.3.1.3.1 Risk Management Analysis:

Basel II impacts are taken into account in the KPI analysis in 4.3.1.3.3

4.3.1.3.2 Compliance and Audit:

The impacts of the regulatory auctions are included to the FSP of the Z bank mentioned in 4.3.1.3.3

4.3.1.4 Define and Develop Vision and The Objectives:

In light of the assessments Z Bank developed the FSP for the coming three years. The FSP was mainly comprised of a very detailed analysis of the financials. Although the data templates filled by lines of businesses FSP did not cover the lines of business analysis. After the approval of the FSP by board of directors the lines of businesses budgets were presented under the leadership of CEO.

Although the FSP process of Z bank is more detailed than X Bank the explanatory information and details are also covered by top management. Since the turnover is low, especially at the top management level the deficiency of the explicit knowledge is covered by tacit knowledge.

4.4.2 Knowledge Integration-Share The Strategy

In Z Bank there was a top down approach followed during FSP process. The MRBP group both consolidate and work on the strategy of the bank only figures than consolidation department was involved to the process and integrated the budget of affiliates in order to build the consolidated FSP. Since the bank had a very powerful IT system some parts of the budget process were prepared in excel sheets.

Firstly, MRPB prepared excel sheets to be filled by all business lines and sent them by email to top management of line of business with the deadlines. Following the email all lines of businesses organized their financial strategic processes internally and then filled the excel sheets. The excel sheets contained outstanding and new production amounts, interest rates, fees and commissions expectations by products. After receiving the excel sheets MRBP started to work on the excel sheets, they controlled the data and then calculated the expected profit and consolidated balance sheet and KPI’s by line of businesses.

Secondly, the first results of the study were presented to the local Board of Directors by the Chief Financial Officer and Head of MRBP. During the presentation FSP was discussed during the meeting with all lines of businesses. According to the decisions taken in the meeting MRBP revised the FSP.

Thirdly, the revised FSP was again presented to the local Board of Directors. If any revision was required challenging meetings with the partner company ensued. The CEO and CFO presented the FSP to the global Board of Directors. If any revision was suggested, the FSP was updated if not both the global and the local Board of Directors approved the FSP.
Finally, after the approval of the FSP, bank distributed the next year budget to the branches by using an IT based system. All lines of business separately distributed the budget to the branches and MRBP controlled the consistency of the distribution.

4.4.3 Business Process Environment-Monitor and Evaluate the Strategy

After the approval and sharing processes of FSP all business units put the business plan into action. In Z bank monitors the outcomes frequently. Mainly six tools are used for monitoring and controlling processes.

- **Weekly Asset and liability Meetings**: Weekly Asset and Liability Reports mainly focus bank only figures from the macroeconomic, banking sector, financial and risk management point of view. The report also consists product based performances. Variances between the budget and realized financials are presented.

- **Monthly Lines of Business Reports:** The monthly line of business report mainly gives attention to the performance of the line of businesses performance. Volume evaluation by product, cost analysis, NPL evolution, line of business profits and KPI's are presented in the report. Each report are sent to the line of business including a summary of the evolution of the month. The report gives more hints about the lines of businesses than the Asset and Liability reports.

- **Business Meetings:** The business meetings are organized by strategic management department on a 6 months period in order to go through the performances of lines of businesses. The meetings are fulfilled with the participation of lines of businesses top management, CFO and CEO. Volume evaluation by product, cost analysis, NPL evolution, line of business profits, market shares, regional and branch evolution and KPI's are presented and negotiated in the meetings.

- **Management Board Presentations**: The presentation is prepared quarterly which shows the summary of the quarterly performance of the bank in terms of balance sheet, income tables and KPI's.

- **Operational Expenses Report**: The presentation is prepared for the committee of the operational expenses which analysis the expenses of the bank in a detailed way. - **Branches Reporting and Regional Meetings**: The presentation is prepared quarterly which shows the summary of the quarterly performance of the branches in terms of balance sheet, income tables and KPI's. Besides, line of business details are also presented in terms of loans, commissions, expenses and profit.

The reports mentioned above are prepared by MRBP department in the excel sheets but highly supported by IT tools.

Z Bank follows the actual figures regularly. When the next FSP process starts MRPB starts the whole process from the beginning with the feedbacks of the previous year FSP.

4.5 Validity And Generalizability Of The Case Study

In Chapter 1 it was noted that the purpose of the study is to develop a FSP model integrated with KM within banks.

The rationale for assessing the KM and FSP was discussed throughout the literature study and is not covered in this chapter. This chapter is mainly concerned with the methodology followed in the research.

The researcher operates within a positivist and participatory approach (Runeson & Höst, 2009) (Harrison & Leitch, 2000). In a positivist tradition four criteria is used in researches: (i) construct validity, (ii) internal validity, (iii) external validity, and (iv) reliability (Gibbert, Ruigrok, & Wicki, 2008) (Runeson & Höst, 2009). According to Gilbert & Ruigrok & Wicki (2008) case studies emphasize external validity in a hierarchical relationship with internal and construct validity types. Since the data is validated by the board of directors of X and Z bank and direct observation method is used in the case study constructing the validity is enabled. Besides, a framework model is developed by the researcher within a cause and effect relationship approach between the data and the outcomes internal validity accuracy is obtained. Although the FSP documents are confidential in the banking sector, the investor reports shows that the research can be generalized and external validity can be verified. The model developed by the researcher and both TNKM and PCF for banks documents are classified in a detailed way the reliability of the data is obtained. Since it is not easy to isolate a FSP model of a bank due to its variability and instability of the subject, the researcher adopt the case study method since it is a contemporary phenomenon in its natural context and does not generate the same results, but provide deeper understanding of the phenomena (Runeson & Höst, 2009)

Concerning the competitive market conditions and confidentially of a FSP data gathering from the other banks is not simple. Therefore, the choice was largely influenced by convenience factors. The data have been gathered from the FSP of X Bank and Z Bank are confidential. Observations have been documented based on daily interaction with managers. Since the researcher was a manager at MRBP department all documents were available to assist in the research. And the researcher could rely on firsthand knowledge about the processes of producing a FSP.

Since the confidentially of FSP's in the banking sector the researcher is not able to make comparisons of the other banks. On the other hand, the aim of the researcher in this study is to develop a FSP model for banks by forming a KM framework. Therefore, the researcher did not prefer a statistical approach. Also, the size of the case study on its own was not a feasible option.

Although, the flexibility of a case study approach enabled the researcher to make use of both quantitative and qualitative methods. In terms of the case study, the qualitative date is used in the study in order to categorize the FSP processes and to provide deeper understanding of the subject.

Runeson & Höst (Runeson & Höst, 2009) emphasize that it is important to increase the precision of the empirical research by triangulation which means taking different angles towards the studied object. Four different types of triangulation may be applied (Stake 1995, as cited in (Runeson & Höst, 2009)

Table 5 Methodological Rigor and the Case Study

Methodological Rigor	Comments on Case Studies
Data (source) triangulation	Using more than one data source or collecting the same data at different occasions. The researcher applied this approach by collecting the same data at different occasions.
Observer triangulation	Using more than one observer in the study. The researcher applied this approach by communicating with all employees in the study.
Methodological triangulation	Combining different types of data collection methods, e.g. qualitative and quantitative methods. Since the aim of the study is to reveal a framework for a FSP model for banks rather than developing more precise rules this approach is not taken into account.
Theory triangulation	Using alternative theories or viewpoints. The TNKM (Firestone & McElroy, 2005) and PCF for banks (APQC, 2011), two models are combined for the study in order to provide a broader picture of the study.

Source: Empirical Software Engineering (Runeson & Höst, 2009)

4.6 Case Study Findings

In the previous sections how FSP produced, integrated and applied in the two Turkish Banks is discussed. A FSP Model proposed in chapter 3 is applied in the two banks' processes. This section summarizes the findings of the case studies.

4.6.1 Knowledge Production Process

4.6.1.1 Analyze The External Environment

4.6.1.1.1 Assessing and analyzing macroeconomic environment:

Macro-economic environment analysis was one of the main key issues for the two banks during the FSP process. In each bank following the top management's decision the budgetary process started under the leadership of the MRBP team. The process started with analyzing the macroeconomic environment.

A comparison of the process and the findings of the process are as follows:

- Due to the market volatility and the economic uncertainty in global market conditions the forecasts of the banks might deviate. Therefore, it is important to make the following year estimations as much as possible to th closest months to the year-end. However, the FSP process in Z Bank started in July, which is earlier than the X Bank and the deviation in the projections might be more than the X Bank due early starting period. On the other hand the projections of both banks might also deviate since the market conditions are volatile in general.

- Both banks' estimations for the current year-end were similar in terms of annual CPI and USD/TL, 8.9% and 1.84/1.85 respectively. However, the realization of these indicators was different from the estimations of both banks'. The announced annual CPI was 10.4% (TUIK, 2012) and the USD/TL rate was 1.88 (TCMB, 2012)

- According to the FSP documents the macro-economic projections of the Z Bank were comparable with the government target whereas X Bank's projections were not. The government targets are one of the main key indicators for banks during the budgetary process and monitoring the business. Since the FSP as a document distributed more widespread making a comparison is important in terms of providing a realistic and a comparable approach.

- X bank's inflation estimation was in line with the government target, 5.2% (TCMB, 2012) However, Z Bank's estimation despite the expectation in softening domestic demand was high and surpassing the inflation target.

- Although both banks' macro-economic analysis contain in-depth analysis; some of the indicators which were suggested in the model were not taken into account during the FSP process such as follows:

    - geopolitical position and demographical assessments,

    - global market conditions, financial crisis overviews and expectations about the sector and business environment.

    - Identifying the ecological concerns to foresee the potential income or losses and assessment of the social and the cultural changes to capture, increase and keep the market share or to take the new opportunities in potential markets.

- After finalizing the FSP process each bank monitors the macroeconomic indicators closely. The economic research department in X Bank monitors on a daily basis prepares a report on the global and local macro-economy and financial events and shares the information via email on a weekly basis. In addition on a weekly basis Asset and Liability Committee chief economists of the banks present the figures and comment on the economy including the expectations and estimations. The economic research department in Z Bank also monitors the economy closely. Different than the X Bank they prepare a summary of the economic and financial events on a daily basis and on a monthly basis they revise their projections.

4.6.1.1.2 Banking Sector Analysis:

- X Bank analyzes the banking sector according to the growth in terms of assets, loans and deposits also with the breakdown of the lines of businesses. Although Z Bank made its projections according to the expectations in the sector in the FSP documents a detailed analysis for the banking sector is not observed.

- Both banks were expecting a challenging year ahead for the banking sector mainly due to the risky global macro picture. In Turkey, weaker growth has finally occurred after two years of extraordinary growth. The soft landing shows Turkey's resilience to the global crisis and should be regarded as a positive development given that the economy was indeed overheated in 2011. Both banks projections were in line with these expectations.

- Both banks envisage that monetary policy tightening stance will continue, supporting the rebalancing of the economy. Unfortunately, this is not the case of the fiscal policy, for which they expect a slight deterioration, despite the fact that part of the fiscal stimulus to cope with the financial crisis has still not reverted.

- All in all, both banks made estimations in line with the suggested model. As well, both banks estimated that the soft landing scenario will contribute to re-equilibrate the Turkish economy but risks are clearly on the downslide However, the global economy still faces important risks, so keeping a warning attitude and avoiding complacency will become a key strategy for the coming years.

- Each bank monitors the banking sector developments on a weekly basis in their Asset and Liability Committees.

4.6.1.1.3 Surveys and Customer Needs Analysis:

- In the FSP document X bank focuses on the market share analysis rather than customer profile or needs analysis. On the other hand Z Bank's FSP document does not contain any analysis.

- Both banks monitor their actual market shares and develop their business strategy proactively. Although FSP documents do not include survey and customer needs analysis, they are closely made by both banks in the business process environment.

4.6.1.2 Analyze Internal Environment

4.6.1.2.1 Analyze Internal Forces Including Stakeholders, Customers and Employees:

The information of what stakeholders want and need is a strategic and in some cases is considered top secret information. Although each banks' FSP document do not include an information on this issue, each bank negotiate the demands of the stakeholders both before and after the FSP process. Also banks made presentation to the financial analysts and investors which had affected the ratings and price targets.
Different from the Z Bank's FSP document in X bank's FSP document main business strategy is summarized and presented.

4.6.1.2.2 Analyze bank's historical trends

The FSP is consolidated by each bank's MRBP departments. However, due to the nature of the differences in size of the business and in the organization structure the consolidation processes had some differences. Both banks collected the data from all lines of businesses and consolidated the expected profit according to the expectations of the lines of businesses. Afterwards, while X bank projected 2012 budget by total and by lines of businesses Z bank projected only in total. In addition, in X Bank the affiliates are involved to the budgetary process actively and the MRBP departments consolidate to the budget. However, in Z bank the budget of the affiliates are coordinated by the consolidation department and not involved in the budget challenging meetings.

After finalizing the FSP processes both MRBP departments monitor the lines of businesses and total bank figures.

The business monitoring processes of each bank are closely done by MRBP departments by weekly, monthly and quarterly reports.

MRBP department in X Bank monitors the banks' financials in terms of the balance sheet, profit and loss tables and ratios on a daily basis by producing reports depending on reports produced by IT. MRBP produces weekly results of lines of businesses in terms of volumes and margins, commissions and market shares for Asset and Liability Committee with comparison to the budget. During the committee each line of business managers explain the reasons of the variations with the supported data of MRBP. The committee also goes through the economic and financial events and risks of the week. Besides country risk and the profit of the treasury is discussed.

On a monthly basis, MRBP produces reports both for internal purposes and for the mother company. Internal reports represent the monthly performance of the Bank on a consolidated basis including subsidiaries by lines of businesses and by total. Internal reports presented in board meetings and distributed to the lines of businesses. In addition, monthly branch performance reports are published and distributed to the branches, regions and lines of businesses.

On the other hand the mother company reports contain two main reports. First one is the monthly dashboard report which is presented in the board meetings and covers the monthly regulations, macroeconomic evolution, financial indicators, developments in the sector. In addition the evolution of the each lines of business in terms of profit, activity and market share, total profit and activity of the banks, some highlighted ratios, evolution of the non-performing loans and branch evolution with the comparison to the budget is presented. The second report is produced for the mother company MRBP department to consolidate the bank to the mother company by MIS purposes.

In addition to the monthly report formats the quarterly reports, challenging meetings with branches are settled. Moreover, a more detailed of ranking presentation is presented by investor relations. Although, some of the reports are based on IT reports most of the reports produced in excel templates.

Both internal and mother company reports are prepared according to the IFRS. However, since the accounting standards of the bank should be according to the BRSA. MRBP department has to make classification to convert the reports IFRS. For some extraordinary reports MRBP also need to produce reports according to BRSA standard. Therefore, the department monitor according to both IFRS and BRSA standards. In addition the daily basis report is in a different format than the monthly reports and budget. Hence, they have to produce the same reports in different formats.

On the other hand, MRBP department in Z Bank monitors the banks' financials in terms of balance sheet, profit and loss tables and ratios on a daily basis. Most the reports are produced by IT department in a very detailed manner. Since the daily, weekly, monthly, quarterly, budget reports are in the same format Z bank does not have to produce reports on different formats. All the required information for bank's financials is presented in the weekly reports. On a weekly basis, MRBP produces weekly results of lines of businesses in terms of volumes and margins, commissions and market shares for Asset and Liability Committee with comparison to the budget. During the committee each line of business managers explains the reasons of the variations with the supported data of MRBP. The committee also goes through the economic and financial events and risks of the week. Besides country risk and the profit of the treasury is presented. The Asset and Liability Committee report of Z bank is more detailed than X banks.

On a monthly basis, MRBP produces reports both for internal purposes and for the partner company. Internal reports represent the monthly performance of the bank and do not include the subsidiaries performances. In addition lines of businesses performances are presented in a very detailed way and with the explanations of the monthly variations and budget. Internal reports presented in board meetings and distributed to the lines of businesses. On the other hand the partner company reports are reported according to the local format including all the explanations. The presentations and the reports which are representing Z bank in the partner company are prepared by the partner company with the contribution of the MRBP department. Therefore, the operational workload of Z bank is less than the X bank.

Both banks took into account the historical data in order to make a comparison and to formulate an analysis during both the FSP and the actual monitoring process. Since Z bank has a more systematical and regular format, the reports are supported by IT they are able to make the comparisons and analysis more systematically. They can explain the variations of the previous periods with exact numbers with all details. However, since Z bank's report is mostly produced manually and in different formats they are not able to construct an analysis in details with exact numbers.

4.6.1.3 Risk Management, Compliance and Audit Analysis

Both banks took into account risk management and compliance in terms of regulatory auctions and capital requirements. However, in the past the MRBP department was working together with risk team in X Bank. The risk team of X Banks is involved with both monitoring the activity and the performance more than the Z Bank by doing gap and sensitivity analysis and determining internal transfer prices and with treasury. Also the risk department works in close collaboration with treasury in order to monitor the foreign currency position of the bank and liquidity of the bank. On the other hand, although the risk department in Z bank makes similar analysis they are not as involved through the process.

Since the global economic conditions were not stable in the recent years the regulatory authorities in Turkey made regulations proactively in order to monitor the sector and keep the sustainable economic growth in the country. Since the last quarter of 2010, the Central CBRT started a new monetary policy, and this strategy prompted by what they defined as a ‘new normal’ in the global economy. As a result, the CBT understands a new scenario characterized by the growth discrepancy between advanced and emerging economics, exceptionally loose monetary policies adopted by advanced economies, and strong credit growth amid increased short-term capital inflows. To cope with, the CBT decided to extend the financial stability to the main objective of maintaining price stability. Under this new strategy, the CBT has been targeting multiple goals with multiple instruments. While keeping inflation as the main target, the CBT explicitly announced desired levels for credit growth and exchange rate levels. The policy instrumentation has also been multiple, changing the main tools from the use of an interest rate corridor to one-week repo auctions (policy rate), one-month repo auctions, daily repo auctions as well as required reserves ratios and direct FX interventions. (TCMB, 2012). The so called ‘unorthodox’ framework of the monetary and macro prudential policies has received some critics by making the strategy too complicated and exposing it to the multiple objectives problem. However, the CBT justified the framework on the need of flexibility of goals and instruments to cope the current global financial conditions.

4.4.1.4 Define and develop vision and the objectives

X Bank prepared the FSP according to the vision and mission of the bank and defined the short term targets of the bank. Before the approval of the FSP made challenge meetings with lines of businesses. Then the FSP is negotiated with the mother company. After coming to an agreement with all related parties the management board approved the FSP. Although, the FSP document of X bank covered most of the related heading that the researcher suggested in Chapter 3 due to the deficiency in technological infrastructure and systematically knowledge sharing culture there was a shortage of explanatory and analytical information. However, since the turnover was low, especially in top management level the deficiency of the explicit knowledge is covered by tacit knowledge.

Since the establishment of the bank, Z Bank did not have to change its rota due to the market conditions. The bank had a strategy of prioritizing the profitability instead of the market share. In some cases the bank preferred to lose market share in order to avoid profitless market competition. Although it is a large scale bank in Turkey, they managed their assets in agility and flexibility.

On the other hand, X bank is a medium scaled bank and gaining market share is very important component to allow the bank to grow. Although, the bank is more open to the market conditions the bank also do not prefer to take big risks and managed in agility.

The business success of the both banks not only derived from the success in FSP process and closely monitoring the business but also due to the less turnover in management levels. However, in Z bank's MRBP the turnover of the employees was also less than X bank. Therefore, the bank managed to transfer tacit knowledge to explicit knowledge and carried all the required data to a technological infrastructure and provided a more systematically and analytical perspective for business monitoring. Since the turnover was low the quality and knowledge level of the employees were high. On the other hand, in MRBP department of X bank the turnover was high and the technological infrastructure was insufficient therefore, the tacit knowledge transfer was limited. As a result of this, in the department there were some key employees who dominate all the information with a high level of work load.

Z bank prepared the FSP according to the vision and mission of the bank and defined the short term targets of the bank. Before the approval of the FSP CEO made challenge meetings with lines of businesses in a parallel run FSP is shared with the partner company. After coming to an agreement with all related parties the management board approved the FSP. The FSP document of Z bank covered the majority of the related heading that the researcher suggested in Chapter 3.

4.6.2 Knowledge Integration-Share the Strategy

The budget approaches in both banks are from top-down. After the approval of the strategy the FSP started to distribute to related parties. Consequently, MRBP departments in both banks built the each branches budget with the leadership of lines of businesses. Since the technological infrastructure of Z bank is more developed than X bank; on the first day of the budgeted year the branches are able to view their new year target on their screens and are also able to monitor their business performance by using the same screens and able to manage their performance. However, in X bank branches are able to monitor their business performance on a monthly basis.

Although it is important to focus on a specific target together to achieve the aimed results X bank do not make an announcement nor training programs to share the knowledge. However, at the beginning of the year Z Bank organized meetings with all levels of management team to tell the new year targets and the expectations from them for the related year.

4.6.3 Business Process Environment - Monitor and Evaluate The Strategy

Both banks monitor the business performance and the financial performance frequently. However, since the technological infrastructure of Z Bank is stronger they are able to prepare the reports in more details than X Bank. Another advantage of Z bank is to prepare its reports according to its internal management approach. However, X bank has to produce reports both for the internal management and for the mother company. In addition, although the researcher made the comparison based on MRBP departments and excluded other departments in her study the major performance reports in X bank prepared by MRBP, however in Z bank there are other departments which follow the performance as well under the financial institutions group and make a remarkable

To sum up, in the case studies it was concluded that knowledge processes of FSP are regularly applied by both banks. Each bank has a separate division, MRBP, responsible from the process. Z bank both in terms of monitoring and producing the FSP is stronger in terms of technological infrastructure and staff quality. In X bank since the all data is collected in excel sheets and are done manually the knowledge production processes are limited and are prone to making mistakes.

X bank applies almost all processes of the model developed in Chapter 3. However, financials are presented with a very limited explanation and comment. Therefore, the analysis done by the MRBP or other related people remain as tacit knowledge. The bank compensates this situation by working with the same top management. The turnover rates of the managers are very low.

Z bank also applies almost all processes as well with a more stronger background and infrastructure.

Transforming tacit knowledge into explicit is very important for knowledge transfer and corporate KM. X Bank distributes the FSP by email and present the FSP to the related parties on top management level. However, Z bank in addition to the processes in X bank organizes a meeting with the attendance of all levels of managers and tells the new year target and share its expectations.

In the case study it is come out that both banks in terms of HR, IT investments perform the strategy mostly as cost base items. However, both IT based structures and HR are key elements of KM. In addition they do not include the compliance and Audit to the FSP process as suggested in the model.

As a conclusion, improving technology investments on SP and adding commentary details of the financials can be added to the FSP processes in X Bank. Besides, the strengths and the weakness an analysis can also be added to the FSP process of the two banks. After the implication of the model in two banks it has been validated that PCF (APQC, 2011) and TNKM (Firestone & McElroy, 2003) can be combined and applied as FSP model in banking industry.

CHAPTER 5

CONCLUSION

5.1 Introduction

This chapter concludes the research. The model is applied with case studies in two Turkish banks. Since the case studies consist of specific information about the banks, the details of the case studies are presented in a separate technical paper.

After focusing on the main points from the case study findings in the previous chapter, the major findings are highlighted, followed by a review of the methods used to conduct the assessment of knowledge processing environment in the MRBP department. In this chapter the summary of work done and research contributions will be assessed. The researcher also recommends possible areas for further research. Finally, the chapter concludes with a critical overview of the study, including its limitations and strengths.

5.2 Summary Of Work Done

The main contribution in this research can be summarized as the proposal of a model by combining two unique models TNKM (Firestone & McElroy, 2003)and APQC PCF (APQC, 2011) for banking for FSP utilized for banks.

This research presents a detailed model for banks to develop a FSP and monitoring the financial performance. The model is applied with case studies in two Turkish banks. Since the case studies consist of specific information about the banks, the details of the case studies are presented in a separate technical paper.

In this research, a survey of the literature is provided on knowledge, KM, benefits of KM in banking industry, FSP and KM application of KM in banking KLC (Firestone & McElroy, 2003) and APQC (APQC, 2011) process classification framework.

Within the scope of this research, a unified model has been developed based on the literature and the personal experience of the researcher. The model is extended with APQC

PCF (APQC, 2011) concept and the framework of the model is developed based on TNKM (Firestone & McElroy, 2003). The processes of the model have been defined and mapped with the combination of the two models. The TNKM served a framework to design a knowledge production environment in banks. The APQC provided an approach to define the sub processes of the model. Haven proven with the implication of the model in two banks it was concluded that PCF (APQC, 2011) and TNKM (Firestone & McElroy, 2003) can be combined and applied as FSP model in banking industry.

The model have been defined in three main categories of TNKM (Firestone & McElroy, 2003), namely "knowledge production process, knowledge integration process and business process environment". According to the proposed model, during the knowledge production process external environment is analyzed, internal forces including stakeholders, customers and employees are assessed, banks' historical trends are followed up and vision and the objectives are defined and developed. During the knowledge integration process challenging meetings with business units are done, the FSP is validated and approved, the following year's targets are announced and the FSP is distributed all related parties. Finally, during the business process environment the business plan is put into action, the outcomes are evaluated, both financial and business performance are monitored and feedback for the future FSP are provided. The following year the process starts from the beginning, taking into account the evaluation of the previous year's results, which is part of the information and acquisition process of Knowledge Production.

The research points out that KM should be a part of SP. If the deficiency in the theory is taken into account, the researcher believes that the suggested model maintains a baseline for a bank to implement a FSP and to monitor the business. The researcher believes that the frequent monitoring mechanisms suggested will help increase the efficiency and the performance of the business. The KPI indicator set which is defined in the model also provides a measurable and comparable instrument for the bank. Both internal and external KPI's are based on the personal experience and the FSP documents of some of the banks. The indicator set is not only provided as an internal measurement tool, but it is also used by other banks all over the world. Therefore, the KPI's are open to make interpretations and analysis not only internal sources but also to external community. These indicators can vary according to the countries and types of the banks. KPI's should be revised and improved actively according to the changing both internal and external economic and financial conditions.

In addition, the model reveals a balanced approach between profitability and risk management by including risk management and compliance processes. Since the market volatility in Turkey higher than the European countries Turkish banks are likely to recognize reversals in the sector in practice. On the other hand, the ongoing concerns regarding the global economic growth especially in Eurozone increased not only internal volatility but also the external markets. Therefore, the researcher considers that including risk management and compliance to the model and combining them with finance view provided an added value to the theory.
Since the model suggest similar methods and tools both for developing a FSP and monitoring the business; different scenarios can be studied to see the results of the scenarios with financials figures. As a result, a comparative analysis model for tracking the changes can be provided. The research revealed that monitoring the performance and the financials, evaluating the outcomes and providing feedback for the future FSP provides an early warning system for the bank. Besides, it increases the performance and the profitability of the banks.

The model also provided an effective cost management opportunity for the banks along with achieving the targets. Since all the levels of bank; branches, regions, head office and affiliates; have a limitation on the costs with its details they are able to foresee the results of the possible variations from their targets.

Also, one of main strengths of the suggested model is based on its close link with APQC (APQC, 2011)and TNKM (Firestone & McElroy, 2003) Analyzing the current situation, defining the vision, developing the strategy, sharing the strategy, monitoring and evaluating the strategy of a bank completes the knowledge cycle. The case study presents that the developed FSP model can be applied to real life and it already has similarities with the real life. Therefore, the model makes a practical contribution to budget planning and management of the goals which are identified in FSP, allowing for forward continuous monitoring suggestions and KPI’s for tracking the banks.

The model also allows to the top management a global view of the business without entering too much knowledge. With the implementation of the model a tool for the top management is obtained which provides a whole picture of the bank with all perspectives. The model reveals a perspective of finance, economy, risk and marketing. Equally, the model can be beneficial as an ad hoc instrument for the organizational culture for knowledge sharing which in some cases the employees and managers might refuse knowledge sharing.

Taken into account the growing competition in the markets, the speed of the changes in global market conditions, the pressure for cost reduction and the high profit targets; the need to set up a FSP model is growing. Financial institutions are facing many challenges such as liquidity and funding needs, compliance with regulations. Therefore, the need for being agile is crucial in today's world. The each information flow layers presented in the value chain policy model in Figure 3 which is derived from Vincent Ribiere's value chain study, (Vincent Ribière, 8-9 November 2001) provides not only a systematical KM approach but also it provides a policy approach for the KM in the banking industry. A banks' main strategy and business should take into account its historical overview. The historical overview layer gives a global, sectoral and local position for the banks for their both internal and external relations. Therefore, most of the business plans of the banks comprises historical data. This historical data presents the past economic outlook, the evolution of the banking sector and the bank. Executives make decisions by analyzing the financial history, the past success and losses, the big changes at the organization. The history provides them a road map for their future. Most of the time the position of the bank, the activity areas, the contribution of the bank to the economy and the banking sector is a determiner while creating its business plan. The positioning also reflects the global conditions. The policy overview provides the model of a macro outlook which are valid for all levels of the model. The improvement and expansion in the economy and its reflect to the business plan and the main strategies of the bank are all taken into account in decision making process. On the one hand, the banks' main strategy and business plan feds the global economy; on the other hand the global economy feds the business plan of the banks. The target of the banks and the accomplishment levels of the targets creates the banking sector success.

With all these challenges, the banks should executive their financial strategies in order to be agile and sustainable. According to the researcher, the suggested FSP model in Chapter 3 increases the quality of knowledge by serving as a guide for the executives of the bank where as the executives can also be called as the policy makers of the bank. The use and the allocation of the sources, the need for the investments, the expected challenges should be all managed by the policy makers. Therefore, the policy makers need a systematical approach and a macro view about the bank's current and future situation. Hence, all the levels mentioned in the FSP model is a type of policy making for the banks and it can be stated that a FSP is a policy production process. The policy makers takes decision on their strategies based on their FSP's and other sources.

In FSP model, the main key factors and the indicators are identified which may affect the proposed policy. According to the analysis the required needs and changes are detected which supports the desired policy outcome and stakeholder's needs. Following, the strategy is developed to achieve the target. Finally, a monitoring and learning systems is developed not only to track and control the progress but also to make necessary adjustments and evaluate the model by learning lessons for the future analysis.

On the other hand, this policy production process is not only reflects the individual or organizational approach but also reflects the sectorial, global and macro policies by creating a consensus and a perspective for banking. The banks share information about their financial strategies with its investment communities, shareholders, regulators and themselves according to their FSP's. These communities are also the policy makers for the economic and financial arena. The FSP also creates an opportunity for these policy makers to take their decisions based on the highly qualified information available along with the other components that they should take into account. So that, the economic and the financial benefits are enhanced and losses are reduced by creating the road map for the policy. Equally, a clear policy objective is also created by taking into account the knowledge production process of the banks. The investment communities, shareholders, regulators and the banks starts their own knowledge production process with the shared knowledge. This process continues as an ongoing and endless process.

The FSP model reflects and analyzes the macro economy and the regulations. The model and the case study have been extended by linking macro economy in order to provide a detailed overview of how the economy affects the model. It was concluded that in addition to the KM, the policy has a very strong effect on the model. The global and local macro-economic and financial conditions affect the companies. However, as the agility of the companies increases the contagion rate of the banks decreases from the extrinsic factors. Also the application of the model asserted that as the banks closely monitors the economy and take into account the economic indicators during the FSP process, their possibility of achieving the target increases.

Given the various sources of evidence presented in Chapter 4, it would be reasonable to state that the two banks perform in the area of knowledge production and almost apply the suggested model. Although, X Bank should develop its knowledge integration and business process environment. The qualities of the KC are valuable for each bank. It can be stated that X bank should decrease the turnover in MRBP department and should improve its technological infrastructure. The researcher is thus left with the general impression that the knowledge production environment in Z bank is higher than X bank with its high quality of problem solving and systematic approach.

Another, contribution of the case study is that it presented that knowledge management is not only an IT system issue but also it is also an issue for the business and the strategy.

5.3 Limitations And Further Research

In this research it became obvious that there are areas in which the research was unable to cover fully. Although, the three main production processes are explored "knowledge integration process and business process environment" processes are limited within the framework of FSP. Therefore, the researcher believes that future researches related with these issues will further contribute to the study.

Also the research did not cover an appraisal of the technology infrastructure that supports main knowledge processes of the model. New processes can be added to the model specifically on IT and HR.

The case study is partially validated since it has done in two Turkish banks. It is important to apply the model in different banks with different economies and cultures. Also a questionnaire as a research tool can be implied for the model.

The KM processes in KLC are assessed by the proposed model of FSP in banking sector. However, the K3M maturity model which is pointed out in the literature review in Chapter 2 is not integrated into the model in this research. Although by assessing the case study findings of the two banks examined in Chapter 4, a KM maturity level ranking can be done for the two banks; the researcher believes that evaluating the maturity levels by a questionnaire would provide more objective results.

According to the researcher the FSP model can also be integrated with K3M model and can be applied in banking sector to assess the maturity level of the banks. It is important to identify and try to improve to what extent a strategy is transformed into formal knowledge or penetrated within the KM processes. A FSP can be developed according to the KM maturity levels of the banks. As the maturity level increases, the success of building a better FSP increases. For this reason, the researcher considers that maturity model integration can be a valuable contribution to the model.

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APPENDIX

TEZ FOTOKOPİSİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü ☐

Sosyal Bilimler Enstitüsü ☐

Uygulamalı Matematik Enstitüsü ☐

Enformatik Enstitüsü ☐

Deniz Bilimleri Enstitüsü ☐

YAZARIN

Soyadı : Durtaş Başpınar

Adı : Canan Pelin

Bölümü : Bilim ve Teknoloji Politikaları ve Çalışmaları

TEZİN ADI (İngilizce) : FINANCIAL STRATEGIC PLANNING AND KNOWLEDGE MANAGEMENT: A COMPARATIVE CASE STUDY ON TURKISH BANKING SECTOR

TEZİN TÜRÜ : Yüksek Lisans ☐ Doktora ☐

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir. ☐
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir. ☐
3. Tezimden bir bir (1) yıl süreyle fotokopi alınamaz. ☐

Yazarın imzası: ………………….. Tarih: ……………………