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Performance Management in Chinese Commercial Banks

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Abstract

This dissertation aims to design and implement a tailored performance management framework for Chinese commercial banks in order to deal with some of the bank problems. Chinese commercial banks are experiencing rapid development from both internal management and external environments. With increasingly fierce competition, more strict risk management requirements and ongoing reform of process-oriented bank, many issues emerged regarding to the banks management and operations. Performance management is believed to be an effective tool to deal with some of the bank problems. However, the current performance management frameworks used in Chinese commercial banks are mostly designed for general organizations. There is lack of a systematic performance management framework specially designed for Chinese commercial banks considering features of banking operations and their current situations. Thus in this study, the main features of Chinese commercial banks are firstly discussed, which include risk management and external supervisory institutions. Then a performance management review is carried out including key definitions and current developments of performance management theories as well as some performance management methods. The commonly applied six steps performance management framework is adopted in this research since it is consistent with the research purpose. After that, the current performance management studies and practices in Chinese commercial banks are reviewed and discussed. Meanwhile, recent studies show that suitable performance management models are closely related to organizational structure. Therefore a review of organizational structure theories, especially the Minzberg' s configuration theory, is carried out. The configuration theory suggests applying different management approaches for different parts of an organization, which assists to identify different structures in Chinese commercial banks and then design proper performance management activities. Based on the above review, a performance management framework for Chinese commercial bank is developed. This framework initially follows the six steps framework and integrates the bank features in management and operations into the performance management activities. The configuration theory is also applied in this framework in order to identify performance management targets as well as design proper

performance management approaches. The main contingency factors related to this framework are discussed, especially the factor of stable organizational structure, since a rapid changing organizational structure requires further adjustments of the framework. This framework is applied in a case study which is carried out in a Chinese commercial bank located in Henan province. A performance management system is designed and implemented according to the framework based on the banks current situation. Feedback is collected after the implementation, and generally is positive. The framework is then adjusted by introducing performance tree method in order to deal with rapidly changing organizational structure. Compared with other methods, Performance tree method does not rely on the current organizational structure (e.g. Department structure) to carry out the strategy decomposition and deployment. It is also powerful in looking for innovative improvements in operations. The adjusted framework is applied in another case study carried out in a commercial bank located in Zhejiang province. This bank is experiencing rapid change in both management and operations due to process-oriented banking reform. Traditional performance management approach is found failed to deal with their current situation. A performance management system is designed for this bank based on the adjusted framework. Moreover, we also assist to develop a digital mission monitoring system to track and carry out their daily performance management activities. The feedback is positive after the implementation, and the bank is praised for good progress in building of process-oriented bank. The main contribution of this dissertation is the design and implementation of the tailored performance management framework for Chinese commercial banks, especially the adjustments in framework by introducing the performance tree method. It enriches theories and practices of performance management system in a rapid changing organizational structure. Further studies are suggested to look for more applications of performance tree method in different type of organizations.

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Performance Management in Chinese Commercial Banks

Chapter One: Introduction

1.1 Introduction of This Research

In China, commercial banks play a key role in economic development, especially the four major state-owned banks, which were formed initially to support development in different industries (e.g. agriculture and construction). After years of development and revolutions in the Chinese banking sector, the banking market and the business environment have changed enormously many problems exist pertaining to the management and operations of Chinese commercial banks. As a result, Chinese commercial banks are facing complex and difficult challenges, which can broadly be classified into two categories: internal and external. However, these categories are not exclusive, which means they both interact with and influence each other.

The external factors chiefly comprise the recent changes in the economic environment of China. The economic development, financial reforms, and the opening up of the economy have made entry into the banking market much easier. Consequently, many new organizations have appeared, adding to competition in the banking sector. This includes foreign banks, local commercial banks, and joint-stock commercial banks (other than the state-owned joint-stock commercial banks). The Chinese banking sector is no longer an oligopolistic market dominated by the state-owned commercial banks (Ye, Guo and Feng 2001), which means that the competition in the domestic banking sector is increasingly fierce. Secondly, although the Chinese banking regulatory institutions are increasingly stringent in implementing international banking regulatory standards, it is getting more difficult to supervise the sector due to three main factors: a) the uneven level of the new banks in terms of management practices and efficiency (including that of even the

regulators) (Xu, Zheng and Qi 2002); b) different database practices and accounting standards (China Banking Regulatory Commission 2007); and c) different types of IT software and hardware in use. Finally, given the gradual relaxation of the financial regulations in China, the interest rates, foreign exchange regulations, financial derivatives, and investment banking business are all increasingly opening up (Chen 2006). As a result, although the commercial banks have more opportunities, they are also facing greater challenges in terms of their business structures, business models, and profit models (Ling 2007; Chi 2007; Hong and Jing 2009).

The internal factors involve the management structure of the banks. Several major state-owned commercial banks have now become joint-stock commercial banks. Many urban as well as rural credit cooperatives have been restructured into local commercial banks. Generally speaking, the Chinese banking sector is now made up of the central bank, commercial banks, and policy banks (Liu and Huang 2002). The commercial banks, especially the four key state-owned commercial banks, are expected to carry out commercial operations. However, in reality this is not entirely the case. One reason is that most of the state-owned commercial banks still carry the policy burden and they cannot operate fully commercially (Liu 2010), another is due to their out-of-date management mode. The large state-owned commercial banks have been using the same management philosophy and style as in government institutions. Such a management mode emphasize how to control a commercial bank for the state, rather than how to provide better service to bank customers. Commercial banks are paying increasing attention to their customers. This requires banks to transform from departmental banking into process-oriented banking along with associated changes in management style and business mode. Secondly, commercial banks, especially the large state-owned ones, have relatively poor profitability for many reasons (Matthews, Zhang and Guo 2009). First of all, they have too many inefficient branches (Song, Lu and Yang 2009). More importantly, for a long time, the profits of the Chinese commercial banks have, for a long time, relied on the loan-to-deposit interest margin, but interest rate reforms, loan-to-deposit ratio ceiling, and other issues have limited the profit growth (Liu and Huang 2002). Moreover, many bank-loan customers are

state-owned enterprises and many of these suffer from poor management (Xu, Zheng and Qi 2002). This situation has led to a large number of non-performing loans. Finally, the state-owned commercial banks are comparatively lagging behind Western banks in many aspects of management, including risk management, product design, capital management, and information system design (Wu, Chen and Lin 2007). Many factors are responsible for this situation. First of all, the current management of state-owned commercial banks is still based on past management models and experiences (Lau 1999). Secondly, key employees lack sufficient professional skills. Most crucially, there is a need for improved technical support, including information management hardware and software (Laurenceson and Chai 2003). The above factors have caused a big gap between Western and Chinese banks and has seriously affected the market competitiveness of the latter (Xin 2006; Bayraktar and Wang 2004).

Due to the complicated nature of the challenges mentioned above, no single solution can be used to deal with the situation. However, it is believed that a proper performance management system can vastly improve the market competitiveness of the Chinese commercial banks in the new market environment. A performance management system includes sophisticated controlling, monitoring, and motivating systems (Armstrong 2000). These systems continuously improve individual performance and integrate them with the organizational performance (Ferreira and Otley 2009). As a result, problems like poor profitability and management issues gradually diminish and competitiveness is greatly improved.

Therefore, it is not surprising that the performance management of commercial banks has become a hot topic for debate in recent years in China. More and more Chinese scholars are now studying the performance management of commercial banks. Most of these studies, however, are confined to measuring the concerned banks' efficiency and rarely mention how to actually improve it (Chen, Skully and Brown 2005; Ho and Zhu 2004; Yao, Feng and Jiang 2004). The focus of my research is to design and implement a performance management framework for the Chinese commercial banks with a view toward improving their efficiency. There have been quite a few studies in this area investigating the role of individual performance management practices, such as the use of the balanced scorecard (Zhao and Zhao 2004) and some studies about property rights mechanisms and incentives for the state-owned commercial banks (Wei and Gui 2002). However they fall short of developing a guiding framework specifically designed for banks, taking banks' special characteristics into account, such as risk management and external regulatory mechanisms. More importantly, these studies have taken no notice of the impact of management changes on bank performance management in recent years. In fact, many of these studies simply apply the general corporate performance management models and procedures to develop a performance management system for banks. Some consulting organizations, such as Microsoft, Yongyou, and Kingdee, have designed a variety of performance management solutions for banks. However, these systems are actually information systems instead of performance management systems in the strictest terms (Kingdee performance management solution 2009).

A comprehensive performance management system should begin with the organizational structure of the bank. According to organization theory, an organization generally achieves its objectives through its core operations (Pfeffer 1982; Pugh and Weber 1971; Daft 2009) and, therefore, most management activities are aimed at improving core operations, taking the characteristics of these operations into account. For example, in general Machine Bureaucracy organizations, such as large manufacturers, core operations often consist of simple and repetitive work (Mintzberg 2010). Based on this characteristic, performance management for these organizations is generally accomplished by setting up detailed rules and regulations. On the other hand, in Professional Bureaucracy organizations, like universities and research institutions, core operations are complex and require a high level of skill. Therefore, in such organizations, the key to performance management is to improve the skill-level of staff involved in core operations (for details see Chapters 4 and 5) (Mintzberg 2010). Obviously, one of the key components in designing a theoretical framework for the performance management of commercial banks is the analysis of the core operations of commercial banks and their characteristics.

Banking is considered to be a business that deals with risks (Podpiera 2006; Pyle 1999). Therefore, risk management is one of the essential parts of the core operations of a bank (Santomero 1997). In fact, risk management includes many tasks. It has different meanings to different type of employee in a commercial bank, such as the operations risk of counter staff and the reputational risk of top managers. There are many kinds of risk and classifications of risk which will be discussed in the next chapter. In the bank performance management, from institutions to individual employees, risk and risk management should be emphasized at all time.

Considering these factors, I should firstly understand the features of the core operations in Chinese commercial banks before designing a corresponding performance management system. The risk points in each step of core operations should also be noted and emphasized in the designing process.

Further more it needs to be clear that a performance management system is not a static system. It needs to be constantly adjusted according to the organizational strategy and management structure of the bank in question. In current Chinese commercial banks, the ongoing reform of building process-oriented bank is leading to a significant change in their management style and their organizational structures. Thus when designing a performance management system, I need to consider this fact, and try to promote the building of a process-oriented bank through performance management.

Summarizing the above discussion, I will focus on the following three research questions in this thesis:

1. How to design a comprehensive and effective performance management framework, taking into account the organizational structure and operations of Chinese commercial banks?

2. How to apply the performance management framework in the ongoing reform of

process-oriented banking in Chinese commercial banks?

3. How to implement this performance management framework in practice?

In keeping with the requirements of this research, this thesis first introduces and analyses some important features of the Chinese commercial banks in order to have a general understanding of their banking operations and management. Next, the organizational structures of these banks are discussed because the Chinese commercial banks are considered to have a certain type of organizational structure which is to be taken into account later when designing a performance management framework for them. Most importantly, I will discuss the ongoing reform of process-oriented banking exercise in Chinese banking sector and try to design a suitable performance management system. Some related theories will be reviewed and some detailed case studies are examined at the end.

1.2 Road Map and Chapter Summaries

In chapter one, I introduce the research objectives, research questions, and some background information.

In chapter two, I discuss the main features of commercial banks, why and how it is different from other organizations or banks. Risk and risk management are the most important features in commercial banks, since bank performance is closely related to its risk. Thus it is necessary for us to understand how the commercial banks deal with different forms of risks before designing a suitable performance management framework for them. Other features such as influence from external insinuations are also discussed in this chapter. Understanding these features could help us develop a tailored performance management framework for commercial banks.

Chapter three reviews performance management theories, as well as development and current issues of the Chinese banking sector. By reviewing the performance management theories, I believe that a six step performance management framework developed by Liu (2010) is helpful to this research. I also review some widely applied tools and methods in performance management. Some of the tools will be used to design our performance management framework for commercial banks. By reviewing the development and current issues of Chinese banking sector, I found that Chinese commercial banks are facing many difficulties and challenges and performance management could be a key to solve or improve some of the problems in Chinese commercial banks. However, after reviewing the current performance management studies in Chinese commercial banks, I found that Chinese commercial banks are lack of a systematic and targeted performance management framework, which should be designed starting from exam the organization configuration of Chinese commercial banks.

In chapter four, I review the organizational structure theories from the perspective of performance management. Some recent studies have shown a close relation between organizational structure and performance management. This is also supported by the Minzberg's organizational configuration theory which suggests different management approaches and coordination methods in different organizations. I reviewed Minzberg's theory and found that such difference in management methods is because of the natural of core operations. So I classify the core operation based on two basic dimensions: the degree of specialization and the degree of variability. With the configuration theory and the ranagement framework for Chinese commercial banks.

In chapter five, I develop the performance management framework for Chinese commercial banks based on the six steps performance management framework introduced in chapter three. The organizational configuration theory is used in this framework to identify who should be responsible and who is the actor in each step. The classification of the core operation is applied to classify the bank operations and the management activities in order to design suitable performance management activities. In the end of this chapter, I discuss some contingency factors which may lead to different approaches when applying the performance management framework. Here I emphasize the contingency factor of stable organizational structure, because in a rapidly changing organizational structure (e.g. the banks during building of process-oriented system) our framework needs to be adjusted.

In chapter six, I apply the performance management framework to a Chinese commercial bank, which has been developed in chapter five for a stable Chinese commercial bank. In this case study, I look into the original performance management practice and the current situation of the bank then try to improve the current performance management system based on our framework for Chinese commercial banks. Positive feedbacks are collected from the bank after they took our suggestions and made improvements based on the implementation of the performance management framework.

In chapter seven, performance tree is introduced to handle the strategy decomposition and deployment in a rapidly changing environment. Compared with classic decomposition and deployment methods, this new method does not rely on the organizational structure so that it can be used when the organization structure is rapidly changing during organizational reforms, such as process-oriented banking reform. The performance tree method is also powerful in looking for innovative improvements from the perspective of performance management. It could help a commercial bank to improve its management structure (such as department structure) according to its operation process.

In chapter eight, another case study is carried out in a Chinese commercial bank which is experiencing rapid changes in both the organizational structure and the operation process due to process-oriented banking reform. The traditional performance management approaches are found failed to deal with their current situation. Therefore, in this case study, I adjust the framework for a stable bank and apply the performance tree method to develop the performance management system for this commercial bank. I design and implement a performance management system for this commercial bank and help them develop a digital operation system to carry out daily performance management activities. Feedbacks are generally positive, and their management efficiency is greatly improved and they are praised for the good progress in building process-oriented bank.

In chapter nine, I discuss the theoretical and practical contributions of this research, and I also discuss the future research.

Chapter Two: Review of Management Structure of Commercial Bank and its Main Features

Banks have attracted worldwide attention in the past decade. They have played a dubious role in many catastrophic events, such as the sub-prime mortgage crisis in 2007, the Libor manipulation scandal in 2014 and the European debt crisis in 2010. Goldman-Sachs was blamed for covering the high risk of the Greek national debt by creating a special credit default swap index. Banks play a crucial role in the financial and economic world. This fact, coupled with the scandals mentioned above, has prompted many researchers to study the banking industry from different perspectives. This research focuses on the management of the Chinese commercial banks from the perspective of performance management.

With the development of the banking industry, banks are now much more complicated and the boundary between banks and other financial institutions is fuzzy. (Hao 2006). Moreover, the nature of the bank operations varies greatly in different countries, respective to their banking acts or laws (Preston 1933; Avgouleas 2009). Therefore, it is worthwhile to clarify and explain some definitions related to the research subject beforehand.

Traditionally, banks are defined as financial institutions that take deposits from public and transform the deposits into loans to borrowers. However, this definition simply describes the main function and activities of banks and provides little guidance about other functions and practices. Due to the major influence of banks in the financial and economic system, they are heavily regulated in most countries. Therefore, banks are more clearly defined by the corresponding banking laws and acts in force. These acts and laws define banks from different points of view. Zhong (2002) summarizes these definitions into two types – the enumeration type and the generalization type. While the former lists all the activities of banks, the latter describes only a few essential features.

In the UK, a bank is defined (according to the Banking Act 2009) basically by its deposit taking activities. According to it, a bank is an institution that "accepts deposits in the United Kingdom in the course of carrying on a deposit-taking business". All such institutions are to be supervised by regulators and must comply with the provisions of the Banking Act (Banking Act 2009). Thus, the definition of banks in the UK is of the generalization type since it emphasizes only the deposit-taking feature of banks. In the US, before 1987, the Bank Holding Company Act (1956) and the National Bank Act (1963) defined banks on the basis of their activities. However, the Bank Holding Company Act (1987) redefined banks as: 1) institutions that obtain Federal Deposit Insurance Corporation (FDIC) insurance; and 2) institutions that accept demand deposit and provide commercial loans. Thus, it can be seen that, before 1987, the definition of a bank in the US was of enumeration type, as the activities of banks were listed as clearly and exhaustively as possible. After 1987, however, the definition only focuses on FDIC insurance and some key activities of banks, and is therefore of generalization type. On the other hand, in China, the Law of the People's Republic of China on Commercial Banks (1995) defines commercial banks to be the organizations that accept deposits from the public, issue loans and handle settlement businesses, etc. The word "etc." includes 13 activities and "any other activities that are approved by the China Banking Regulatory Commission". Thus, this definition is quite enumerative, but emphasizes only 3 basic/generalized activities: accepting deposits, issuing loans and handling settlement business. At the same time, it is also a loose and equivocal definition as, if a corporation engages in any or even one of the 13 activities that come under the term "etc.", it would be defined as a commercial bank. This is clearly incorrect and conflicting, since many of these 13 activities are not exclusive to the commercial banks. For example, the 7th activity – issuing, cashing and selling government bonds as agents –

can also be carried out by a securities company. Considering the deficiencies and flaws inherent in the definitions given by these Acts and Laws, Peng (2007) suggests that the Chinese commercial banks, for research purposes, be defined by the activity of taking demand deposits from the public, which is quite similar to the definition given by the Banking Act of the UK. The term 'commercial bank' in China refers to less than 1000 institutions, including 4 major state-owned banks and about 10 commercial banks. Therefore, this research will follow the definition of commercial banks given by the Law of the People's Republic of China on Commercial Banks, referring to the institutions mentioned above. Compared to the Western countries, commercial banks in China refer to banks that majorly deal with traditional banking business and operating mainly for profits. Generally investment banking business is strictly monitored by the regulator and only a few kinds of them are permitted to be carried out in commercial banks.. Under the Banking Act 1933, the US government asked the commercial banks to operating only banking businesses, whereas the investment banks are required to only operating in capital market.. In the Act, the term of commercial bank was originally not used in the Act, but later came to be used to define a bank and its branches that majorly carry out traditional banking operations. However, the customers of the Chinese commercial banks are not limited to corporations, they also include individual customers. Moreover, some investment banking services have also come to be approved by the China Banking Regulatory Commission. Therefore, many commercial banks in China have investment banking departments. More details about the Chinese commercial banks will follow later in the course of the discussion.

In general, there are two main differences between banks and other organizations. First, risk and risk management are essential parts of the management of a commercial bank (Kuritzkes, Schuermann and Weiner 2003; Pyle 1999; Santomero 1997). Secondly, the management of commercial banks is largely affected by external institutions (Suzman 1962; Van Roy 2005). Therefore, I will review these contents in the following part.

2.1 Risk and Classifications of Risk

Generally, a commercial bank deals with money received from the public and operates for profit. If the bank fails, not only the bank itself but also its customers (depositors) suffer losses. Moreover, bank failures have chain-reactions, like a domino-effect. Other firms may go bankrupt because of bank failures (Aghion, Bolton and Dewatripont 2000). Therefore, if a commercial bank fails, the damage is considered to be more catastrophic than the failure of other companies (Kaufman 2009; Baer and Klingebiel 1995; Bartholomew and Whalen 1995; Aharony, Joseph and Swary 1996; Calomiris and Mason 1994). Besides, banks are more vulnerable to the external environment; poor management is not necessarily the trigger for bank failures (Caprio and Klingebiel 1995). A large number of early withdrawals as a result of panic, for example, may lead to bank failure (Aghion, Bolton and Dewatripont 2000; Diamond and Dybvig 1983). Due to these reasons, risks in the banking industry have been much discussed and studied, and risk management is considered to be a major part of bank management.

Chen and Wang (2001) classify the risks of banks into three levels. The first of these is the system risk. It includes events that banks have little or no control over but are greatly influenced by them, such as wars, economic recessions, and social unrest. The second refers to risk of competition, regulatory, and reputation. These risks are influenced by banks, however they still cannot control them. Some strategic approaches are available to deal with these risks but the result is not definite The third level of risk refers to credit risk, market risk, liquidity risk, technology risk, process risk, and people risk. Banks normally manage these risks through risk management. The following chart shows the three levels of risks:

First Level	Systematic risk					
Second Level	Reputation risk Competition risk		Regulatory risk			
Third Level	Credit risk	Market risk	Liquidity risk	Technology	Process	People risk
	TISK	1151	1151	115K	1151	1151

Table 2.1: Risk classification

Other researchers have given similar classifications of risks, with slight changes depending on their research objectives. For example, Kuritzkes and Schuermann (2008) classify risks into 'known', 'unknown' and 'unknowable'. The known risks are the risks that can be identified and quantified; the unknown risks include the risks which cannot be qualified but could be identified; the unknowable risks refer to the risks that are unpredictable, let alone quantifiable. They also define the total bank risks in terms of earning volatility, and divide the risks in to following categories: credit, market, operational, asset/liability and business risks – positioned from the known to the unknowable in that order. Based on their data, they argue that the market risk accounts for only about 5% of the total risks, credit risk account for nearly 50%, the non-financial risk (operational risks) accounts for about 25% and structural interest rate risk account for about 20%.

Pyle (1997) defines risk in terms of "reductions in a firm's value, and classified the main way of value reduction as operation risk, credit risk, market risk, and performance risk".

Pyle also claims that, although the latter two types of risks are not mentioned much in financial theories, they are still quite important.

Basel I and II (An introduction to Basel can be found in section 2.3) classify three main parts of bank risks as credit risk, operational risk and market risk. Definitions like these are basically same as given by Pyle. In addition, Basel II also gives the calculation methods (the first pillar). In this step, some kind of risked are not mentioned since they cannot be measured in a quantitative way. However, in the second pillar, they are mentioned and classified as systemic risk, pension risk, concentration risk, strategic risk, reputational risk, liquidity risk and legal risk. Basel III specially emphasizes liquidity risk, it explains the liquidity risk to be the risk of not being able to trade asserts fast enough and lead to a lost of profit. Thus, in all, Basel accords identify four kinds of risks.

Other classifications of risks follow similar lines. Some especially emphasize settlement risk which can, however, be classified as credit risk, since it occurs when the counter-parties fail to meet their contractual obligations at the time of the settlement (some classify the settlement risk under operational risk). Interest-rate risk is also frequently discussed in many researches. For our purposes, it can be classified under market risk. In summary, the bank risks can be classified mainly as credit risk, market risk, operational risk and liquidity risk. This classification tallies with the current Basel Accords, and is accepted by most researchers. Systematically, it also tallies with the three-level risk structure, as given by Chen and Peng. For example, the operational risk includes the technology risk, people risk and processing risk. Other levels of risk are considered as not controllable by banks and, therefore, are not discussed further in the paper.

It is generally agreed that the credit risk constitutes the most significant category of risks. However, there is no agreement about the other three. Some argue that these should be considered together with the social and economic environment of the banks. This means that the banks will face different weights of the four kinds of risks in different backgrounds. For example, some banks may face greater market risk in certain countries at certain times. Some researchers also suggest that the four kinds of risks should be equally valued by the management, regardless of their proportion in particular environments. However, in practice it is hardly the case; risk management is almost always delineated by the risk perception and access to data on the part of the management. Therefore, in general, the credit risk and market risk are more emphasized, since the methodologies to identify and tackle them are better developed and they are easier to be quantitatively analysed. For operational risks, there is no generally accepted approach, as these risks encompass many aspects of a bank's daily operations and are difficult to analyze quantitatively. The management of operational risks is considered to be more of an art than a science. Therefore, some banks simply allocate 15% - 25% of their capital for operational risk precautions.

2.2 Risk Management

Although risk management is considered to be an essential part of banking management, it is not only found in financial institutions. Firms in other industries also manage their risk exposures (Allayannis and Weston, 2001; Cebenoyan and Strahan, 2004). In the banking industry, risk management primarily deals with the four risks mentioned above. Although risk management consists of certain well-known steps – for example, risk identification, risk measurement, and so on – there is no general agreement about these. Therefore, it would be useful to review some risk management studies.

Santomero (1997) believes that a risk management system consists of four general parts: 1) standards and reports, 2) position limits or rules, 3) investment guidelines or strategies, and 4) incentive contracts and compensations. Standards and reports refer to setting up standard and reporting financial situations. Position limits and rules basically refer to a carefully designed limit to committing capital. Such principal applies to all the positions in banks. The investment guidelines provide suggestions as well as prescribe limits to the line managers in this regard. However, according to Santomero, investment guidelines result to "passive risk avoidance and/or diversification". Finally, the incentive schemes try to conclude "compatible contracts" with the front line employees in order to provide risk-related compensations, thereby reducing the need for detailed and inefficient supervisions and monitoring. He also indicates that the incentive schemes depend on a carefully designed job position and monitoring system, which is quite difficult to design.

In fact, each bank designs its own risk management system. In China, due to the limitations of the banking management system as well as the regulatory systems and requirements, risk management may not be of the same standard as in the Western banks. However, in general, the framework of a risk management system has certain well-accepted steps: identification, measurement, mitigation and control, reporting and auditing. The risk management for each kind of risk follows these procedures (Pyle 1999). In the first two steps, each kind of risk is managed and calculated individually, while in the other steps, various types of risks are managed together. The subsequent section discusses the four main types of risks individually. However, it must be stressed here that some of the details and algorithms, including the dispute on the models, are not being discussed in this paper. The introduction of risk management is for the better understanding of the overall management of commercial banks, and for the purpose of devising a framework for their performance

management. More details of risk management can be found in Santomero (1997) and Stulz, (1996).

2.2.1 Credit Risk Management

Credit risk is majorly caused by the breach of contract from a borrower. The borrower might be unable to pay back the loan or simply don't want to. Credit risk is seen as the most difficult and complex risk in traditional banking activities (Altman. and Saunders 1997). The risk management of credit risk generally follows the procedures of identification, measurement, control, reporting, and auditing.

In the identification stage, simply speaking, a credit score is evaluated and given to a bank customer. The customer is then rated based on this score. For individual customers, credit rates or scores are based on their credit records provided by credit bureaus. In some cases, banks use some statistical methods of their own to analyse the customer's personal information and give them the credit scores. Such personal information includes the type of work, family status, and so on. For corporate customers, the risk identification includes the company's financial position, reputation, and the risks of the concerned industry or even the concerned country. (Duffie and Singleton 2009; Saunders and Allen 2010)

There are many methods to determine the score or rating and many bases for classification. Some classify these methods as qualitative and quantitative. Others suggest expert evaluation, credit scores and credit rating methods (Cantor and Packer 2006). In practice, however, these methods can be classified as expert evaluation and model rating, or a combination of both. The expert evaluation method has been widely practiced by banks before. It relies on the credit experts who give relatively subjective evaluations of the customers. The most common criteria in expert evaluations are the so-called 5Cs, which include a customer's character, capital, capacity, collateral and economic cycle. However, there are other criteria as well, such as (Cantor and Packer 2006): 5Ps: Personal Factor, Purpose Factor, Payment Factor, Protection Factor, Perspective Factor;
5Ws: Who, Why, When, What (is the collateral), How (to make the repayments);
4Fs: Organization Factor, Economic Factor, Financial Factor, Management Factor;
CAMPARI: Character, Ability, Margin, Purpose, Amount, Repayment, Insurance;
LAPP: Liquidity, Activity, Profitability, Potentiality;

CAMEL: Capital adequacy, Asset quality, Management, Earning, Liquidity.

These methods are basically qualitative in nature, with some quantitative analysis of the financial indicators, if necessary. However, in general, these are based on the subjective judgment of the experts. Many studies have questioned the accuracy of expert evaluation. More details can be seen in the report of Oliver, Wyman & Company (1994).

The model rating method involves selecting a set of indicators and giving them different weights to rate customers. An index is calculated using a model that reflects the customer's credit. This method is basically a quantified version of the expert evaluation method, and relatively less subjective, as the other credit staff have an operations manual or guide book. An example of the scoring model follows:

Altman (Edward Altman, 1968) model: $Z=1.2X_1+1.4X_2+3.3X_3+0.6X_4+0.999X_5$

- X₁: Working Capital/Total Assets
- X₂: Retained Earnings/Total Assets
- X3: Earnings before Interest and Taxes/Total Assets
- X₄: Market Value of Equity/Total Liabilities
- X₅: Sales/Total Assets

This model is known as the Z-score model. It is used to measure a company's financial health, diagnose problems afflicting it, and predict the possibility of bankruptcy in the coming 2 years. Studies have shown that the prediction accuracy of the formula is up to 72% - 80%. The model has been broadly applied in many countries. Other more advanced models of credit rating are not discussed here. It should be noted, however, that banks often

compare customers' scores as assessed by them with the scores provided by credit bureaus, and then decide their creditworthiness.

Under Basel II, the banks are allowed to implement an internal rating system. Since then, some mature, internal rating models have been developed and used in the identification and measurement of credit risk, including Moody's KMV Risk Calc model (Eric 2000) for non-listed companies, and Credit Monitor, Credit Edge model (KMV Corporation 1993) for listed companies. Standard & Poor's also provides the Default Filter model for the obligor rating (Standard & Poor's Risk Solutions 2004).

Among these models, Risk Calc gives a more detailed consideration to the company's financial factors, such as the earnings ratio, financial leverage ratio, current ratio, and capital and working capital turnover rates. But it does not explicitly consider the non-financial factors and macroeconomic factors. The model suggests that, although the importance of the non-financial factors has been recognized, these factors should be dealt with by the experts' subjective judgments, and should not be included in the explanatory variables in this quantitative model.

In contrast, other models, such as the Default Filter, or the explanatory variables model, consider not only a series of financial factors but also the values of non-financial factors and macroeconomic factors, such as changes in the percentage of the Growth National Product (GNP)/Growth Domestic Product (GDP), changes in the market index, default rates in different industries, and other factors. In general, regardless of the model or method applied, the customer's industry characteristics, management, financial condition, environmental factors, borrowing capacity and early warning signals should all be considered while rating their creditworthiness, and only then a final credit rating should be given. Different banks may have different standards, but most banks would compare their rates with those of the famous rating agencies. Following is an example of a credit rating comparison table (Cantor and Packer 2006.):

Standard &	Moodys	Fitch IBCA	AM Best	Banks
Poors				Convention
AAA	Aaa	AAA	A++	1+
AA+	Aa1	AA+	A+	1
AA	Aa2	AA	A	
AA-	Aa3	AA-	A-	
A+	A1	A+	B++	2+
A	A2	А	B+	
A-	A3	A-		
BBB+	Baa1	BBB+	В	2
BBB	Baa2	BBB	В-	
BBB-	Baa3	BBB-		
BB+	Ba1	BB+	C++	2-
BB	Ba2	BB	C+	
BB-	Ba3	BB-		
B+	B1	B+	С	3+
В	B2	В	C-	
В-	B3	В-		
CCC	Caa	С	D	3
D	Ca	D	Е	4
D	С	N/A	F	5
N/A	N/A	N/A	N/A	6

Table 2.2: Comparison of different credit rating systems

In this table, the top row lists five credit rating systems, developed by different companies (the last one is currently most commercial banks' convention). In each system there are many levels representing different credit levels such as AAA and A++. All the rating levels are listed in the lower part of the table.

Since a customer's condition changes all the time, their credit rating changes accordingly. In general, there is a quarterly review of the state of business and an enterprise is rated again annually. In some cases, this is done every six months. For some international companies, more considerations are taken into account. Further, there are different ratings for specific industries and countries.

Simply speaking, one's credit rating is calculated and linked to one's Expected Default Frequency (EDF). EDF refers to the default expected to occur in the future, when the value of a company is lower than the outstanding debt obligations. If the default does occur, the bank can recover some of its investments, and the part that cannot be recovered is considered as the loss given default. In theory, it is possible to calculate one's expected and unexpected losses based on EDF, Loss Given Default (LGD), and other data, like exposure at default. There are many specific methods for calculation in different situations. A simple example follows (Cheng and Wang 2001):

The Expected Loss (EL) of a loan:

EL=AE*LGD*EDF

AE (adjusted exposure)=OS+(COM-OS)*UGD,

OS refers to Outstanding amount, COM refers to Commitments, and UGD refers to Usage Given Default

Unexpected losses can also be estimated through a similar formula.

When calculating the risks and losses in the portfolio, one also needs to take into account the risk concentration, the degree of association of the customer and the single risk contribution of other factors, in order to maximize the returns under certain levels of risk control. Therefore, in theory, the risk and profitability of each customer's each loan can be calculated and used in a bank's funds allocation, product pricing and product design processes (Cheng and Wang 2001).

Credit risk measurement has been studied thoroughly by researchers. Since it is not the main concern of this research, only a brief introduction has been given in order to explain banks' operations. More details can be found in Altman and Saunders (1998). They have comprehensively summarized various credit risk measurement models, including the previously mentioned expert system, from the 1970s to the end of the 20th century.

2.2.2 Market Risk Management

The market risk of a bank mainly refers to the risk involved in the trading of financial assets. Such financial assets include foreign exchange, financial derivatives, and securities, and so on. The regulatory authorities decide the kinds of financial assets that can be traded by banks. A considerable part of a bank's income comes from the trading of financial assets. Therefore, the market risk management is an important part of a bank's risk management operations. The Bank for International Settlements (2003) defines market risk to be potential loss caused by market prices fluctuations. In risk management frameworks, market risk management also includes the procedures for identification, measurement, control, reporting and auditing. Here, I discuss some important and different procedures only.

In the risk identification step, the main tasks are value assessment and risk decomposition. Value assessment assesses the market value of a bank's trading products portfolio, according to the prevailing market price and related banking regulations and procedures. This step provides a basis to calculate the market risk and the credit risk for a bank. The risk decomposition further decomposes the market risk of various financial products, in order to accurately measure various risks. Each type of transaction may contain different risks. For example, an interest rate swap transaction may contain a directional interest rate risk and yield a curve risk. The risk measurement step includes contents, such as probability-based measurement, sensitivity analysis, stress-testing and background-testing. Among these, the most important part is the calculation of VaR (value at risk). The calculation of VaR is believed to be a central part of market risk management.

VaR is used to quantify the limit of possible fluctuation for a set of financial investments. Broadly speaking, there are three methods of VaR calculation: variances/covariance, Monte-Carlo process and historical simulation. A recent McKinsey report estimates that more than 80% of the major banks are applying the historical simulation while the rest are using the Monte-Carlo method. These methods have their pros and cons. Here is a simple comparison:

Method	Pros	Cons
Variance/covariance	Easy to understand, calculation is fast	Cannot handle non-linear transactions, problem of fat tail
Monte Carlo process	Can handle non-linear transactions	Large amount of data processing
Historical simulation	Easy to understand, does not depend on assumptions of other parameters, no model risk	Cannot change the data correlation, over-reliance on historical data

Table 2.3: A comparison of different methods

More details about these can be found in Hendricks and Hirtle (1997).

VaR is very effective when estimating the risk of bank portfolios. It provides a risk measurement method for different types of transactions in the portfolio and different types of risks. It also takes into account the factor of correlations between different risks. However, it has many deficiencies. For example: a) it is a backward-looking system, since it is based on the historical data, b) it makes assumptions and subjective judgments for the volatility and correlations of the risk factors, like the basic assumption that the previous data can show the trend of future risk, and c) it is not a fool proof system, it requires the managers to be skilled, well-trained and experienced (Hou 2005).

After the calculation of VaR, banks normally need to run back-testing to compare the results and develop new models and improve the current ones. The back-testing runs monthly or quarterly and the test results affect some important parameters, such as the correlation and volatility of the model.

Moreover, banks also need to conduct stress-tests to gain a more comprehensive understanding of their risks. As a supplement to VaR, the purpose of stress test is to identify the possible financial risk in extreme conditions. Simply speaking, the market risk measurement is achieved by calculating the VaR and its complement procedures. The result is used for the bank's capital allocation and investment decisions.

2.2.3 Liquidity Risk Management

Liquidity risk is understood as the possibility of loss of a bank's reputation caused by the lack of sufficient liquidity reserves to respond to the payment of current liabilities at any time, or to meet the requirements of the loan. When it happens, it is difficult for a bank to make up for or eliminate the loss and the damage in the community. Thus, liquidity risk severely threatens the survival and development of a bank (Cornett et al. 2011). In some cases, it may even lead to bank failure. Some studies divide bank liquidity into asset liquidity and liabilities liquidity. The former refers to the ability to convert the bank's assets into cash with minimum loss of value, while the latter refers to the ability to obtain necessary funds at a low cost (Goodhart 2008). Scholars have given three levels of definitions for liquidity. The first is the liquidity of financial instruments, which is the ability to trade but not change the prices dramatically and keep or increase the value. The second is market liquidity, which means that, at a certain trading volume, assets or securities transactions do not significantly affect the prices. The third is money liquidity, which refers to the total monetary liquidity in the overall macro-economy (Goodhart 2008). Studies show that in the history of banking crises, regardless of the cause of the crisis, the ultimate manifestation of the crisis is the lack of liquidity and bankruptcy. So, liquidity risk management includes assets liquidity management as well as capital or fund liquidity management. The former is usually carried out by the risk management department of commercial banks, while the latter is done by the treasury department which is also in charge of the cash management and fund rising strategies. Some scholars identify three stages in the development of liquidity management. Before 1960s, the liquidity management theories advocated keeping bank liquidity by maintaining asset liquidity. Between the 60s and 70s, the liability management theory stressed that banks can take the initiative to have liabilities through funds borrowed from the market, to meet the needs of bank liquidity. In the mid-70s, the asset-liability management theory combined the

advantages of both the theories and pointed out the key role of liquidity to guarantee the security and profitability of banks. The asset-liability management theory is considered to be a major breakthrough in bank management (Cheng and Wang 2001). It is still widely used in the banking industry and the financial sector as a whole.

Fundamentally, in order to manage the liquidity risk, commercial banks need to balance and allocate long-term and short-term loans and deposits in the first place. Then, they need to allocate and extract appropriate amounts of capital reserves for the liquidity risk prevention. Meanwhile, banks also need to have inter-bank borrowing on the capital markets to fill the actual liquidity gap. As opposed to market risk and credit risk, the liquidity risk management requires the managers to not only be skilled but also have an overall and comprehensive perspective of commercial bank management. From the perspective of external supervision, the liquidity risk has been mentioned in Basel III (about liquidity coverage ratio). However, it does not develop any specific operational method or framework; it only introduces a minimum standard after an observation period of a few years.

In addition, in liquidity risk management, all commonly used financial models assume that relevant liquidity data are available. In fact, these data are difficult to obtain in most cases and this makes it very difficult to manage the liquidity risk in commercial banks.

2.2.4 Operational Risk Management

Broadly speaking, the term operational risk refers to all potential risks caused by non-market factors and non-credit factors. The New Basel Capital Accord suggests to classify operational risks into following groups: the system risks, people risks, processes risks, and external events risks. The external events can be internal or external fraud, workplace safety issues, damage of assets, business disruption and system failures. There is no formal system for operational risk management. However, the area has been receiving increasing attention of the scholars (Cruz 2002; Gao et al. 2006). Compared with credit and market risks, most operational risks are derived from the bank's business operations, which are endogenous to the bank, and can be controlled to a large degree. There is no defined and clear quantitative relationship between an operational risk factor and the operating loss. Operational risk management needs to cover almost all aspects of risks in bank management and operations. It includes mistakes in the day-to-day business processes with high frequency but relatively low loss and natural disasters or frauds, which rarely happen, but lead to catastrophic situation and put the entire bank in danger. Therefore, to manage the operational risks in all the areas by a single method is not applicable. Moreover, for both market and credit risk, a close and clear relationship exists between the risk and the reward. However, for operational risk, such relationship usually does not exist. Therefore, to manage the operational risk, the entire bank should participate not only the risk department or the internal audit department (Wan 2005).

In general, two methods are applied to estimate operational risks: top-down and bottom-up. The former globally measures the operational risk by analyzing the variability of the loss or profit to obtain an estimated risk at the company level. This method is relatively simple and easy to implement. However, it rarely has association with the real business operations. The bottom-up approach analyses each operational risk factor generated from the operations and then estimates the overall operational risk. As mentioned above, the top-down approach basically has a global perspective and is of little help in improving the business processes, while the bottom-top approach provides an opportunity to understand the operational risk and its key factors at the local level. However, it also means a lot of work, especially when there is a large staff with many uncertainties (Wan 2005). As for its measurement, currently there is no unified method. Some banks have made some progress in this area, but still cannot meet the actual needs. Some banks simply assign 18% to 25% of their capital for operational risk prevention. Meanwhile, many management information systems have been designed for the day-to-day operation of commercial banks. These information systems go some way to control the operational risks for commercial banks; they can be combined and integrated into our proposed performance management framework. A discussion on further details will follow later in the case studies.

Generally, commercial banks set up risk committees for various types of risk reporting and risk policy making. The main purpose of the risk policy is to set standards for banking products and to use the information from the risk reports for product pricing and fund allocation processes.

Based on the basic understanding of risk management and some practical documents of commercial banks, a general process of banking operation and management can be described. In doing so, the key processes of the management and operations will receive proper emphasis in the design of our proposed performance management system. An example of the general processes in commercial banks is as follows:



Figure 2.4: An example of the general operating processes in commercial banks

Generally, commercial banks need to accept deposits and savings or create investment products to attract funds from the public. These collected funds will firstly go to the fund pool of commercial banks. The size of the fund pool is decided by the capital size of the commercial bank. These funds will be allocated according to a certain percentage into short-term and long-term loans, or for the trading of financial assets through the processes of capital planning, funds transfer pricing, and so on. Meanwhile, commercial banks also provide some intermediary business service. Since these businesses have relatively low capital requirement, more and more attentions have been paid to this area in Chinese commercial banks.
Based on the general management and operation of commercial banks, a bank's core operation could be divided into the following levels according to the type of risk, difficulty of manage, and importance as follows.



Figure 2.5: Risk and bank operations

The first level of operation R&D includes product design. The second level includes capital planning, risk control, and IT system design. Third level includes trading financial asserts and other intermediary service. The fourth level includes credit and loan operations for individuals and companies. The fifth level includes operations like having and deposit operations and settlement business. Generally the risks of core operations in banks are increasingly concentrated toward to the higher levels of operations, with some operations at the bottom levels such as savings and deposit operations have been transferred. In the higher levels of operations, staffs need to be more experienced and skilled. These staff may account for only a small part of the core. But it is believed that they are the key parts of a bank's operation core and also the most difficult parts to manage. A bank's products are actually designed and produced by these stuffs. While the lower levels of operations could be considered as delivering those products to customers. Based on the classification of bank core operation, it is believed that a more suitable performance management approach could

be designed for different levels of operators according to their nature of the work and risk attributes. For example, skill improvement will be more emphasized for staff in higher levels and their performance plan will be carefully designed. For the staff at the lower level of operations, more attention will be paid to their efficiency, accuracy, and work attitude. More importantly, focusing on their key process indicators may achieve better results. These ideas have been partially reflected both in some studies and practices, e.g. the Human Resource Solution of Citibank. However, only some guidance or principal are provided. These ideas need to be further supported by data and formalized by corresponding regulations. More details will be discussed in the section of performance management framework design.

2.3 External Institutions

Compared with other organizations, the operation of commercial banks is more influenced by external organizations (Suzman 1962; Van Roy 2005). The first reason is that considering the important role of commercial banks in an economy, security issues of banks attract widespread attention. Secondly, some external institutions, such as Basel, advocate standards and methods for banks. These standards are helpful to the management and operation of banks. Applying such standards could also help a bank to get more recognition and trust in the international market (Montgomery 2005). Thirdly, many of the indicators of commercial bank performance are from external organizations (Van Roy 2005). Therefore, it is necessary to introduce some bank related external organizations in our study. In the following part I am going to introduce those organizations and explain their influence to commercial banks.

2.3.1 Basel Committee

Established in 1974, the central bank presidents from the Group of Ten countries formed the Basel committee. The committee members include representatives of the Group of Ten central banks and bank regulators. The objective of Basel committee is to set up operating standards and regulates the supervision activities of banks all over the world. Up to now, the Basel Committee has established many widely-accepted banking industry standards such as the Core Principles for Effective Banking Supervision, International Standards on Capital Adequacy, and the Concordat on cross-border banking supervision (Catarineu-Rabell, Jackson, and Tsomocos 2005). Since its establishment, the Basel Committee also developed many key banking standards etc. the Basel Accord and Basel Concordat. These regulations does not have a compulsory binding, however regulatory authorities of Group Ten countries agreed to implement the regulations within their respective countries. After a period of testing, these regulations have proven to be rational, scientific, and operable. Therefore, many regulatory authorities from other countries voluntarily comply with the Basel Capital Accord, especially those countries that participate to a large extent in global banking business. In late 90s, one of the major standards about how to monitoring the banking activities is introduced. The main principle is proposed jointly by the Basal Committee and some parties out of the Group of ten, and broadly accepted by worldwide regulatory agencies. These principles are also recognized as the international standards. Since then, although the Basel Committee is not really a regulator or supervisor of global banking industry, it plays a key role in making rules and standards in the industry. Since the establishment of Basel Committee, the contents of Basel Accord have been constantly updated and the methods are continuously improved. Thus, there is no agreement with the theoretical cut-off point due to its continuously changing process. The 1988 Basel Report is generally known as the old Basel accord. While the draft published in June 1999, known as Basel II. The contents agreed by representatives of the parties in September 2010 are considered as Basel III. The main contents of the first agreement include the classification of capital and the calculation standards of weights of risk. The capital of a bank is now classified as core and supplementary capital. Different capitals are identified by their own features and definitions are given accordingly. Using a risk weights calculation standard, a bank's balance sheet and off-balance sheet items are divided into four risk grades based on different classifications and properties. Without the risk weights, the standard capital ratio of 8% of risk assets would not have real meaning in the reports.

Basel II introduces a concept with three key points of banking supervision.. The first one requires banks to have enough capitals. The second point is to emphasis monitoring and supervising activities from regulators. The last one is to set up rules and regulations for banking market.

In Basel II, it points out that individual supervision ratio cannot show that a bank is operating safely not to mention the whole banking system. It also stressed the importance of the regulatory authorities and the disclosure of banking information. The agreement also proposed three ways to handle credit risk: standardized approach: General IB2 Restriction Advanced IRB, and Foundation IRB. IRB stands for "Internal Rating-Based Approach". The standardized approach is based on the approach in Capital Accord of 1988 and the risk weights are determined by external rating agencies. This approach is generally used in less sophisticated banks. External assessment parties are relatively more independent than the classification based on the boundary of the original Organization for Economic Co-operation and Development (OECD) countries. Therefore the result from external rating agencies should show a more accurate situation of risk. However, in most developing countries, it is quite difficult to apply this method. There is only a small number of rating agencies in those developing countries. More importantly, they are difficult to achieve the internationally recognized standards. With high rating cost and relatively low reliability, Companies will not have the enthusiasm to participate in the rating process since the risk weight of the unrated companies are 100%, and the majority of the company's evaluation result would be not satisfying since the risk might be over estimated if rigidly applying the standardized approach (Lall 2009). In addition, due to the higher risk weights and the introduction of capital requirements for operational risk, this approach will naturally increase the requirement of the bank's capital. Therefore, in China, the majority of commercial banks prefer internal rating approaches. Internal rating approaches inherited innovations of the supplemental agreement of market risk in 1996. The internal rating method suggests banks to calculate their own capital adequacy ratio and identify the rating of the bank. The information needed for calculation could be collected from bank's own operation records (Catarineu-Rabell, Jackson and Tsomocos 2005). In the contrast, the foundation method of Internal Rating-Based Approach only requires banks to measure the

probability of non-performing loans. Meanwhile, advanced Internal Rating-Based Approach suggests banks to apply a number of their calculated risk factor values. To push forward the implementation of Internal Rating-Based Approach, the Basel Committee allows a interim period of three years starts from 2004 (Monfort and Mulder 2000).

The third Basil agreement was formed in 2010. Simply speaking, the third agreement raises banks' core capital adequacy ratio and introduces many leverage ratios. The agreement also stresses the importance of liquidity risk. There are many different opinions on the interpretation of the contents of the new agreement. However, generally it can be seen that the new agreement has a higher requirement for banks in capital adequacy and capital quality. This means that the Basel Committee advocates a tougher and more comprehensive supervision for banks (Zhou 2006).

The advocated supervision is carried out by regulatory institutions in different countries. These institutions are considered as the direct supervisor and regulator of commercial banks. In China, the major regulator is China Banking Regulatory Commission. To understand the influence of the CBRC in China banking industry, here is a brief introduction:

Established in 2003, the China Banking Regulatory Commission (CBRC) is a public organization, managed by the Chinese government, responsible for setting up banking industry regulations; improve banking industry supervision quality of banks, financial companies, and other deposit-taking financial institutions in China. It controls 36 Banking Regulatory Bureaus and has branches in 306 cities (China Banking Regulatory Commission 2009).

In general, the CBRC is authorized to:

- 1. Develop and publish regulations on the supervision, management, and business activities of the banking and financial institutions.
- 2. Examine and approve the establishment of, changes in, and termination of the banking and financial institutions.

- 3. Examine and evaluate the qualifications of the presidents and directors in the senior management in banking and financial institutions.
- 4. Supervise and guide the banking and financial activities.

As can be seen, the CBRC has regulatory powers over all the aspects of the Chinese commercial banks. In contrast to Basel Accords, the CBRC supervisions and control over commercial banks are compulsory in China. Because of the key role of the CBRC in the operation of Chinese commercial banks, it has a great influence to Chinese commercial banks. For example, the process-oriented bank reform is initially advocated by the CBRC, and for most Chinese commercial banks, to carry out the process-oriented bank reform is more like an order than a suggestion. Thus, the impact of process-oriented bank reform is to be taken into account and reflected in our later design of the performance management system.

In addition to regulatory institutions, credit bureaus will also impact the operation of commercial banks. Such credit bureaus are able to provide the credit records of the individual or company for banks or other organizations. Such credit records and evaluations are used to apply for loans in many countries. However, in China the development of credit bureaus has just started, they only have limited impact to Chinese commercial banks.

2.4 Process-oriented Bank

In the early 1980s, many western banks started to rethink their process based on business process reengineering (BPR) theories. In the US, Citibank was one of the first to redesign its operations processes and build a new organizational structure. The new structure is more flat, which means it has fewer levels and therefore the bank could respond more quickly. Citibank also created new strategic business units, which were more flexible and closer to its business operations. According to statistics, during 1980-1996, 13 US banks started process reengineering. Soon thereafter, the trend of bank process reengineering rapidly spread to Europe. For example, Lloyds Bank, Industrial Bank, BNP Paribas, and Deutsche Bank all underwent process reengineering. In Asian countries, bank process reengineering

started relatively late, basically during the Asian financial crisis of 1998. During this period, banks in Japan and South Korea led the Asian bank process reengineering. In China, the concept of process-oriented banking was emphasized by the former chairman of CBRC, it could be considered as the direction of future development for Chinese banking sector.

By reviewing studies in process-oriented banking, it can be found that research progressed in two phases; the first phase emphasizes process reengineering, while the second phase emphasizes management through process (MTP). In the following part, the difference and development of the two phases will be discussed.

Goodstein (1988) initially mentioned the idea of redesigning the bank process in order to improve efficiency. Later, Bollenbacher (1992) interpreted the meaning of bank process reengineering, and draws more attention from public. Allen (1997) summarized the US and EU bank reengineering practices, and described bank reengineering process as: a fundamental rethingking and radical redesign of bank operation process in order to obtain a huge improvement in terms of cost, quality, speed of response and overall performance. After this, the BPR theory was widely spread, and became the most popular theory at that time. However, the result of real practice is not ideal, a series of surveys in early 90s showed that 70% or more reengineering actually worsen the business operations. In practice, reengineering usually means to give the process design tasks to an external team of experts and IT staff. Thus most of the redesign show no effect, or actually worsen the situation. In fact, the process reengineering once become a tool and a symbol of downsizing, because every time a company redesign process, some employees will get fired.

By summarizing the failures of reengineering practices, some researchers developed a new management method called "MTP" (Manage through Process) or process management. The aim is to control the basic of work flow in every process, such as planning, design, construction, operation, and regulation. MTP also suggests that the operation process need to be designed based on business strategy, and comprehensively consider the cooperation and allocations between various processes. Meanwhile, the operation process and management process should be separated but also adapt to each other. The MTP theory can

be seen as the developed and extended theory based on process reengineering; it suggests a unified, integrated and coordinated process management in business operations.

In summary, the core of process-oriented bank concept is process management. Although the origin of process management theory is BPR, they have different emphasis. MTP do not suggest a thorough redesign or to create a completely new process, but rather a management mode based on process. In this mode, the purpose of management is to improve the efficiency and quality of the entire process. Such management focus on division and optimization of process, connection and coordination between processes, resource allocation and distribution in the process. Therefore, process-oriented bank does not emphasize the process reengineering; it pays attention to the continuous optimization of processes, and the management of process.

In China, major commercial banks began to take preliminary exploration of process-oriented banking reform in 2002. In 2005, after the concept of process-oriented banking was introduced by CBRC, the introduction of process-oriented banking in major commercial banks significantly accelerated. As a pioneer of the reform, Minsheng bank clearly stated in their 2006 annual report that promoting a process-oriented bank would be the focus of their future work. Similarly, in 2007, Bank of Communications declared that they have made a three-year plan of building the process-oriented bank. After a few years, progresses was made in other Chinese major commercial banks with regard to process-oriented banking reform. The following part summarizes these progresses from five aspects.

1. The implementation of division system management and the optimization of internal structure of organization

Industrial and Commercial Bank of China (ICBC): ICBC started to explore the division system early in 2000, it set up bill business division directly managed by the head office and practiced independent accounting in the division. In 2002, it set up another division to

manage bank card business. Such divisions are managed directly by the head office of ICBC and have no affiliation with their local branches. Until now, ICBC has set up 8 different divisions in order to explore and implement the division system management.

China Construction Bank (CCB): In the second half of 2006, the CCB head office established divisions of wholesale business, retail and investment banking business, three high level directors were appointed to carry out the operational coordination within the three divisions. Meanwhile, a reform pilot was launched in Ningxia province, the old three level management structure of "province branch-city branch-local branch" was changed to "division-local branch". The department structure of CCB was also reformed to concentrate on customers and processes.

China Minsheng Bank (CMBC): In January 2003, personal business was separated from headquarters and seven key branches to form a division named retail banking department, a president was appointed to be responsible for managing the division. In November 2004, the retail banking division thoroughly implemented independent accounting and realized independent operations, and from the beginning of the same month the division took over all personal business from other Minsheng branches. Until recently, Minsheng Bank has established eleven divisions dealing business from investment banking business to bank card business. The lower level branches are now only focusing on local enterprise business and public relation maintain.

Other commercial banks: China Merchants Bank (CMB), Shanghai Pudong Development Bank (SPDB), Industrial Bank (CIB) all established divisions for emerging bank business such as bank card business, online banking business and SME business. Independent accounting and governing are applied in most of divisions

2. The implementation of flat management, to simplify management structure and reduce management levels

Management functions are centralized and integrated from second and third level of branches to form local function centers such as Approval center, Operation center and R&D center. The establishment of these centers greatly improves management efficiency and enhances the market responsiveness for the commercial banks.

Currently, CCB has implemented flat management structure in its branches of 23 provinces. Bank of China (BOC) reduces its branch management levels from five to three.

3. The implementation of centralized and specialized management, realizing the separation of front, middle and back desk (office)

The front desks are now more specialized in marketing and customer service. Other operation process and functions are centralized and deployed to professional working groups.

ICBC sets four working groups in Shanxi, Shanghai, Chongqing and Yunnan, in order to build large –scale, standardized and specialized back office. These four working group could deal business operations from all the branches of the bank. CCB takes away the support functions such as cash transport, treasury management and file management from the front counters, which greatly reduce the pressure and workload of the counters.

4. The optimization of management and operational process to satisfy bank customers

China Construction Bank (CCB) designs a system named Voice of Customers (VOC) to carry out the process optimization. VOC collects feedback from external customers and bank employees, these feedbacks are used to analyse the customer demands, suggestions from process operators and efficiency of internal processes. After the information collection and analysis, CCB carry out hundreds of process optimization projects, relating to the retailing business, online banking, IT management, risk management and HR management processes. The result of these optimization projects is satisfying for bank customers as well as employees. CMB applies the Six Sigma method to improve its operation efficiency and process quality. It also set up a department to carry out the process optimization. After one year, positive results are received from almost all the improvement projects.

5. The design of supporting IT system

ICBC carry out independent research and development of core operation system in 2002 and an improved system named NOVA is put in use in 2003. The NOVA system is continuously updated and greatly improved the operation efficiency of ICBC.

CCB also develops its independent information system in 2003. In 2006, many supporting IT system are developed which enables real-time operations in many of its bank business, such as international transfer business and customer information inquire service.

Summarized from a lot of research and practices, CBRC has gradually developed some well-accepted steps on how to build a process-oriented bank. There are four main steps:

Step one: process optimization. This step is to organize and manage the work flow, connect the work flow with jobs and positions, and then transfer the work flow into standard process. Therefore it is clear what need to be done in this process, what is the standard in each step of work, who is responsible for the process. When the standard process is formed, the optimization is started. The optimization has two dimensions, the first is to vertically compress the processes, which means to make the process go through less steps to finish; the second is to combine the same functions of different process. It means, when the steps or units in different process but dealing with the same operations or business, the steps or units could be combined to form a job center. For example, we can have a telephone sale for each product; we can also combine all the telephone sales to form a telephone sales center to sell all the products. It would be easier to manage the center and more efficient in terms of sharing resources. Step two: Organization structure adjustment. In accordance with optimized process, the organization structure should be adjusted. New jobs and positions should be designed based on processes to form new department or business units (or other types of organization structures). So that the processes could match with corresponding structures, each employee is clear about the responsibility to the process. The new organization structure should guarantee that inside a process, each working step is smoothly linked, and different processes should be relatively independent in order to minimum the impact of each other.

Step three: Building of performance management system. Performance management system is the key to combine the optimized process with the adjusted organization structure. Otherwise the employees would stick to their old way of working so that process management could never be carried out.

Step four: Information system design. New information system should be designed to fit into the new process and management structures.

Actually the second and third steps are very long processes, so in most cases, the second, third and fourth steps are carried out at the same time. Currently, many Chinese commercial banks are at the second and third steps.

It can be seen that the organizational structure of commercial banks may be greatly changed during the reform of process-oriented banking. Such changes and adjustments usually take a long time, which makes it difficult to apply the classic models or methods to guide the performance management activities in commercial banks, since one of the important tasks in classic performance management framework is to deploy the decomposed strategy to responsible executors. The dramatic changes in the internal structure of the organization make it difficult to identify and assign the responsibilities through the organizational structure, to carry out the strategy deployment directly using non-adjusted organizational structure leads to consolidation of existing structure, and hinder the reform and restructure of the organization.

Chapter Three: Performance Management in Chinese Commercial Banks

There are lots of issues in the Chinese banking sector that impact its performance. Some of them result from the national governing system (based on a planned economy), others are management issues that can be tackled directly by performance management. Therefore, in this chapter, I will firstly review performance management theories and then discuss the developments of the Chinese banking sector, its current issues, and performance management.

3.1 Literature Review of Performance and Performance Management

Since our research is based on performance management, I first need to understand what performance management is and its recent developments. Before defining performance management, it is necessary to understand what performance is. Rogers (1994) believes that the definition of performance should be result of certain activities. Fitzgerald and Moon (1996) suggest that performance is a more complex concept, which should include many aspects. From different perspective, performance can be measured by various methods and presented in different way. Otley (1999) also gives a definition of performance. He believes that performance is not only about the outcome or result of work but also includes the process of carrying out the work. Based on above opinions, Liu (2010) concludes the definitions and divides the performance into three parts: achievements relative to organizational objectives, the action of implement action up to now, and the expected internal and external gains due to the achievement and action for a fixed period of time. With different understanding of performance, researchers have different opinion of what is performance management and how to manage performance due to their research purpose

and industrial backgrounds. Some argues that the purpose of performance management is to make sure the objectives of the organization could be achieved with limited resources (the less, the better). Some consider performance management as a tool of management, which is used by different level of managers to enhance the performance of employees, departments and therefore overall performance of an organization. Above understanding of performance management shows different aspects of it, with the recent theatrical developments, performance management is well-accepted as an important management process which consists of developing, decomposing and deploying organizational objectives and strategies, structuring performance plan, supervision and motivation system. By carrying out the process, the organizational performance should be achieved (Armstrong 2000; Ferreira and Otley 2009; Folan and Browne 2005; Halachmi. 2005; McNamara 2008; Liu et al. 2012)

In summary, the performance management should involve following activities:

1. To understand what the strategic objectives are and how they are formed.

2. To decompose the strategy and objectives level by level.

3. To deploy the decomposed strategy and objectives for individual and groups.

4. To design and carry out supervision, monitoring and feedback data collecting activities in order to improve the performance of overall organization.

Among these definitions, Qi et al. (2010) suggest a performance management framework with six steps for classic organizations. The classic organizations often have a pre-set objective, the environment and structure is often stable. They believe that performance management is an ongoing learning process throughout most of the business processes and management blocks (including strategy management, operation management, human resource management, and so on). It usually includes six circulating steps although the order is not rigid. See the following Figure 3.1:



Figure 3.1: The six steps of performance management

3.1.1 Steps of Performance Management Framework

Step one: Strategy intervention (adjustment)

The above framework posits that an organization's strategy and performance are closely linked. However, the core of performance management is not the formulation of organizational strategy, but the understanding of the organization's strategic content, environment, and so on. More importantly, in the cycle of the six steps, performance management also needs to constantly adjust according to the results and feedback in step 6 in order to come up with suitable strategic content and strategy formulation methods. In this way the combination of strategy implementation and performance management could generate an organic and dynamic system. In this stage, performance management pays more attention to who sets the strategies (or who is involved in the strategy formulation process) and how the strategies are developed. For example, the strategies can be set only by the top managers and or through collective negotiation by the representatives from each layer, etc. Understanding the organization's strategy and its formulation method can lay down the foundation for the following performance management steps and it can make the performance of organization and strategy closely integrated.

Step two and three: Strategy decomposition and deployment

After the formulation of the organization's overall strategy, the step by step decomposition of the strategies to the departments and individuals is needed, in order to form a practical and feasible performance management plan. Theoretically, the department's work content and the responsibilities of the individual should all come through strategic decomposition. This decomposition process is, in fact, also a description of the organization's performance implementation steps. The common method of strategy decomposition is through the formal structure of the organization. That is, to decompose the overall performance into department performance and then into group performance, and so on. The overall strategy can also be decomposed through the common business processes, such as purchasing performance, production performance, sales performance, etc. Reasonable strategy decomposition requires a clear understanding of the organization's operations and management processes. If necessary, performance management can optimize the daily operations and business processes in this step. There are many methods of decomposing strategy; for example, the most commonly used method of the balanced scorecard, or the more flexible Soft System Methodology (SSM), and so on. These methods will be reviewed in detail in the following paragraphs. After the strategy decomposition, the key processes (KPs) of achieving an organization's strategy (performance) are identified. Then, the strategies can be deployed to the corresponding structures of the organization (for example departments) according to the details of the KPs.

Step four: Performance measurement

Through the above process, the KPs for realizing the strategies are defined. Then, the corresponding performance evaluation indicators are extracted from the KPs to form the performance measurement system for the corresponding organizational structure. This includes using 3E theory (Checkland 1981). For evaluating the performance of KPs from

aspects like efficacy, efficiency, and effectiveness in order to get the corresponding key performance indicator (KPI).

Step five: Performance plan

Performance plans are generally made by a manager with employees. Through discussion, both the manager and employee should be clear about the work plan of next period. However, work plan is only part of a performance plan. During the process of making performance plan, the previous work results are reported and guidance is given by the manager. Employees can also discuss the difficulties and resources needed with the manager and therefore get the necessary resources to carry out the work. Meanwhile, the managers should make agreements with the employee about the deadline and incentive methods. In this way, the performance of individuals could be tracked and improved by effective monitoring, motivating and guiding.

Step six: Performance assessment and feedback

In this step, the result of certain work period is assessed. The assessment result is compared with the targets so that everyone could know which part needs more efforts, and whose personal performance need to be improved. The assessment result and feedback from employees can be used to improve the next cycle of six steps, starting with adjusting the original strategic objectives, key activities, performance plans and KPIs.

3.1.2 Review of Other Framework

The above performance management six steps systematically and comprehensively integrate the main content of the classical theory of performance management. Moreover, they provide a systemic operation plan for establishing a performance management system in an organization, which provides significant guidance for this research. Therefore, this research will be mainly based on the 'six steps performance management' framework to discuss the design and application of the performance management framework in a commercial bank in China.

In fact, there are various performance management approaches and models available, and there is no universally applied performance management approach. Qi et al. (2010) classifies and concludes the existing methods into following categories.

The first category is to list all possible factors and key elements of performance management. Researchers simply list managerial activities that need to be done. For example, the performance management system suggested by Otley (1999) and its further development by Ferreira and Otley (2009), lists twelve questions about performance management such as what is the most important factors to the future development of the company? How do we care about these factors now?

The authors believe that such questions cover all five key elements related to performance management: objectives, target-setting and strategies, incentive and reward structures, plans for their attainment and information feedback loops. By answering these questions, a performance management system can be built in an organization.

The second category of performance management approach is based on benchmarking. Standardized models are designed to measure the performance of different organizations using the same performance measurement criteria. The measurement criteria vary in different models. For example, the Baldrige National Quality Award framework (Lee et.al. 2003) uses 7 major criteria: Leadership; Strategic Planning; Customer & Market Focus; Measurement, Analysis & Knowledge Management; Workforce Focus; Process Management; and Results. The criteria are given different points in sum of 1000. The organization could have a self-assessment by this framework and also for 'benchmarking' to compare with others.



The Baldrige National Quality Award framework is shown in Figure 3.2, below.

Figure 3.2: The Baldrige National Quality Award framework

Another well-known example of a standardized performance management model would be the European Foundation for Quality Management (EFQM) model.

First introduced in 1988 by 14 top managers of EU companies, the EFQM model is claimed to be one of the best applied total quality management frameworks of EU (Nabitz et al. 2000).

The EFQM Model applies nine major factors (and more than 30 more detailed criteria) to measure the performance results of an organization. Among the 9 main factors, five of them are considered as driving factors, which are shown in the left part of figure below. The rest are considered as results, which are shown in the right part of the figure below. The driving factors measure the managerial and operational activities in the organization, and the 'Results' shows what these activities achieve for the organization. The 'Results' could be

helpful to improve the 'Enablers' by an innovation and learning loop, as can be seen from the figure below:



Figure 3.3: The EFQM Excellence Model

This category of approaches is relatively easy to apply since the framework or the model is already designed, but they only show the performance result or comparison of performance scores in different organizations, and provide little guidance about how to improve the performance.

The last category includes structural and procedural frameworks to design a performance management system step by step for an organization. The most well-known one is the balanced scorecard method. Compared with the last category of performance management methods, this category of methods normally has a more systematic and logical structure. Most of the methods could be considered as guidebooks on how to design and develop a performance management system in an organization. Moreover, this category of methods emphasizes the connection between performance and organizational strategy, management activities and operational processes. Their concern is no longer an evaluation of performance from a macro perspective outside the organization, but to seek possible performance improvements in the organization. Currently, this category of methods is by far the most-applied category in companies. The Balanced Scorecard (BSC) method, as the

representative of this category, has a dominant position and is widely applied in many industries.

Other similar methods have been proposed by Medori and Steeple (2000), Diamond (2005) and Meyer (2002). More methods can be found in Liu et al. (2010).

These methods all have their advantages and disadvantages, but the main principals and procedures are similar. They all rely on the existing organizational structure and business processes so that they can provide little suggestions about how to improve the current structure and processes. Although some of the methods attempt to address problems, e.g., Medori and Steeple's method (Medori and Steeple 2000) which suggests improving performance by connecting the performance management system to the core competitiveness of the organization, there is still lack of practical and concrete frameworks and procedures. Since my research focus is on commercial bank performance management, in the following part I will therefore introduce the most widely-applied framework in commercial organizations: the balanced scorecard.

3.1.3 Review of Balanced Scorecard

Originally, the balanced scorecard is developed based on a research named 'Measuring performance in the organization of the future'. This study is initially sponsored by the Nolan Institute in 90s. The study lasts for twelve months and the research team carried out the research with co-operations with many organizations. The result of this research is the well-known balanced scorecard framework. In this framework, the objectives and strategies of an organization could be decomposed into different perspectives and then generate corresponding indicators (Kaplan and Norton 1996).

The indicators generated cover not only the financial perspective of an organization, but also three other perspectives, such as customer perspective, internal operation perspective and learning and growth perspective. Summarized from the 12 months study, the researchers believes that these four aspects are crucial to the success of an organization. The major development of balanced scorecard framework is the emphasis of non-financial factors. In balanced scorecard framework, Kaplan and Norton believe that the financial indicators only shows the past performance of an organization, while combined with other three perspectives, the future performance of the organization can be shown. In later developments, Kaplan and Norton also are aware that the framework should be adjusted according to the real situation of the organization as well as the organization type. Therefore, they suggest that each organization should design their own balanced scorecard.

One of the advantages of balanced scorecard framework is that it firstly connects the organizational strategy and objectives to the measurement indicators. The overall strategies are decomposed by the four perspectives and divided into more detailed strategy and objectives. Indicators are designed through discussion so that the target and work plan of individuals could be clear. A connecting process which contains four steps is proposed by Kaplan and Norton and a demonstrated is given as follow:



Figure 3.4: An example of how measures linked to four perspectives

The balanced scorecard framework is wide spread all over the world. Many companies achieve better results after applying the framework. However, questions and critiques arise continuously. Some researchers argue that the relations between perspectives are only logically linked, but in real situation, different perspectives can hardly linked because the linkage is limited by time (Noreklit 2000). Same researches also question the order of

perspectives, for example they claim that the financial perspective does not necessarily stays on top and linked to customer perspective. There should be other sequence of perspectives which could be more beneficial to the organization (Kanji 2002). Some even argues that the balanced scorecard framework is not suitable for organizations which have different business mode or management or operation problems (Marko 2003).

Generally, when applying the balanced scorecard, a strategy map is firstly generated to demonstrate the overall objectives and strategies of the company. In the strategy map, the strategies and objectives are normally summarized in different shapes representing corresponding perspectives, as mentioned before, financial, customer, internal operation and learning&growth. These shapes are linked with lines with arrows showing connection and cause-effect relations between perspectives. In the strategy map, not all the strategies and objectives are shown, since it is only a demonstration of overall strategy and first level of decomposition. More detailed decomposition will be carried out within each perspective. The shape of strategy map is originally following the top-to-bottom structure in which the financial perspective is on the top side of the map and followed by other perspectives one by one. In later development, Kaplan and Norton refined the structure of balanced scorecard, missions and strategy is put in the middle of the map and surrounded by four perspectives. In the new structure, the four perspectives do not show a clear sequence. Instead, they connected with each other as well as the missions and strategies. The strategy map could show the important process or key factors of an organization. Then, the KPIs could be generated or selected from these processes to form a performance measurement system.

There are lots of applications of the BSC in commercial banks. Some of them are only conceptual frameworks which are designed following the basic principal of the BSC, such as the one below (Zhang 2009):



Figure 3.5: The four indicators of a commercial bank's bank of evaluation index system

There are also practical applications in real commercial banks, such as the 5C BSC framework in Barclays Bank (Barclays Balanced Scorecard 2013):



Outcome Statements

We balance our stakeholders' needs across the short and long term.

Our activities drive mutually reinforcing outcomes across stakeholders.

5Cs	Metric	Actual 2013	Target 2018
Customer & Client (we are 'go-to' for our customers and	RBB, Barclaycard and W&IM: ranking of Relationship Net	4th	1st
clients)	Promoter Score vs. peer sets		
	CIB Client Franchise Rank	4th	Top 3
Colleague (our colleagues are fully engaged; we create a	Sustained engagement of colleagues' scores	74%	87-91%
diverse and inclusive environment where colleagues can			
fulfil their potential)	% women in senior leadership	21%	26%
Citizenship (we positively impact the communities in which	Citizenship plan - initiatives on track or ahead	10/11	Plan Targets
we operate)			
Conduct (our products and services are designed and	Conduct reputation (YouGo survey)	5.2/10	6.5/10
distributed to meet clients' needs; we act with integrity in			
everything we do)			
Company (we create sustainable returns above the cost of	Return on equity (adjusted)	4.5%	> Cost of equity
equity; we understand and effectively manage our risks, and			
continuously improve control)	Fully loaded CRD IV CET1 ratio	9.3%	>10.5%

Table 3.6: 5C BSC framework in Barclays Bank

More details of BSC applications in commercial banks can be found in Guo and Hong (2004); Yan and Long (2009); Sabah and Khawla (2012); and Sanja (2014). We can see that the BSC framework is commonly used in demonstrating the strategy of commercial banks and generating the performance measurement indicators. However, due to the limitation of the method, its application is limited by many aspects. For example, although the BSC can form the performance measurement indicators and the performance measurement system based on the strategy, it cannot specify the people who carry out or who are responsible for the strategies and indicators. The BSC framework provides only limited insight into the key parts of performance management, such as how to set up a performance plan, how to give feedback on the performance results, and how to communicate and give guidance in order to improve individual performance. In other words, the content of the BSC framework is not enough to form a complete and modern performance management system.

More importantly, the application of the BSC framework is often based on the existing business processes of the organization. Since strategy decomposition is based on the current business and operation processes, it is hard to discover and fix the defects of the existing business processes. In other words, if the business processes of the organization are inefficient, the BSC framework can only decompose the strategy and form the performance measurement system based on the inefficient business processes. Furthermore, implementation of BSC relies on the existing organizational structure, which reaffirms the current organizational structure and therefore hinders building of process-oriented banks. The process-oriented bank's emphasis is on the constant optimization and reformation of the business processes and management structure, and then on management through the optimized processes.

Due to the weakness of the classic BSC framework in commercial banks, especially in building process-oriented banks, I will introduce soft system methodology (SSM) (Checkland and Poulter 2006) in the following section, which is believed to be a flexible and helpful tool to solve complex problems, especially in providing innovative ideas to improve the current situation.

3.1.4 Review of Soft System Methodology

Compared with the BSC method, SSM does not rely on the existing organizational structure or business processes to carry out strategy decomposition and deployment. SSM can decompose a complex concept (e.g. organizational strategy) by asking a series of fundamental questions such as: what to do, how to do it, and who to do it. Such questions can be answered by different stakeholders of the organization, thus more possibilities and perspectives can be collected and reflected on, as well as some innovative ideas generated. However, SSM has its limitations. The successful application of the method requires the modellers to have a lot of application experience. Otherwise the results could be unrealistic, which leads to a high cost of implementation.

Originally, Soft system methodology was introduced by Checkland and colleagues in the 70s. Checkland explain the method to be a soft approach to deal with the complex problem which exists in normally open systems. In fact, the target of soft system methodology does not have to be a specific problem. In many cases, the actual situation is quite complex and confusing. People even do not understand what the problem is. Therefore, the soft system methodology can also help to understand the complex situation, and then make improvement of the situation. Although there is a general structure of how to use the method, the soft system methodology is more rely on ideas and system thinking. It means that different users will lead to different results when dealing with same situation (Checkland and Poulter 2006). There is a seven-steps process explaining how to apply soft system methodology, shown as below:

1) Understanding the complex problems and current situation that needs intervention.

2) Collecting all kinds of information about the problem and demonstrating in rich picture.

 Identifying key aspects of the situation in rich picture and generate root definitions (RDs). 4) According to each RDs, building conception models (CMs) based on personal understanding and ideas.

5) Comparing the CMs with the current situations in real world.

6) Comparing potential improvements and discussing the possibilities of the improvements.

7) Implementing the improvements, making changes to the situation.

Here is a diagram to show these steps:



Figure 3.7: SSM application processes

There are serval important concepts in SSM, such as conception model, root definition and CATWOE. In the follow, these concepts will be briefly introduced.

A root definition is usually a sentence, following certain format, in order to describe a complex system. The format of the sentence is normally like this: to do activity A, by using tools B or activities C and D, in order to improve E. This sentence answers three fundamental questions of what to do, why to do and how to do. By building the root definition, a particular situation can be clearly demonstrated, so that people could understand what the problem is and how should the problem be dealt with.

After generating a root definition, a principle of CATWOE should be applied in order to extend the definition and consider some necessary factors of the definition. The principle of CATWOE refers to six words: customer, actors, transformation, worldview, owner and environments. Customer refers to the people who benefit from the system (root definition); actors refers to the people who actually carry out the system; transformation is about what is transformed through the system, what is changed through the system and changed to what; worldview is about how people value the system, why is the system useful? Owner refers to people who own the system and are able to make changes to the system; environment refers to the external environment of the system, it is also about the limitations of given environment. With the principle of CATWOE, some important factors are considered by the users of soft system methodology, so that the root definitions could be more realistic and feasible.

Based on root definitions and CATWOE, conception models could be generated. Simply speaking, the conception models answer the question of how to do in root definition. For each root definition, there could be a corresponding conception model. The format of conception models is usually a set of linked activities, for example, in order to achieve result A, we should carry out activity 1 first, then activities 2 and 3, at last activity 4, so that A could be achieved. These activities in conception model are generated by personal ideas, experiences or understanding of the system. Therefore, it usually can get logically more reasonable or innovative ways to achieve certain result.

The application of SSM can be found in many studies, such as Waewick (2008); Kusmuljono (2008); Hanafizadeh and Aliehyaei (2011); and Winter, Brown and Checkland (1995). Recently, SSM was found to be quite useful in designing a performance management system framework in different organizations (Liu et al. 2012).

In my thesis, soft system methodology is applied to decompose and deploy strategies and objectives in order to design the measurement system.

The application of SSM can be found in performance management practice. For instance, Wang and Liu (2012) developed a performance management system using SSM for a Chinese high-tech organization named Tonsan, which was struggling in the recession due to their outdated management and operational systems. The authors applied SSM to develop a performance management system for the company and the results were successful. In this case, the authors firstly identify the key strategies of the company, and then develop the conception models for each of the key strategy. In this way the key process and activities are identified for the company. Through detailed discussion, the authors carry out more levels of decomposition by building conception models for each activity in higher level of conception models. The management members are closely participated during this process. In the end, the authors and managers of company develop an improvement plan. After the implementation, the performance of this company is greatly improved.

Other examples are similar, which can be summarized into several steps: firstly, understand the strategy and objectives of the organization. By understanding the strategy and objectives, a root definition of the organization can be generated. Secondly, deciding the key activities or key processes for the organization. The key activities and processes are answers of how to achieve the objectives. This step can be considered as the first level of conception model. With the basic idea of how to achieve the organizational objective, the third step is to build conception models for each key process and activities. The third step can be repeated for many times until the activities and processes are very clear and all the stakeholders in the organization agree with them. Then the last step is to generate appropriate indicators for each activity using 3E theory (Liu et al. 2012). In the process of building conception models, the organization could have a detailed review (rethink) of how to achieve the organizational objective. Therefore, some innovative ideas and optimization could be spotted and then implemented to improve the current situation.

The follow is a figure showing above steps:



Figure 3.8: Decomposition process using SSM

Here I use an example to demonstrate how to apply SSM based on the above steps. The paper 'Using SSM to structure the identification of inputs and outputs in DEA' (Mingers, Liu, and Meng 2007) gives the example of using soft system methodology as a tool of performance management. In this study, soft system methodology is applied in the Chinese Academy of Science (CAS). The leaders of CAS was trying to select performance indicators for the institutions, but they cannot reach the agreement since the leaders believes that the institutions are so different to be compared with each other using same indicators. Therefore, the authors apply the soft system methodology to firstly generate the root

definition of CAS, and then gradually build up the conception models based on the root definition. During the process, the leaders of CAS all participate and reach the agreement of what CAS should do and how should they achieve the objective of CAS. More detailed conception models are then built for each institutions based on the higher level of conception models. This step is repeated many times until the activities in conception models are quite clear to generate indicators using 3E theory. Since the conception models and root definitions are logically connected, the indicators generated from the activities in conception models are consistent with the overall objective and strategies of CAS. In this way the leaders of CAS reach the agreement of how to select indicators to measure the institutions.

3.2 The Chinese Banking Sector and Performance Management

3.2.1 The Development of China's Banking Sector

After the financial system reforms in the 1980s, the banking sector in China was separated from the Ministry of Finance and came to consist of the central bank, i.e. the People's Bank of China, and four state-owned specialized banks (García Herrero and Santabárbara 2004).

Among these four specialized banks, the Agricultural Bank of China was mainly engaged in agricultural investment and rural credit business, while the Bank of China specialized in foreign exchange and foreign trade business. The main business of the People's Construction Bank of China included infrastructure loans and fixed-asset investment loans, while the Industrial and Commercial Bank mainly dealt with the industrial and commercial credit business. Funds were no longer allocated by the economic plan and the specialized banks needed to borrow funds from the Ministry of Finance (Cheng 2003). Moreover, bank accounts were now maintained separately, instead of by unified accounting by the Ministry of Finance, as was the case earlier. Business restrictions were also partly removed and the specialized banks were allowed to issue innovation loans and technology loans (Xing and Sims 2012). In the era of specialized banks, the four state-owned commercial banks adopted the principle of the professional division of labour, but they were still engaged in

policy-related businesses. Their development was still part of the domestic economic plans, and administrative interventions were widespread in the banking industry. As a consequence, these banks could not operate independently or completely commercially (Xi 2007).

By the mid-1990s, the Chinese financial reforms had found their basic direction and, from then on, the specialized banks began to shift towards being commercial banks (Cheng 2003). Enacted in 1995, the Commercial Bank Law of the People's Republic of China clearly defined business objectives of and legal controls over commercial banks. More importantly, the profits and asset quality were now considered as the standards for the performance rating of the state-owned commercial banks. This was a historic shift from the administrative evaluation to the economic evaluation of commercial banks (Cheng 2003). The policy-related businesses of the specialized banks in the past were nominally transferred to the newly set up policy banks, such as the National Development Bank, the Export-Import Bank of China, and the China Agricultural Development Bank. From then, all commercial banks consistently began to adopt innovations and saw many new developments in their management systems. These developments included the reform of the credit funds management system, the implementation of asset and liability management and risk management, improvement in the internal control system, and the introduction of modern enterprise management systems. Moreover, the asset-quality of the banks came to be controlled through national funds injection, non-performing assets transfer, and other measures (China Banking Regulatory Commission 2009; 2007; 2004).

However, in reality, the reform of the commercial banking sector is still not complete. The policy-related businesses are still not completely separated and, in practice, commercial banks still have the obligation to support state-owned enterprises. Besides, the large state-owned commercial banks still cannot avoid of government or administrative intervention (Brehm and Macht 2005; Chen 2006).

In 2002, the main financial reform carried out was the joint-stock reform of the state-owned commercial banks (China Banking Regulatory Commission 2007). In 2003, the government

established the Central Huijin Company, which was responsible for the recapitalization of the state-owned commercial banks (Xu, Zhang and Qian 2002). At the end of the same year, the State Council decided to choose the Bank of China and the China Construction Bank to carry out shareholding reforms. Besides getting rid of government funding, the two banks also saw large-scale reforms in the form of financial restructuring and corporate governance. In 2007, the Agricultural Bank successfully completed the shareholding reform. The joint-stock reform in the state-owned commercial banks was also completed. As a result, the asset quality and capital adequacy ratios of the state-owned commercial banks improved. However, the general view is that reform has not finished yet (García Herrero and Santabárbara 2004). Compared to the Western banks operating in the Chinese financial market, the state-owned commercial banks still have a big gap in corporate governance, risk management, growth and profit models, and employment systems (Xu, Zhang and Qian 2002). Many researches mentioned the problems of Chinese commercial banks, the common thread are as follow: the problem of NPL, the disproportionate and non-performing loans to the nationalized business, and the intervention of the governments (Wei and Gui 2002). Many studies recommend that an external supervisor should be responsible for dealing with these issues (Xu and Wang 1999; Berger, Hasan and Zhou 2009; Godlewski 2005). But there are also studies that suggest that Chinese commercial banks still need deeper and ongoing reform in terms of internal operating models, business models, management levels and management philosophy, etc. In fact, large commercial banks in China are still strongly influenced by political authorities; in years of planned economy and government overprotection, Chinese commercial banks are not considered as good banks or good corporations, no matter how much annual profit they make or how large scale they are. Therefore, right after the stock holding reform, Liu, the former chairman of China Banking Regulatory Committee (CBRC), suggested the future development for Chinese commercial banks: transforming from departmental banks to process-oriented banks.

In the era of the planned economy, the organizational structure of large Chinese state-owned banks is basically the same, since it is more convenient to be managed by the government. These banks set the same departments, and resources are allocated separately to each department. Over the years, Chinese commercial banks have been consistent with their original organization structure with certain departments. Resources and operations are divided by departmental responsibilities. This system caused many problems. Some new businesses require cooperation between departments, but they all 'pass the buck'; it is not rare to see departments shift blame to each other. This also leads to a low efficiency in process operations, since the working process is divided into different departments. The same problems also exist in bank management; department heads fight for the interests of their own departments, but harm the entire bank. The department bank system brought many issues that hinder the further development of Chinese commercial banks and so, from 2006 until now, the Chinese banking sector has been promoting a broad and in-depth activity: building process-oriented banks.

The majority of Chinese commercial banks is interested in building process-oriented banks, and have started to act. Therefore, following the joint-stock reform, the process-oriented bank reform has become another major event in the Chinese banking sector. In the following section, I will firstly discuss some current issues of Chinese banking sector, then discuss more details of process-oriented banks.

3.2.2 Current Issues of Chinese Banking Sector

Inefficient Management Structure and High Cost of Administration

Chinese commercial banks widely use the branch banking system (Bonin and Huang 2002). Commercial banks can set up domestic as well as international branches in order to promote their business. Competition and efficiency are the keywords while setting up new branches. Banks need to increase their market share and maximize profits while taking into account the total economy of the branch locations, in order to avoid a blind pursuit of scales expansion leading to wastages and inefficiency (Bonin and Huang 2002; Yang 2011). In China, the branch set-up generally follows the basic administrative regions: the head offices are located in Beijing; the first level branches are in the provincial capitals; and the second level in other cities. There are also some base-level branches in the villages and towns. This administrative branch set-up leads to an overall structure of three levels of managerial branches, and only one level of operational branches (García Herrero and Santabárbara 2004). Thus, the operational branches are managed and governed by multiple-levels of higher branches. Moreover, the excessive number of administrative staff also leads to high management costs (Ariff and Can 2008). On the other hand, the administrative branch set-up is not based on business needs, but on the administrative divisions and levels of government. Many studies have shown that this leads to a chaotic financial environment and low branch efficiency (Berger, Hasan and Zhou 2009; Chen, Skully and Brown 2005; Sun 2012). Therefore, many Chinese scholars, such as Zhang and Liu (2006) suggest a flat management structure, breaking the boundaries between the provincial, prefectural (city) and county (district) levels, identifying economic zones and setting up branches in the large cities of these zones. Moreover, they assert that the main responsibilities of the head office should be strategic decision-making, credit management, product development and information processing. Other functions, especially the function of marketing, should be as decentralized as possible. Although the major state-owned commercial banks still have the administrative branch set-up, recently there have been many improvements in internal management. Most of the front-level branches only have simple functions and focus mainly on business expansion. However, the issue of the administrative branch set-up has not been resolved, and the Chinese commercial banks still suffer from inefficient branches and the high cost of administration (Cull and Xu 2000; Yang and Fang 2004; Sun 2012).

The administrative intervention in Chinese commercial banks greatly affects their employment system. The senior management of the state-owned commercial banks, such as the presidents, is generally appointed by the central government. This staffs are given certain administrative control. At the branch level, the recruitment system follows the appointment and selection criteria of other government departments. This recruitment system makes the banks dependent on the government at top level, since the managers at higher levels are designated and appointed directly or indirectly by the corresponding level of the government. Managers at higher levels tend to be responsible to the local governments, not to the banks themselves, as their welfare and benefits are largely determined by the government rather than by their performance, or the performance of the
bank or its branches. In fact, the performance of commercial banks hardly affects their managers, as the most important criteria for promotion are the ability and willingness to satisfy the higher authorities. Under a flawed supervision system, this can easily lead to corruption and low efficiency (Wang 2007; Cull and Xu 2000).

Although major problems are from the national banking system, a proper performance management system could improve some aspects by selecting more focused performance indicators, implementing a performance plan system and designing an effective incentive system.

Ineffective Risk Management and Non-performing Loans

The problem of non-performing loans in the Chinese commercial banks has been drawing widespread concern (Matthews, Zhang and Guo 2009). According to the classification system of five loan categories implemented in 2002, the People's Bank usually keeps the special reserve ratio of 25%, 50% and 100% for standard loans, doubtful loans and lost loans respectively. As can be seen, a large number of non-performing loans take up the banks' capital and restrict their operating activities, adversely affecting their profitability and security (Bonin and Huang 2001; Wang 2012). The state-owned commercial banks have stripped themselves of the non-performing assets three times - in 1999, 2004 and 2005. However, as can be seen from the data released by the Supervision Committee of the People's Bank of China, non-performing assets still accounted for about 8% of the total assets in 2006, with the state-owned commercial banks having a disproportionately high share of these. Although, in recent years, the share has shown a decreasing trend, the absolute value of non-performing loans is still very high. (Yang 2012). Many scholars have examined the causes of non-performing assets. In addition to insufficient risk management and control, the issues of credit rating, internal control and supervision, government intervention, and policy loans of the state-owned enterprises are also mentioned in most of these studies (Matthews, Zhang and Guo 2009; Bonin and Huang 2001; Chen 2006). Moreover, as these enterprises and banks are owned by the state, the responsibility is not clearly identified and leads to excessive loans (Wei and Gui 2002). Moreover, a large

number of state-owned enterprises suffer from inefficient management systems, product structures and low product quality, and cannot meet the requirements for the development of a market economy (Xi 2007; Wang 2012). This situation has led to the accumulation of losses for a large number of state-owned enterprises. What is worse, there are also a large number of evasion activities in the case of state-owned commercial bank loans, in the form of bankruptcy, acquisitions, mergers, contracts, leases and restructuring (Wang 2007). However, some scholars believe that this situation is inevitable, because banks can hardly carry out other businesses based on the current personal credit information system and the restricted investment and financing environment (Yong 2006).

Limited Profit-making Mode and Blind Competition

Another widely mentioned problem is the over focused loan incomes of China's commercial banks (Yong 2006). Under normal circumstances, the profits of commercial banks come from capital investments, interest income and intermediate business. For a long time, the interest income has been the main part of commercial banks' profits (Ariff and Can 2008). However, during the last 30 years, with the on-going financial reforms, the profit structure of the major commercial banks of the world has gradually changed and the proportion of interest income has gradually come down. For example, Citibank, in the USA, receives only 20% of its profits from the deposit and loan business, while other businesses, such as transaction services, securities and derivatives trading, and capital market activities, account for 80% (Yong 2006). However, in China, about 90% of the profits of state-owned commercial banks comes from interest income. In the past, under the oligopoly of operating and interest rate controls, it was easy to make profits from the deposit and loan business. This led to a lack of motivation and limited financial products for the Chinese commercial banks to develop new business. (Yong 2006; Cai 2015). With the gradual opening up of the financial market, however, the interest rate reforms are inevitable. More importantly, the major commercial banks are reaching the upper limit of the loan-to-deposit ratios and there is no room for further development. Therefore, the efficiency of the commercial banks is bound to be greatly affected (Liao 2007). To cope with the situation, many Chinese commercial banks have undertaken some business structure reforms. The intermediary business, in particular, has come to be increasingly emphasized. Scholars also suggest that the commercial banks should vigorously pursue the retail business and private banking business (Lau 1999). However, most of the new businesses are not carefully designed; they are basically an extension of the current business. Moreover, they can be easily imitated and, therefore, can hardly be a source of competitiveness for the commercial banks. This situation is mainly a result of the strict restrictions imposed by the supervisory institutions, which severely limit banking activities and businesses (Ping 2001; Bai 2011).

The issues, therefore, cannot be tackled simply by external supervision. The internal process controls and monitoring are going to be the keys to improving the situation. Performance management has come to be seen as a useful tool to deal with these problems.

For example, we can design more focused performance indicators and pay more attention on promoting risk management and the emerging bank businesses. Also, in daily performance evaluation activities and salary structure design, we can put more weight on the emerging bank businesses in performance evaluation result. In this way, we can effectively tackle the lack of risk management and the problem of profit mode mentioned above. The performance plan system that is designed based on strategy decomposition can constantly decompose the organizational strategy into key processes, and then allocate them to the responsible executors. It can also help to propose a detailed work plan, monitor the realizing process, improve the execution power and reduce the administration costs.

Moreover, the building of a process-oriented bank is a solution to the main issues mentioned above, especially in the aspect of organizational structure optimization. The concept of a process-oriented bank promotes the organizational structure to be designed based on the principle of facilitating management through processes. In this way, the operation and management of commercial banks is not only more efficient, but also more competitive in the banking market. At present, many Chinese commercial banks have entered the second and third stage of building process-oriented banks. Currently, the optimization of business processes is basically completed. The major task now is to carry out performance management based on the optimized organizational structure and business processes so that they can be reinforced. To fulfill this task, the performance management framework is required to promote, rather than hinder, the rapid change of organizational structure according to the optimized business processes and management modes. It also requires that the performance management framework reflects and emphasizes the performance of the processes rather than the performance of results. Furthermore, the performance management framework is required to promote and support the building of a process-oriented bank, and to thoroughly execute the principal of managing through process. However, the current performance management framework cannot fulfil these requirements. Most performance management frameworks rely on a stable organization. Therefore, they are unable to cope with rapid changes of the organizational structure. The following section will review some current performance management studies of the commercial banking sector of China.

3.3 Performance Management in the Chinese Commercial Banking Sector

In recent years, Chinese banks have gradually been transformed from state-owned enterprises to commercial banks and have eventually become joint-stock commercial banks with a sound corporate governance mechanism. Bank performance has been considered a long-term development goal for Chinese commercial banks (Xin 2003; Guan and Jia 2011). As a result, performance management is emphasized as a tool to solve many problems in Chinese commercial banks.

Currently, most Chinese commercial banks use the BSC approach to design their performance management system (Jiang and Zhang 2012). However, the performance indicators of the banks have also experienced changes. In the beginning, most of the indicators were related to the amount of deposits and loans, and the sales of banking products. However, recently, an increasing number of banks have adopted more comprehensive indicators, such as Economic Value Added (EVA) and Risk Adjusted Return on Capital (RAROC) (Xin 2003). Moreover, greater attention has been paid to the strategic business, which is expected to be helpful to the banks' their further development.

With the development of the commercial banks and reform of the financial system, Chinese commercial banks generally accepted a basic KPI driven performance management system based on their business operations. However, there are still many problems that need to resolved, as mentioned in many studies (Pan 2006; Li et al. 2012; Lin 2004; Zhu 2005; Guan 2003; Ding 2009, Mao 2014): 1) there are too many short-term indicators but not enough long-term indicators; 2) too much attention is being paid to the performance measurement process while other aspects, such as guidance and communication, are getting ignored; 3) the departments designing the indicators lack coordination, causing conflicts, communication gaps, and a reluctance to share information and resources; 4) the results of performance measurement are only referenced for bonuses and remunerations of the employees, they are rarely used for aspects like targeted training and personnel changes; and 5) only limited incentives are being considered. In addition to these general problems, there are also some studies that discuss other aspects of the banking business. Some examples follow.

Ying (2006) argues that there is unequal performance pressure on the operators and the managers. Some departments and positions are clearly more relaxed than others. Therefore, the performance management should be designed based on a hierarchical classification of the employees, including: 1) management; 2) sales and marketing; 3) operations; and 4) functions and professions. There should be a different performance evaluation system for each category, with consideration of differences in incentives.

Some studies suggest another classification from a different point of view (Zhang 2006; Li et al. 2012; Lin 2004; Zhao 2007). They argue that the Chinese commercial banks have too many levels in their management structure, which was originally designed for bureaucratic organizations. Although this structure cannot be changed in a short time, the design of the performance management system should not follow this structure. These studies suggest

designing the performance management system based on business units and product lines, thereby providing a basis for resource allocation. More importantly, the system should encourage cooperation between different product lines, levels and classifications, based on shared responsibilities and benefits. These studies, however, only provide a general idea. There is no further development of, or detailed practice based on, this idea.

Some studies question the performance indicators of the Chinese commercial banks (Guan 2003; Jia 2013; Zhu 2006). They argue that some indicators are either too subjective or too difficult to cover all banking businesses. In practice, only the employees who participate in the final part of the value-adding process are considered to have made the contribution, while the contribution of others gets ignored in the performance management system.

Xin (2008) specifically points out that the current performance measurement and evaluation systems are well developed for frontline operators. These systems already have many detailed indicators covering nearly every aspect of their work. However, for the staff in the back-office, there are few operational indictors, though they form a key part of the value-adding process.

Some studies question the commonly used indicators from a different aspect. For example, Yu (2007) believes that some financial indicators currently being applied are detrimental to the healthy development of the commercial banks. Most banks emphasize the deposit indicators too much. However, with an increasingly high deposit reserve, they have come to face greater pressure, leading to the manipulation of indicators and violations of the norms to attract savings, e.g. with higher deposit rates at the end of the term. Moreover, the non-financial indicators have become a mere formality. These indicators have been discussed a lot, but there is little to show in practice.

In addition, a relatively few number of performance management papers also talk about the objective decomposition and allocation methods. According to Gui (2009), in the objective decomposition method, the upper-level branch decomposes the objective and allocates

resources based on experience. This method is hardly scientific or fair, and leads to egalitarianism and inertia at the lower-level branches. The allocation method is based on the number of employees in the lower-level branches, such that the branches with more employees get more resources, as well as higher targets. However, it ignores the differences in the level of development and quality of personnel. Another method is to set up higher targets, based on the performance of the previous year, meaning that the lower-level branches that have produced better performances in the previous year will face greater pressure from the indicators. This method is designed to estimate branches' potential, and to decide their targets and indicators accordingly. Similar systems can be seen in Microsoft's and Kingdee's performance management solutions.

In addition, there have also been studies of more basic problems (Zhu 2009; Hou 2004; He 2006; Ge 2008; Chen and Huang 2013; Bai 2011), such as the design of jobs or positions. Actually, some Chinese commercial banks have not yet carried out job analysis; some do not even have job descriptions.

It is, therefore, clear that these performance management studies are limited to a few aspects of Chinese commercial banks. They acknowledge the issues, but fail to resolve them. Some studies do give suggestions in principle, but say little about implementation. Moreover, there is little research that systematically studies performance management in Chinese commercial banks. As described in the previous chapters, building a performance management system is a complex process which consists of six general steps. Currently, the design of a bank's performance management system must also take into account the characteristics, the situation and the major problems of Chinese commercial banks, because these will have an impact on every aspect of the performance management system. For example, in the step of strategy decomposition, the classic BSC is not suitable for current Chinese commercial banks, since its concept and method is in conflict with the process-oriented bank reform (the reason will be discussed in the case study chapter). Moreover, the ongoing reform of the process-orientated banking system also causes problems for performance management practice. A detailed discussion will be carried out in Chapter Six.

In summary, Chinese commercial banks lack a systematic and targeted performance management framework that controls their internal processes and monitors employees' activities. This framework needs to be further reinforced by regulations and incentives, and should consider the external environment, internal process and the organizational structure equally. This framework should start by examining the organization's structure. Therefore, the following section reviews some organization theories.

Chapter Four: Organizational Structure from the Perspective of Performance Management

In the above discussion, I mentioned that the performance management activities are closely linked to the structure of an organization. Some recent studies also show the connection of organizational structure, organization type, and performance management activities. For example, Meng (2012) discusses the key points of performance management in mechanical organizations and shows some initial results. Similarly, I will also explore possible connections between effective performance management approaches and organizational structures. Therefore, here I review some relative theories of organizational structure from the perspective of performance management.

4.1 Reviews of Organizational Structure Theory

First of all, I may need to clarify definition of an organization and organizational structure. There are lots of different definitions in the long history of organizational theory. Here, I only summarize some of the key theories.

4.1.1 Definition of the Organization

It is not easy to define the concept of an 'organization'. Robinson classified organizations into ten categories and found that the contents of the concept are related to researchers' perspectives. Thus, it is hard to get a well-accepted definition for this concept. Based on the divisional standards from Scott (1961), logical system, nature system, and open system are the three basic perspectives of organizations. Form the logical system perspective, an organization can be split into related components so that these components and the relationships between components can be studied. From the perspective of the nature system, an organization does not necessarily have a structure or model. Therefore more attention is paid to the problems in real practice. The open system perspective is to firstly identify the boundaries of organizations, both internal and external, and then break the boundaries so that the organization can be integrated into its environment. Based on these perspectives, an organization could be defined as: An open system that consists of two or more cooperating individuals in order to achieve an objective (Scott 1961; Shafritz, Ott and Jang 2001; Tolbert and Zucker 1999). Although the system is open, it has identifiable boundaries. The system also consists of a rule system, an authority system, a communication system and a coordination system. This open system interacts with its environment and contributes to its members, itself, and society.

There are three widely recognized models of organizations. These models describe the basic components and their relationships. These models are: diamond model, star model and 7S model.

Leavitt (Leavitt, Dill and Eyring 1973), the creator of the diamond model, views the general form of an organization as an interconnected system consisting of: Structure—certain shape of aggregation of departments and positional Technology—certain skills or techniques the organization uses to accomplish its targets Strategy & Task—certain direction or target the organization pursues People-human resources, the organization reaches its strategy or task by whose implementation

For the relationship between the above components, see chart below (Leavitt 1965):



Figure 4.1: Relationship of an organization's components

The star model was created by Galbraith (Galbraith and Jay 1977), and in this model the organization is viewed from a behaviourism perspective. Strategy, structure, processes, people and rewards decomposed the model, and these five components indicate five basic sub-systems.

Strategy	\rightarrow	direction of the organization
Structure	\rightarrow	power of the organization
Processes	\rightarrow	information and its interaction of organization
People	\rightarrow	skills/mind-sets of the organization
Rewards	\rightarrow	motivation of the organization

To configure the organization well, management processor, performance system and Human Resource Management (HRM) system also should be taken into consideration.

First raised from Pascale and Assos's book *The Art of Japanese Management* (Pascale and Athos 1981), the 7S model was widely accepted by CEOs and managers in 1980s. Compared with other models in that time, Pascale and Assos added some soft factors into their organizational model. They think some invisible factors, such as working style, special

skills and attitude towards work, play the most important roles in the Japanese economic boom in the 1970s. They point out that under the similarity of hard environment (strategy, structure, system, staff), soft factors are keys which lead companies to success.

4.1.2 Review of Organizational Structure Theories

There are many existing definitions of organizational structures. An organizational structure includes many parts, such as work assignment, coordinating and monitoring activities, in order to achieve the objectives of the organization (Pugh and Weber 1971). An organizational structure could be understood as how the members of organization see the organization and the internal environment (Jacobides 2007). An organizational structure refers to the rules and regulations about how the job positions are set, how the authority is distributed, how the duties connect to individuals, how the employees are monitored and managed and how the communication is carried out in the organization (Gupta and Govindarajan 1991). Normally we use an organization chart to demonstrate the organizational structure. However, a chart can hardly show all the information of an organizational structure.

Overall, the general theory of interested organizations describes the constitute elements and the relationships between them (Child 1972), as well as the organizational structure's framework. The organizational structure is mainly involved in the corporate sector and constitutes the basic job settings, authorities and duties, business processes, management processes and internal coordination and control mechanisms (Aiken and Hage 1968). The organizational structure is the platform on which the staff members achieve the purpose of the enterprise, and it has a direct impact on the effectiveness and efficiency of internal organizational behaviour.

In general, no matter what an organizational structure is, there are some key factors in all the structures. Since these factors are inherent in the very idea of an organizational structure (Gupta and Govindarajan 1991; Levinson 1959; Sarker 2000). These factors include:

1) Some kind of governance.

- 2) Rules by which the organization operates.
- 3) A distribution of work.

Governance

The governance refers to the authority hierarchy in the organization. The top of hierarchy is normally the decision makers. No matter what the structure is, there are always some decision makers.

Rules by which the organization operates

There are always regulations and rules set by the internal or external authority, in order to control the behaviour of employees and make sure that the organization could run normally and healthily. Some rules are formal and others are not, but members of organization consent with the informal rules.

Distribution of work

In all organizational structures, there is some sort of work distribution. It shows how the job is assigned to individuals. The distribution could be permanent, it becomes job specialization; or it could be temporary, such as workload allocation. The distribution of work always exists in organizational structures, since no one could carry out all the work in the organization.

The above elements decide an organization's structure. They should be considered when designing, adjusting or reforming the coordination mechanism of an organization.

Current organization structure theories can be roughly divided into classical organizational structure theories, neoclassical organizational structure theories and modern organizational structure theories. The modern organizational structure theory could be further divided into systematic and contingent organizational structure theory, environment-determined organizational theory, economic organizational structural theory and new organizational structure theory. In the following part, I will briefly introduce the above theories.

A) Classical organizational structure theories

In the 1950s, the classical organizational structure theory category was dominant. It includes Taylor's scientific management theory, Fayol's general administrative theory and Weber's bureaucracy theory. The classical organizational structure theories study the general principals of static organizations. They believe that these principals can be accurately applied to any organization (Taylor 1914; Fayol 1949; Weber 2009).

B) Neoclassical organizational structure theories

From the 1930s, behaviour theories suggested analysing organizational structures from a more dynamic perspective. Here, the social and psychological impact of behaviour was emphasized. The formal structure of an organization is not as important as the feelings and needs of the organization's members. Moreover, the organizational culture is stressed and it is believed to play an important role in organizational structure theories. Representatives of neoclassical organizational structure theory are mainly Mayo, Maslow, McGregor, and Herzberg and colleagues. (Kochan, McKersie and Cappelli 1984; Maslow 1943; McGregor 1960; Herzberg, Mausner, and Snyderman 1959).

C) Modern organizational structure theories

Since the 1930s, many new organizational structure theories have been developed. Examples include systematic and contingent organizational structure theory, environment-determined organizational theory, economic organizational structural theory, and new organizational structure theory. These theories are considered as supplements and improvements to classical organizational structure theories (Kast and Rosenzweig 1974; Euske and Roberts 1987).

1) Systematic and contingent organizational structure theory

Contingent organizational structure theory considers an organization as a dynamic and open social system. Managers need to continuously adjust the organizational structure in order to fit the environment. Therefore, the best organizational structure design does not exist. The representatives of systematic and contingent organizational structure theory are Kast and Rosenzweig (1974). They point out that social systems are just like biological systems. Such systems have a cycle of input, transformation and output. An organization gets inputs of labour, funds, information and raw materials from the social environment. After the transformation of production, these inputs are transformed into outputs of products and services for the social environment.

Contingent theory believes that an organization and its members are extremely complicated. Moreover, the environment of an organization is also complex and changing all the time. Thus, there is no generally effective managerial method. An organization should learn from other successful organizations, and design its own management based on experience and current situations.

2) Environment-determined organizational theory

Since the 1970s, some new organizational theories based on sociology have emerged. These theories include: Hannan and Freeman's organizational ecology theory (Freedman 1992); Meyer, Rowan and Zucker's institutional theory; and Pfeffer and Salaneik's resource dependence theory (Tolbert and Zucker 1999). The above theories all agree that the external environment of organizations (rather than managers) determines the organizational structure.

3) New organizational structure theory

Represented by Mintzberg (1971), new organizational structure theory integrates other organizational structure theories. It suggests classifying and summarizing the features of each type of organization, and then designing the coordination mechanism based on the size

and complicity of the organization. The new organizational structure theory is closely related to our framework; therefore I will introduce Mintzberg's theory in the next sections.

In summary, the classical organizational structure theories consider organizations as a closed system. More attention is paid to the internal control of organizations based on division of labour, hierarchy, and bureaucracy. The classical organizational structure theories attempt to build up a hierarchical authority system, with clearly defined regulations, in order to control the members of the organizations. Such organizational structure theories are not flexible; they try to conclude the general principals of organizations. Meanwhile, the neoclassical organizational structure theories could be considered as an innovation of classical organizational structure theories. Both theories try to improve the efficiency of organizations, but the neoclassical organizational structure theories adopt a 'softer' approach. Neoclassical organizational structure theories emphasize the impacts of people's psychological reactions. The values and expectations of each member of an organization is more important in neoclassical organizational structure theories. However, the classical and neoclassical organizational structure theories separate the organizations from their environments. These theories believe that organizations are self-functioning systems that are not affected by their environment. Thus, the impacts of the environment are not considered. In contrast, the modern organizational structure theories believe that organizations are open systems which interact with and benefit from the environment. Some theories further develop the classical and neoclassical theories in the aspects of human behaviour and internal control. However, each of the modern organizational structure theories is quite independent; they study specific organizational issues from their own perspectives. More importantly, most of the theories provide little guidance to performance management, while Mintzberg's theory emphasizes the management and operation activities of the organization from the perspective of internal management. More importantly, it discusses and suggests how to carry out these activities and who should be responsible. Mintzberg's theory is very helpful for the design of our framework as it answers the question of 'who to do it' in performance management, and provides insights into how to improve the management efficiency of an organization. Therefore, I will discuss his theory in the following section.

4.2 Reviews of Mintzberg's theory

In the view of Mintzberg(1973), an organizational structure is the combination of all the specialization and coordination activities in the organization. The specialization activities refer to the activities such as division of labour and work allocation. Such activities breakdown the overall task of the organization into small pieces of work and assign these work to individuals. The specialization activities enable the organization to complete complex and large tasks which cannot be carried out by any single person. As a result of specialization activities, an organization is divided into departments, working groups and job positions. Meanwhile, the coordination activities refers to the activities that make the individual operations could be bring together in order to achieve the organizational objectives. Such activities could control the individual operations to be carried out at the same pace, so that the whole system could operate harmoniously. Coordination activities also control the result of each operation to be standard, so that the results could be assembled and achieve the overall objectives.

To demonstrate the organizational structure, Mintzberg introduced an organizational configuration model. Initially the model consists of five parts: strategic apex, middle line, techno structure, operation core, and support. These five parts are believed to cover the major organizational activities in an organization. In later development, Minzberg added a new part named ideology. These parts will be explained one by one in the follow.

An organization always needs to carry out certain operations in order to achieve its objectives. Some operations are core operations which directly (or more closely) linked to the objectives of the organization. Thus the operators who carry out the core operations are considered as the operation core of the organization. As the organization grows, the core operations become increasingly complex, and the tasks require more people to work as core operators, then the strategic apex appears. The strategic apex refers to decision makers of the organization. They also manage the operation core through monitoring, coordinating and motivating. Limited by the control of span, a hierarchy of management is generated as the

organization grows larger. Now only the top part of the hierarchy is considered as strategic apex and the lower part is recognized as milled line. The responsibility of middle line is to deliver and deploy orders, assignments and instructions from higher level of management to the core operations. The techno structure is formed to set regulations and rules for core operations in order to improve the overall efficiency of the organization. The techno structure is often formed by experts and authorities internal or external of the organization. They design the work processes, set standards and provide guidance to the core operators. The support staffs exist in some large organizations, the aim is to provide support mainly to the operation core so that the core operators could focus on the operations. The ideology does not refer to anyone in the organization. It is the commonly shared values, cultures and beliefs of the organization members. These six parts form an organizational configuration, as demonstrated below in Figure 4.2





Figure 4.2: Organization configuration and parts

Based on the six parts of organization configuration, Minzberg further summarized some coordination methods: 1. Mutual adjustment; 2. Direct supervision; 3. Process standardization; 4. Output standardization; 5. Skill standardization; 6. Norm standardization (Mintzberg 1984).

The first one is to coordinate through mutual discussions. The operators estimate the progress of each other and make the adjustment in order to stay at the same pace.

The second one is to directly monitor the operators and give orders about how to carry out the operation. This coordination is normally carried out by a superior manager.

The third is to design standard operation process. The process is monitored instead of operators. This coordination normally applied in organizations with highly automatic operations, such as an assembly line.

The fourth is to set standard to the output of operations. Sometimes the operation process is difficult to control and standardized so that the organization only control the output of each process. For example the processes of sales activities are very difficult to standardize, but the result of sales is relatively easy by setting sales targets.

The fifth is to set the skill standard for operators. Only those who meet the skill standard level can carry out the core operations. It is very common to see the skill standardization, for example the potential employees are always required to have certain education level, qualifications or certificates. This coordination method could be considered as some form of input standardization, if employees are considered as inputs of organizations.

The last one is to coordinate through common shared values and believes. The behaviours of employees are coordinated by the standardized norm if they all believe that what they do is the right thing to do.

To summarize these coordination methods, Mintzberg carried out a lot of field studies and observations in real organizations. Based on these observations, he also concluded some common organization types. Each type of organization has a unique configuration and features. The table below is a summary of different types of organization, the most important part and the most suitable coordination method (Mintzberg 1984):

Configuration	Suitable coordination method	Most important part
Simple organization	Direct supervision	Strategic apex
Mechanical bureaucracy organization	Processes standardization	Techno structure
Professional bureaucracy organization	Skills standardization	Operation core
Diversified organization	Standardization of outputs	Middle line
Innovative organization	Mutual adjustment	Support staff
Missionary organization	Standardization of norms	Ideology
Political organization	None	None

Table 4.3: Different type of organizations and features

1. Simple Organization

The type of simple organization can be found in many newly formed small companies. In this type of organization, normally there are only two parts: strategic apex and operation core. The strategic apex is one or serval leaders and the operation core are a few operators. Since there are only a few operators, the leader of the organization could directly supervise the operators.

2. Mechanical Bureaucracy Organization



Figure 4.4: Configuration of Mechanical Bureaucracy Organization

The mechanical bureaucracy organization is very common in massive production manufacture industries. Such organization often has a large operation core to carry out highly mechanical operations. The core operations in such organization are normally simple and repetitive. The congregational objectives and strategies are divided into very specialized pieces so that each individual in the operating core could focus on only a small part of the operation. By doing so the operators could gain experience and become more skilled and efficient in operation. Since the operations are normally simple and repetitive, it is usually more efficient to carry out the coordination activities by process standardization. The process and work flow of core operations are carefully designed. Meanwhile, detailed standards and rules are set to guarantee the process standardization. In order to design and control the operation process, the organization normally needs to set powerful techno structure. Similarly, the middle line is also relatively bigger than other type of organizations because of large number of operators and limited span of control. The most powerful advantage of this type of organization is the high efficiency of core operations. To achieve this high efficiency, the operation core needs to be stable and relatively separated from outsides in mechanical bureaucracy organizations. As a result, such organizations often design large support part to carry out all other unnecessary operations for the operation core. The support staffs also provide service to make sure the core operators can focus on the operation. The bureaucracy means that the organization should have a clear hierarchy structure. The staffs are managed level by level in order to make the information and orders flow fluently within the organization.

3. Professional Bureaucracy Organization

One of the most significant features of professional bureaucracy organization is the highly professional core operations. Compared to the mechanical bureaucracy organization, the former has much more complicated core operations. Such core operations can hardly be divided into simple pieces of work or be monitored efficiently. Therefore, the core operators are normally more independent from other operators and have more authority power to decide how to carry out the core operation. One example of the high professional operation is a surgery operation in hospital and the doctors are operators. The surgery is highly complex and requires the doctors to be well trained and professional. The doctor can decide how to carry out the surgery according to the condition of the patient. Generally, the most suitable coordination method is skill standardization. As I have introduced, this kind of coordination is to set skill level requirement for the operators, only the qualified ones are permitted to carry out the core operation. Therefore, in the professional bureaucracy organizations, the professional level of operators is strictly controlled. To improve the professional levels of operators normally leads to a better result of the core operation. Therefore the operators are encouraged to get higher professional level by sharing experience and self-training. The techno structure is relatively small in this type of organization, because that the processes and rules of the core operations are majorly designed and decided by the external authorities. Such authorities are normally associated experts of the specific professional area. The middle line of professional bureaucracy organization is also smaller than in other type of organizations. The nature of the core operation makes it very difficult to monitor or supervise the core operators. Therefore it is not necessary to set up a large middle line structure. Similarly to mechanical organization, the professional bureaucracy organization also needs to keep the operation core stable and concentrate to core operations. As a result, a large support part is designed to help the operation core.

4. Diversified organization

Such organizations are results of decentralization of authority power. The strategy apex give out the decision making power to middle line managers in order to be more flexible and reactive to customer needs and market changes. The middle line structure becomes the strategic apex of the division, and each division develops its own configurations similar to mechanical bureaucracy organizations. The most common coordination method is output standardization. The organization set up targets and objectives of each division, and each division should decide how to achieve the objectives based on the actual situation.

Other types of organization do not really have a significant difference compared to above ones, such as the adhocracy organization, missionary organization and political organization. Each of them uses a different kind of coordination method. However, these types of organization and coordination methods are not very common in real companies. Thus we will not introduce these contents here.

We can see from the Mintzberg's organizational structure theory, that one of the fundamental aspects of classifying an organization are the characteristics of the core operation within an organization. For example, the theory suggests using a standardized process and setting regulations to manage simple and repetitive core operations. In contrast, for the complex core operations in a professional bureaucratic organization, it suggests improving the professional skill level and setting a standard professional skill level for employees to manage the core operations. It can be seen that the analysis and classification of core operations and their characteristics are important prerequisites for discussing management methods in organizations.

There is little research that classifies operations according to content, nature or characteristics; the most related one is the study of Dan and Michael (1980). In this study, the authors systematically review the relationship between organizational performance and organizational structure factors, such as span of control, management level, and so on. In this study, the authors also discuss the relationship between performance, degree of specialization and complexity of core operations. Here the definition of specialization agrees with the definition provided by Payne and Mansfield (1976) and Pugh, Hickson, Hinings and Turner (1968). They define specialization as how many job positions and departments are designed in an organization. Definition of complexity takes the opinion of Hage and Dewar (1973), in which the concept is defined as how many different professional experts in the organization. We can see that the specialization and complexity refer to the content and characteristics of activities (operations); this idea is same as Mintzberg's analysis of features in organizational core operations. Based on this idea, I have developed a classification method according to the degree of specialization and degree of complexity. This content is discussed in the next chapter.

Chapter Five: A Performance Management Framework for Chinese Commercial Banks

As mentioned in previous chapters, there is little research that systematically studies performance management in Chinese commercial banks. Moreover, bank characteristics such as risk management and external interventions are not fully considered in most performance management practices. Bank performance studies in the literature mostly focus on measuring the efficiency of commercial banks and there exists no tailor-made performance management framework for commercial banks. In this chapter, I will introduce a performance management framework for Chinese commercial banks in order to deal with some of the bank problems that were reviewed in Chapter Three. For this purpose, I connect Minzberg's organizational configuration theory to the management structure of Chinese commercial banks and then apply it to develop a performance management framework.

5.1 Organizational Configurations of the Chinese Commercial Banks

In developing our performance management framework, I will still use the six circulating steps of performance management framework initially developed by Liu et al. (2010), details can be found in Chapter Three. This framework shows the main tasks of performance management in general for Chinese commercial banks.

Simply speaking, when developing a performance management system in Chinese commercial banks, one can generally follow this six-step framework. However, this framework only provides direction and general guidance, which is not enough for practical work because it does not state how to carry out each step or who should execute it. To answer these questions, I will apply Minzberg's organizational structure theory to match the five organizational parts with the general organizational structure of Chinese commercial bank, and then discuss the detailed content of the performance management framework for Chinese commercial banks.

According to the Minzberg's organizational configurations theory, an organization has five basic parts (in later development of the theory, he adds ideology as a sixth part): strategic apex, middle line structure, techno structure, operation core and support. The form of these structures varies in different classes of organizations. In real organizations, the departments and job positions may be different, but they can generally be classified into the five basic parts of an organization according to their functions and features.

Chinese commercial banks generally use the branch system, in contrast to other organizational structures, such as manufacturers, universities, or hospitals, Chinese commercial banks normally set their head offices in capital cities, and then have many branches under the head office. For the Chinese commercial banks, they normally set many levels of branches, such as the province branch, city branch, and rural branch. Below is a demonstration of the branch system:



Figure 5.1: Branch system

The head office (or headquarters) is the highest management structure in a Chinese commercial bank. within the top management layer there are normally all types of functional departments and committees to carry out the back office operations and administration for the bank. In some commercial banks, divisions are set directly under the control of the head office. Such divisions are normally designed for developing certain bank business.

Branches are set up to develop bank business in a local area. The branch manager is the top manager of the branch, who is normally assigned by headquarters. The branch manager is responsible for the daily management and operations of the branch. Under the branch manager are usually one or several vice managers who are in charge of different bank business or risk management functions. The structure of departments in the head office are copied into the city branches and integrated into further sub-branches. For example, in the head office there are individual departments for different bank business: the personal banking business department, the credit loan department, and so on, while in the sub-branch these departments are combined to form a Business Development department, which manages several bank business simultaneously. Considering the risk management of the bank's business, the head office often sends an independent accounting and auditing director to directly monitor the business and management operations in the branch. In the branch, the front desk core operations can be classified into two groups: one is the people working on the bank's counter (including the lobby manager); the other is sales, including sales managers or product managers.

In the next part, I will discuss how to match the organizational structure with the commercial bank's structure. It needs to be emphasized beforehand that the actual work content of some job positions in commercial banks may be matched to different organizational structures. For example, in a commercial bank, the branch managers are considered as middle line structure of the overall bank, since the most important responsibility of a branch manager is to deploy and execute the strategy of headquarters. Although the branch manager could make local strategy for the branch, and help the strategy making of the whole bank, he/she should not be considered as the strategic apex of the commercial bank.

According to Minzberg's (1979) organizational configuration theory, the top managers at headquarters (and possibly the managers and vice managers in the branches) of Chinese commercial banks could be considered as the strategic apex, since they are responsible for defining strategy. In a few large scale commercial banks, some branch managers only execute the strategies made by the upper management; strategy-making power is centralized to upper level management. In this case, the main duty of the branch manager is to assist and coordinate the development of bank business for the branch and the manager is not considered part of the strategic apex of the branch. In general, for a Chinese commercial bank, the strategic apex generally refers to those individuals in higher administration group, for example, the governing body, top officers, and top managers.

Managers of departments at headquarters and branch managers could sometimes be considered as the middle line structure of a Chinese commercial bank. Here, the main function of the middle line structure is to deploy strategy, collect feedback, and manage the core operations.

The core operations of a commercial bank are those which directly participate in the bank's business development and operations. Thus, it should include: the front desk operators (counter operators and lobby managers); sales people (sales managers and product managers); traders of other bank business (e.g. investment banking business) and employees in the middle and back office (staff carrying out approval and audit processes, supervision, and inspections).

The techno structure sets the regulations and designs the operation procedures for the organization. In a commercial bank, the actual techno structure includes both some departments and outer institutions, for example: the CBRC, board of supervisors, and law and risk management personnel. The internal techno structure might be different in different

commercial banks due to the different configuration of the functional departments, but the external techno structure of the commercial bank is generally CBRC.

The support part in a commercial bank refers to the individuals or departments which help other structure to focus on their operations. Such as IT department, HR department and management office.

Minzberg's Configuration	Commercial banks personnel
Strategy apex	Top managers at headquarters
Techno structure	CBRC and risk management departments
Operation core	Counter operators, sales person, and experts
Middle line structure	Department managers and branch managers
Support part	IT department, HR department, and management office

Figure 5.2: Summary table of personnel to Minzberg's configuration

From the perspective of organizational configuration theory, the structure of Chinese commercial banks is more like the characteristics of a Mechanical Bureaucracy Organization. Its strategy is mainly developed by the strategy apex (top managers at headquarters), then deployed and supervised by middle management (branch managers and heads of departments at headquarters). There is a powerful techno structure (CBRC and risk management departments) and the core operation is relatively simple and easy to control (mainly handled by the counter operators). However, the core operations of Chinese commercial banks are diverse. There are simple and mechanical operations as well as flexible marketing and sales activities. In fact, the marketing and sales activities are major components of the daily core operations in a commercial bank. Although there are some standardized processes for sales managers and product managers, the marketing and sales

activities are more reliant on the personnel's resourcefulness to handle flexible and complex situations. The managers are required to use appropriate sales methods when dealing with different type of customers. Thus, process standardization is not helpful to marketing and sales activities and the supervision, monitoring, and guiding methods are different than in Mechanic Bureaucracy Organizations. Actually, besides the marketing and sales activities, there are also highly specialized operations which require many years of professional training (for example the investment banking business operations). Due to the diversity of a bank's core operations, when I design the performance management system for Chinese commercial banks, appropriate management approaches should be selected for different parts of the core operations.

5.2 Classification of Complexity of Bank Core Operations

Based on the above discussion, we can see that the performance management method is closely related to the nature and specific work content of the organization. In order to describe this relationship and show the differences of various types of work content in performance management clearly, I carried out a classification of operations in the organization. According to the literature review from the previous chapter, the work content in the organization can be classified based on the degree of specialization and variability. The higher the degree of specialization, the more detailed the division of work. In general, the content of specialized work also tends to be simple and repetitive. In contrast, the higher the degree of variability, the more skill types that are required to complete the work. The nature of work can be described roughly by the definition of specialization, however, the specific features of the operation cannot be described. So, I adopted and adjusted the concept of specialization for work classification:

The degree of specialization can be decided using the professional training time needed for certain work (Payne & Mansfield 1976; Hinings, & Turner 1968).

The concept of variability is too general and its meaning may contain many aspects. Therefore, here I only adopted the part that describes the characteristics and nature of work (Hage and Dewar 1973).

The degree of variability is described by the variety of work processes and the realization methods.

For example, an operation can be achieved in a standardized manner or it can be achieved in a flexible and resourceful manner. From the performance management point of view, I propose the following work classification rules as the extension of these two definitions, see Figure 5.3:

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Degree of specialization	High degree of specialization, low degree of variability (Such as accounting operations)	High degree of specialization, high degree of variability (Such as research and development operations)
	Low degree of specialization, low degree of variability (Such as operations in assembly line)	Low degree of specialization, high degree of variability (such as sales operations)

Figure 5.3: Work classification figure

We can see that the core operations in Minzberg's organization theory can also be analysed by using the two dimensions, in order to summarize the effective management measures for different types of core operations. According to the classification method mentioned above, the work content of the core operations in Chinese commercial banks can be generally classified into three types. The first type is the operating work, which is simple, mechanical and repetitive. It includes the branch counter operators, accountants, cashiers and parts of supervision and audit operations in the middle and back office. The second type is the bank product sales, customer service, and management functions, which is high in variability. It usually includes customer managers, product managers, and lobby managers, etc. The third type is the highly professional business operations, which is more technical and highly specialized, such as the investment banking operations. It usually includes the specialists that deal with these businesses.

For the first type of operations, since the work content is mostly simple and repetitive, it does not require much professional training. This type of work usually has a clear operation process, so it is easy to regulate and supervise. This type of work is similar to the core operations of a Mechanic Bureaucracy Organization in Minzberg's organization structure theory (Mintzberg 1993). For this type of work, organization structure theory shows that it is suitable to use specific and detailed regulations to carry out daily management activities. In terms of supervision, since the work content and process is simple and easy to understand, direct supervision is usually adopted by the supervisors. The training is often carried out on a large scale and in a formalized style on a regular basis. The content of the training is mainly about the related regulations and operational skills. In terms of risk management, the main focus is on operational risk which comes from operation mistakes. The commercial banks usually set up an independent post-supervision department to do risk management. In the paper "Performance Management of Mechanic Bureaucracy Organizations", Meng (2012) explained the key points in the performance management of core operations, which are: mechanical, simple, and repetitive. The details can be seen in Minzberg (1993).

For the second type of operation, the work content is mostly not highly specialized, which means that one does not need to go through many years of professional training to meet the job requirements. Usually, induction training of several weeks or months will be enough. However, it is not so easy to be competent, since it requires staff to respond flexibly to a variety of situations, sometimes using their personal charm and taking advantage of their social relationships. Compared with simple and repeated operations, to complete such operations, the manager needs to give employees more authority and freedom. However, from the previous literature review, I found that moral hazards often occur in product sales in commercial banks. The sales person often takes advantage of their position and damages the interests of commercial banks for personal gain. Also, the case happens from time to time that a sales person will cheat the customers and damage the reputation of commercial banks to help improve their individual performance. Such cases are often discovered after a long period of time. Therefore, it causes a lot of difficulty for commercial banks to carry out reputation risk control. For this kind of problem, some banks attempt to partly regulate the processes of sale operations, but the results are not satisfactory. Since the sales work needs the person to be flexible and adjustable to customers' requirements, to control the process of sales work may be beneficial from a risk management perspective, it can negatively affects the sales person's performance. Considering the features of sales work, the supervision is often carried out on a one to one basis. For example, the sales directors carry out reviews and survey to customers. For training, formalized sales skills training and product information training are often reported to be ineffective; it cannot significantly improve the performance of the sales people. In contrast, informal training, such as sales experience sharing and mentoring from senior sales people has been shown to be effective (Zhou 2006).

The third type of operations mostly exists in relatively independent departments in commercial banks, such as the investment banking department. Not all commercial banks carry out such business. Since this kind of business operation requires generally higher professional skills, it is very difficult for general managers to understand the specific content of the business operations. Therefore, most commercial banks use decentralized management for this type of operation. They use only the work output as the performance measurement. The supervision is often carried out by a director who knows the specific professional area. Further professional training is reported to be very helpful in improving work performance (Minzberg 1984).

On the basis of classifying organizations, Minzberg's organizational structure theory proposed some management methods for different types of organizations. It helps us with designing the performance management framework in Chinese commercial banks. It provides some insights into organizational structure and management in different organizations. However, this framework is not detailed enough for us to design the performance management system. Since the enterprises in the real world are very complicated, often their structures cannot completely fit within the classic structures of organizations. Thus, when designing the performance management framework, the specific situation of the organization must be considered and analysed, and the classification of the work in different parts needs to be identified in order to choose suitable management tools. Therefore, I will carry out the design and analysis of the performance management framework in Chinese commercial banks using Minzberg's organization structure theory and classification of commercial banks' core operations.

According to the features in commercial banks' core operations, the organization structure and the above core operation classification, I propose the below six steps of building a performance management system for Chinese commercial banks. These six steps are initially developed from the classical performance management framework, but with more detailed and tailored activities for Chinese commercial banks. The difference is discussed in each step in the following section.

5.3 A Performance Management Framework for Chinese Commercial banks

Existing performance management frameworks only provide limited guidelines for commercial banks. Therefore, I wish to develop a more practical framework which can answer three fundamental questions for performance management in Chinese commercial banks: what should a commercial bank do; who is responsible to it and how to carry out the operations. 'What to do?' can be found in Figure 5.1; 'Who should do it?' and 'How to do it?' can be taken from the analysis of organizational configuration theory and corresponding commercial bank job positions. In the following discussion, I firstly assume that the Chinese commercial bank is a general, medium-sized bank. It should have a stable internal structure and external market environment. It should be able to develop its own strategies independently and carry out general commercial bank business. Based on such assumptions, we can discuss the detailed content of the six-step performance management framework.

Step one: Strategy formulation and intervention (appreciation)

As I have reviewed in Chapter Three, commercial banks deal with risks, thus risk management is an important part and a key feature for such organizations. Therefore, in the strategic level of Chinese commercial banks, risk management and risk prevention should be fully taken into account (Hellwig 1995). In the process of strategy development, commercial bank strategy should not only focus on bank business development, but also consider risk prevention as a strategic priority. For most of the traditional commercial bank business, the level of risk is closely related to the level of profit. The decision of how to balance risk and profit may affect the strategic development of a commercial bank.

In addition, Chinese commercial banks are generally supervised by regulatory authorities, higher administrative departments, and even international banking associations (Li 2003). Therefore, during the process of strategy development, a wide range of external factors should be considered, such as how to meet the needs and requirements of regulatory authorities, how to develop and implement their own strategic development plan based on the macro-strategy of the parent organization, and so on.

In summary, we can see that the strategy makers in Chinese commercial banks should have a deep understanding of all kinds of bank business, as well as banking risks. In addition, the communication and contact with other institutions, especially with regulatory institutions, is one of the key points that should be considered in the strategy generating process. For long-term development, strategy makers also need to have an international perspective in order to understand the dynamics of the world's banking industry.

Therefore, the strategy development process in Chinese commercial banks not only needs to take the market and customer information into consideration, but also requires the strategy maker to have an overall vision of the organization's development. It includes the strategic balance of the profits and risks, the comprehensive considerations of internal developments and external regulatory affairs, and the correct understanding of the direction of international banking development (Ge 2007; Zhang 2010). Based on these requirements, strategy development in Chinese commercial banks should be mainly carried out by the strategic apex, since the other structures cannot fulfil the above requirements. The employees from the other structures may be able to have access to local market and customer information and so they may provide information needed to facilitate the decision making through formal communication channels. However, they are rarely involved in high level strategy directly. Meanwhile, I have demonstrated that the core operations of commercial banks are diverse. It is difficult for the strategic apex to understand all aspects of core operations. Therefore, during the process of strategy development, the strategy apex normally needs to discuss with middle management and then make small adjustments to the strategies for the purpose of fitting into the actual situation of the organization. Based on the previous discussions about the components of Chinese commercial banks' strategic apex, the strategy development should be mainly carried out by the strategic apex, which includes the board of directors, presidents, and vice presidents (in most situations, the top level managers are all members of the board). Typically, the overall strategy should be developed by the board of directors at headquarters. Then the vice presidents and the department heads work out the specific content of the strategy through discussions. The detailed strategy would then be approved and finalized by the board of directors. Employees from each department at headquarters are not much help to the strategy development process, but for the departments with a high degree of specialization and a high degree of variability (HH for short), the department professional authority will participate in strategy development

related to their field as representatives. However, in most cases, the department professional authority is the head of the department. For example, the head of investment banking department may also be the senior expert in this department.

After the overall strategy from headquarters is formed, the strategy of each branch will be worked out following the overall strategy. The branch strategy still needs to get approval from headquarters. Usually, the head of the branch and sales manager representative will participate in the process of developing the branch strategy. Due to the high degree of variability of sales activities, the strategy makers cannot get all the information needed for setting up the local strategy, such as the customers' thoughts and feedback on a product, or the specific sales tactics and process, etc. The counter operators (who carry out the low degree of specialization and variability operations) rarely participate in the process of strategy development, because their work content is simple and its information is easy to get. After the overall strategy is formed, the middle managers can fine tune the strategy based on the working experience.

Step Two: Strategy decomposition and deployment

In Chinese commercial banks, the strategy decomposition is carried out level by level based on the management structure. For example, the vice presidents' strategy is decomposed from the strategy of the president; the strategy for heads of department is decomposed from the vice presidents' strategy, etc. There are various ways of strategy decomposition. I have summarized some of them in the previous literature review, such as the BSC (Kaplan and Norton 1996) or decomposition through processes (Luo 2008), etc. With the continuous development of the management methods and management theories, more and more Chinese commercial banks adopt the strategy decomposition and deployment method based on the process standardization (Mintzberg 1993). In the strategy development process I described above, the strategy development and decomposition are carried out at the same time for the departments at headquarters, since the head of each department is involved in the strategy development process and they already clearly understand the part of strategy that they are responsible for. Therefore, they only need to specify and clarify the strategy within the department and deploy the specific missions to employees in the department.

In branches, the strategy decomposition and deployment process is usually carried out by the top managers in the branches, who are considered as the middle management of the organization. For the first type of operations (Low degree of specialization and Low degree of variability operations, LL for short) mentioned previously, like the counter operations, the strategy decomposition and deployment is carried out by the direct superior based in the operation process or the job responsibility. Since such operations are usually well divided and the responsibility of each process is clear, it is simple to decompose the strategy based on the process or the job responsibility. However, for the second type of operations (Low degree of specialization and High degree of variability operations), like sales activities, the decomposition and deployment are usually carried out by the senior sales manager. Due to different sales styles, processes and resources, only the direct senior manager can get detailed information in order to make suitable decisions about the strategy decomposition and deployment.

For the third type of operations with a high degree of specialization (High degree of specialization and High degree of variability operations), since the expert of such operations participates in the strategy formulation process, it is easy for them to understand their part of the strategy. Therefore, the strategy decomposition and deployment process is mainly carried out by those experts for HH operations.

Based on the above discussions, I can conclude the following about the process of strategy formulation, decomposition and deployment in Chinese commercial banks: The strategy formulation process is mainly carried out by the top level managers, such as the president and the vice presidents (Mintzberg 1993). After the formation of the overall strategy, the execution is often carried out by middle managers who are usually the head of departments in headquarters, or the top managers in branches. In this process, the employees from the core operations are usually not involved, but the customer information is collected and
organized through core staff and then provided to decision makers to facilitate the strategy formulation. The strategy decomposition and deployment are carried out level by level, and relies on each level of middle line structure. Here, in addition to decomposition based on process standardization, the front-line managers also play a key role, since they know the core operations better. Therefore, they have some say when it comes to specific execution.

Step Three: Performance measurement

Following the above procedures, I can decompose and deploy the overall strategy of a commercial bank, and then identify key processes which facilitate the bank's strategy. Corresponding key performance indicators can be generated from those key process and form the performance measurement system. There are several approaches to carry out such a process; I have reviewed some widely accepted methods in Chapter Three, such as the balanced scorecard and soft system methodology (Mingers and Taylor 1992).

It can be summarized from the literature review that a KPI-driven performance measurement system has been widely used in Chinese commercial banks. Currently the major Chinese commercial banks have all developed their own KPI performance measurement systems (Guo 2003). The selection of KPIs is basically the same, with small differences. In the design process of a KPI system, not only business development, but also other aspects should be considered, such as the CBRC requirements and the IT and software/hardware level of the commercial bank (Wu 2009). It is quite common to have external experts to design the bank performance indicator system (Li 2004), but normally in Chinese commercial banks, the KPIs are still developed based on strategy decomposition. However, the process and the actual method (used to decompose the strategy) depends on the specific case. I will discuss different application of methods in the case study chapter (Chapter six and eight).

Step Four: Performance planning

Performance planning is a process for all levels of employees to discuss and set up their work plan, provide guidance, monitor work progress and design incentive systems. In this step, an employee normally discusses with the senior manager about the recent work plan. The employee should describe how to carry out the work plan, how to overcome the potential problems, and what assistance may be needed. The senior manager should deploy the strategies and objectives to the employee and reach a consensus about how to carry out the employee's work plan. Meanwhile, feedback is given based on the evaluation of previous work progress, and the manager should provide guidance and motivate the employee to achieve a better performance in the future. The specific content of the performance plan depends on the target job position, but in general, the key activities in a performance plan should include: supervision activities, guidance activities, and motivation activities (as was concluded in Chapter Three). The supervision activity is very important in Chinese commercial banks, as it is one of the most powerful means for risk management. Since there are several kinds of core operations in Chinese commercial banks, and each kind has a different emphasis in risk management, the actual supervision activity that needs to be discussed differs according to the specific circumstances. The guidance activities in Chinese commercial banks are normally done through formal training. There are several kinds of training: pre-position training, skills training, special (project-based) training, and individual coaching (Yan and Cao 2002). The pre-position training is normally organized by the HR department in commercial banks after the annual recruitment of new employees. The content of training is designed for different job positions. For example, the training for counter operators generally includes accounting standards, bank regulations and basic operation processes. Such content is usually unified and basic. The skills training is mainly provided by different heads of departments and the training targets are normally sales managers or product managers. Such training has a regular timetable, and the effect of the training is examined by tests or feedback from trainees. The special training is normally provided by functional departments and organized by the HR department. The trainer and trainee depend on the content of the training. The content of such training normally closely related to the current issues of the commercial bank. For example, a commercial bank

frequently has an operational risk accident, so then the operational risk management training is designed for the operators as well as front-line managers. The individual coaching is rather special: when an employee repeatedly fails the performance evaluation, individual coaching is used. The content of such training is normally designed according to the actual situation. Individual coaching is normally carried out by the employee's senior manager.

In addition to these formal trainings, informal guidance is also very common (Wang 2006). When an employee makes a work plan, the senior manager often provides guidance about how to carry out the work plan and what aspects should be considered. Such guidance does not have to be formal.

Here I will discuss how to carry out these key activities in Chinese commercial banks for different kinds of core operations. For the simple and repetitive LL operations, such as counter operations, the supervision activities should be carried out by direct line managers. Here, the direct line manager refers to the chief accountant who is normally the manager of the counter operators. The daily business operations of the branch are normally monitored by the inspection and supervision departments (e.g. post-supervision department) from a higher level in the branch or headquarters. Operational risk management is the key for this kind of core operation. Many methods could be applied here to manage the operational risk; such methods can be found in Chapter Two. Since the LL operations are normally simple and easy to operate, the pre-job training and regular operation skills training would be enough. The quality (accuracy) and quantity of operations are directly linked to the operator's performance; their salaries are decided mostly based on these two criteria.

Compared with the LL operations, the LH operations (such as sales activities) are more difficult to monitor or supervise. Therefore, in most cases only the results (rather than process) of LH operations are monitored and tracked. The results of LH operations are normally monitored by the direct senior manager (normally the head of branch or the head of sales department). In some commercial banks with a well-developed IT system, the LH operations are supervised by technical means.

Currently, Chinese commercial banks are generally trying to standardize the sales process. Regulations and guidelines are set in order to control the sales process (Liu 2002), but the complexity of sales activities has met with little success. As a result, the supervision power is shifted to the bank's customers. Customer feedback is considered an important aspect of performance for sales managers and product managers. The result is closely linked to the final performance of these managers in order to guarantee the efficiency and effectiveness of customer supervision through a formal incentive system.

Formal and regular skill training provides little help for LH sales operations, since each and every customer is a separate and individual case and there is no unified approach for all customers. Therefore, the sales managers and product managers need to deal with complex situations based on their social skills and resourcefulness, which can be hardly obtained through formal training. In this case, social networks and personal experience of senior sales staff are often more instructive.

Meanwhile, it is necessary to provide training in credit risk management for sales people in commercial banks. Such training not only helps them to develop business more effectively, but also avoids the potential risk of customer default. Commercial banks may apply different standards and management methods of credit risk management. A detailed description of credit risk management can be found in Chapter Two.

The LH core operations rely highly on commission and sales-related performance bonuses. If they fail to achieve their sales objective, their income will be greatly affected.

For the highly-specialized operations, such as investment banking business operations, the supervision activities are normally carried out by the senior manager who is directly responsible for this kind of business. In most cases, the senior manager is also the expert in

the corresponding business. It is difficult for other structures to understand the specific content of such highly specialized operations; therefore the supervision activities are left to those professionals.

The regular skills training and special training in economic policy are believed to be more important and rewarding for the highly specialized operators. In addition, risk management training is required for those operators, since their operations are closely related to the market risk, liquidity risk, and reputation risk of the commercial bank. The content of risk management can be found in Chapter Two. Their income mainly consists of commission and subsidies; basically, the higher professional level, the greater the subsidy.

Generally, in addition to economic incentives, other types of incentives are being used more and more in Chinese commercial banks. Such incentives include organizational culture and collective identity, which are proven to be quite useful under certain circumstances (Zhou and Guo 2006).

Step Five and Six: Performance assessment and feedback

In Chinese commercial banks, the formal assessment of core operations is normally done monthly. For the specific application of the assessment results, the organization generally has a formal system to promote, train, or fire its employees.

For the LL operations, since the content of such operations is simple and easy to control, and the processes and results are easy to understand, the performance assessment and feedback are normally carried out on a daily basis. For example, the counter operators get feedback from the chief accountant every day. For the LH operators, since the business development normally takes a long time, and the process cannot be standardized, the assessment and feedback is normally carried out every month based on the results of the operations. Sometimes there is also case-related assessment and feedback due to unforeseen circumstances. For the highly specialized operations, the assessment and feedback cycle are much longer, normally quarterly or annually, since such operations normally takes months to finish.

The above describes the general performance management activities in Chinese commercial banks. However, it is difficult to summarize the patterns or laws without a specific case. Therefore, more details will be discussed and reflected in the case studies.

For the convenience of demonstration, I summarize the above content into the table below, which contains the important points of how and who (which organizational configuration) to carry out the performance management activities in general Chinese commercial banks:

Performance		Ma	nagement paths	Responsil	ole	
Management				structures		
	Strategy	1.	Formulate top strategy of bank according to the national economic police and banking regulator, risk assessments, and local market environments.	Strategic	apex	(the
	formulation	2.	Strategy makers in Chinese commercial banks should have a deep understanding of all kinds of bank business, as well as banking risks. In addition, the communication and contact	top level	mana	gers;
			with other institutions, especially with regulatory institutions, is one of the key points that should be considered in the strategy generating process. For the long-term development,	members	of	the
			strategy makers also need to have an international perspective in order to understand the dynamics of the world's banking industry.	board);	heads	of
		3.	The strategy development in Chinese commercial banks should be mainly carried out by the strategic apex, since the other structures cannot fulfill the above requirements.	departmen	nts; h	eads
		4.	The strategy apex normally needs to discuss with middle management and then make small adjustments to the strategies in order to adapt to the actual situation of the organization.	of branch	es	
one		5.	The overall strategy should be developed by the board of directors at headquarters. Then the vice presidents and the department heads work out the specific content of the strategy			
step			through discussions			
		6.	Strategies of departments are formulated based on the overall strategy of bank, and discussed with some department heads. For HH operations, department staffs (experts) are			
			involved in formulation process. The detailed strategy would then be approved and finalized by the board of directors			
		7.	After the overall strategy from headquarters is formed, the strategy of each branch will be worked out following the overall strategy. The branch strategy still needs to get approval			
			from headquarters.			
		8.	The head of the branch and sales manager representative will participate in the process of developing the branch strategy.			
		9.	Staffs who perform LL operations rarely participate in strategy formulation process, nether in branch or in head quarter departments.			
	Strategy	1.	Strategy decomposition is carried out level by level based on the management structure.	Strategic	apex	
	decomposition	2.	There are various ways of strategy decomposition such as the balanced scorecard and soft system methodology, or following the operation processes.	Middle Li	ne	
	and deployment	3.	The strategy development and decomposition are carried out at the same time for the departments at headquarters, since the head of each department is involved in the strategy	Tech		
e			development process, and they already clearly understand the part of strategy that they are responsible for	Departme	nts	
thr		4.	In branches, the strategy decomposition and deployment process is usually carried out by the top managers in the branches, who are considered as the middle management of the			
and			organization.			
two		5.				
tep 1			deployment is carried out by the direct superior based in the operation process or the job responsibility.			
Ň		6.	For the second type of operations (LH operations), like sales activities, the decomposition and deployment are usually carried out by the senior sales manager.			
		7.	For the third type of operations with a high degree of specialization (HH operations), since the expert of such operations participates in the strategy formulation process, it is easy			
			for them to understand their part of the strategy. Therefore, the strategy decomposition and deployment process is mainly carried out by those experts for HH operations.			
		8.	Some suggestions for revision will be proposed from lower level managers to ensure technical feasibility, especially in branches.			
	Performance	1.	We can decompose and deploy the overall strategy of a commercial bank, and then identify key processes which facilitate the bank's strategy.	Strategic	apex	
	measurement	2.	Corresponding key performance indicators can be generated from those key process and form the performance measurement system.	Middle Li	ne	
		3.	The BSC method can be applied for the purpose of decomposing organizational objectives from the four perspectives, and then develops more detailed sub-strategies for each	Tech		
			perspective.	Departme	nts	and
L		4.	The soft system methodology starts from the basic logic questions of realizing organizational strategy, keep asking "what to do", "how to do" and "why to do" in order to	external e	xperts	
for			decompose the overall strategy into detailed operations			
Step		5.	After we get detailed information of key processes using the above methods, we could further generate key performance indicators though 3E theory. The 3E theory considers			
•			performance from the perspective of efficacy, efficiency and effectiveness, and then generates indicators from each perspective.			
		6.	Currently the major Chinese commercial banks have all developed their own KPI systems. The KPIs are basically the same, with small differences.			
		7.	In the design process of a KPI system, not only business development, but also other aspects should be considered, such as the CBRC requirements and the IT and hardware level			
			of the commercial bank.			
		8.	It is quite common to have external experts to design the bank performance indicator system.			

Table 5.4: Performance Management Framework for Chinese Commercial Bank continued on next page

	1			T										
		Management path		Actors	ctors Management paths		Actors		Management paths		Actors			
		(for LH operations: sales managers)		(for LL operations: accountant)				(for HH operations: department staff)						
Step five	Performance planning	(fo 1. 2. 3. 4. 5.	In most cases only the results (rather than process) of LH operations are monitored and tracked. The results of LH operations are normally monitored by the direct senior manager (normally the head of branch or the head of sales department). In some commercial banks with a well-developed IT system, the LH operations are supervised by technical means. The customers' feedback is considered an important aspect of performance for sales managers and product managers. The result is closely linked to the final performance. The formal and regular skill training provides little help since each and every customer is a separate and individual case and there is no unified approach for all customers. Social networks and personal experience of senior sales staff are often more instructive than other training. It is necessary to provide training in credit risk management for sales people in commercial banks. Such training not only helps them to develop business more effectively, but	Tech. Departments Middle Line (majorly the head of branches)	(for 1. 2. 3. 4.	r LL operations: accountant) The supervision activities should be carried out by direct line managers. Here, the direct line manager refers to the chief accountant who is normally the manager of the counter operators. The daily business operations of the branch are normally monitored by the inspection and supervision departments (e.g. post-supervision department) from a higher level in the branch or headquarters. Operational risk management is the key for this kind of core operation. Since the LL operations are normally simple and easy to operate, the pre-job training and regular operation skills training would be enough.	Internal external techno structure; manager; middle structure.	and line line	(for 1. 2. 3.	HH operations: departm The supervision and normally carried out manager who is direct for this kind of busic cases, the senior manager expert in the correspont The regular skills train training in economic believed to be more rewarding for the hig operators. Risk management train for those operators operations are closely market risk, liquid reputation risk of th bank. Their income mainl	ment staff) activities by the sectly respon- iness. In mager is also noting busin ning and sp ic policy important shly special ning is reques, since v related to lity risk he comme	are enior sible most o the eess. ecial are and lized uired their o the and ercial	Directors related department external techno structure s as CBRC.	of ts, such
		6.	also avoids the potential risk of customer default. The LH core operations rely highly on commission and sales-related performance bonuses. If they fail to achieve their sales objective, their income will be greatly affected.		5.	The quality (accuracy) and quantity of operations are directly linked to the operator's performance; their salaries are decided mostly based on these two criteria.				commission and subsi the higher profession greater the subsidy	idies; basic nal level,	the		
	Performance	1.	1. In Chinese commercial banks, the assessment of core operations is normally done monthly. For the specific application of the assessment results, the organization generally has a formal Direct								Directors	of		
	assessment		system to promote, train or fire its employees.							department	ts;			
Step six	and	2.	For the LL operations, the performance assessment and feedback are normally carried out on a daily basis.							head	of			
	feedback	3.	For the LH operators, since the business development norma	: the LH operators, since the business development normally takes a long time, and the process cannot be standardized, the assessment and feedback is normally carried out every month branches								branches		
		based on the results of the operations.4. For the highly specialized operations, the assessment and feedback cycle are much longer, normally quarterly or annually, since such operations normally takes months to finish.												

Table 5.4: Performance Management Framework for Chinese Commercial Bank

5.4 Contingency Factors

In the above discussion, it was assumed that the Chinese commercial bank in question was a traditional and classic Chinese commercial bank, with a stable environment, strategy, and organizational structure. However in practice, commercial banks operate in different environments, the feasible implementations are contingent on the actual situation. Therefore, I concluded some contingency factors, such as the size of the organization, adaptability, resources, strategy and IT (Fisher 1998). In the following section, serval critical factors will be examined. These factors will affect the design and further implementation of our framework. Among these factors, the most important one should be the change and innovations in the internal and external management environment, since they greatly affect the performance management approach in Chinese commercial banks. This content will be discussed in detail in the next chapter.

Stable organizational structure and environment

In the above discussions, the stable organizational structure and environment is a fundamental assumption. A stable organizational structure means that the department structure and job positions are clear and fixed, with pre-set regulations and processes for business, operations and management. Based on this assumption, the actors, beneficiaries and stakeholders can be clearly identified in order to develop the performance management framework.

If this assumption does not hold, e.g. when building process-oriented banks, the operation process is constantly optimizing, which leads to a rapid change of organizational structures. Correspondingly, the department structures and even the job responsibilities are adjusted to fit the optimized process. The rapid change in organizational structure makes it difficult to identify the actors, beneficiaries, and stakeholders of each process. The development of a performance management framework is therefore affected in many ways. For example, the decomposition method may be changed in the performance management framework. In a stable organizational structure and environment, the balanced scorecard (BSC) method can be applied to decompose the strategy. However, the BSC method is not suitable and cannot be applied in a rapidly changing organizational structure and environment. In the next chapter, I will introduce how to develop a performance management framework in a rapidly changing organizational environment.

Size

The above analysis is based on medium-sized Chinese commercial banks, which means that the commercial banks normally have a headquarters and several branches. Such banks are very common for Chinese local commercial banks, which are normally transformed from urban and rural credit cooperatives. Compared with the state-owned large commercial banks, these medium-sized commercial banks have a flatter management structure and less administrative departments. However, as the commercial banks develop and expand, the degree of management formalization increases, with more detailed and comprehensive rules and regulations, as well as clearer job responsibilities and division of labour. From the perspective of performance management, the larger commercial banks are more likely to apply formal approaches in the six steps, based on standardized process, and record the process in formal documents. In contrast, the smaller commercial banks tend to apply informal approaches in the six steps. The characteristics of the organizational configurations are not very clear. Sometimes, the branch manager is also the main salesman. Therefore, in the performance management framework, the content of each step will need to be adjusted to fit the specific situation.

External factors

The operation and development of Chinese commercial banks are always affected by some external factors. The most important one is the CBRC. The CBRC directs the development of the Chinese banking sector, which tends to affect all aspects of Chinese commercial banks, from strategy formulation to business development. For example, the concept of the process-oriented bank was first suggested by the chairman of the CBRC in the annual meeting of Chinese banking industry in Shanghai. As a result, the process-oriented banking reform has taken place in all the major Chinese commercial banks. In addition to the CBRC, the government (especially the local government) also has a huge influence over commercial banks. In response to the call for supporting the local economy and industries, many Chinese commercial banks will take into account the requirement of government developing strategy (Ge 2000). For example, the commercial banks need to carry out agricultural loan business and SME (small and medium sized enterprise) loan business, which are not really profitable but compulsory for some of the Chinese commercial banks.

From the perspective of organizational configuration theory, the CBRC is considered an important external techno structure, which, to some extent, affects the strategy formulation process. The government has even more influence over the organizational structure of Chinese commercial banks. Many Chinese commercial banks established a department specifically to deal with the government's requirements, which means that the core operations of those Chinese commercial banks are affected by the government. Therefore, the development of the performance management framework should take into account the influence of external factors such as the CBRC and the government, as such influence may lead to changes in key performance indicator selection and the performance assessment process.

Technology

The change or development of hardware and software could lead to a revolution of managing performance for commercial banks. The applications of new technologies may affect many aspects of risk management in Chinese commercial banks, such as supervision methods and process control methods. It may also provide powerful tools to evaluate the credit situation of bank customers. Moreover, as the IT system develops, the working processes of core operations would be more automated and regulated, the less monitoring and supervision is required. In Chapter Eight I will introduce a commercial bank using its independently-developed supervision and monitoring system to carry out daily performance

management operations, which shows how technologies change the ways of managing performance.

5.5 Conclusion

Based on the above contents, it can be seen that our framework explains the basic but essential parts of how to manage the performance in Chinese commercial banks. The organizational configuration theory (Mintzberg 1993) and the performance management framework were applied to explain and analyse the organizational configurations in Chinese commercial banks, especially focusing on 'who should do it?' and 'how to do it?' in the six steps of performance management.

However, as has been discussed above, the method and process I applied in developing the performance management framework was based on the assumption of a stable management structure in the organization. The recent ongoing reform of process-oriented banking has taken place in many Chinese commercial banks, and not only did the management structure rapidly change during the reform, but also the management style and methods. Since such changes are related to many aspects of the bank's daily operations and management, the rapidly changing situation will last for a long time. In this case, some performance management methods cannot be applied in the design of a performance management system for Chinese commercial banks, such as the balanced scorecard. This is because the principle of the BSC method is in conflict with the change and innovation of the organizational structure (this will be discussed in Chapter Seven). In Chapter Seven, I will introduce a new method to deal with the problems of traditional methods in a performance management framework. This method can be used as a powerful tool in the performance management of Chinese commercial banks. It starts from building a performance tree of the bank in order to decompose and analyse the performance generation process in the bank. The basic principle of this method is consistent with the process-oriented banking system; therefore it is suitable for developing the performance management system for Chinese commercial banks during the process-oriented bank reform.

Chapter Six: Case Study of S Bank

S bank is located in Sanmenxia in the Henan Province of China and was founded in 1980. It is a city-level branch of the Agricultural Bank of China. As a city-level branch, it manages several branches at the county level and has about 500 employees. S bank is one of the oldest commercial banks in the city and plays an important role in the local banking market. With years of development, the competition in the banking industry is becoming more and more intense in the local market. S bank feels competition from its peers is growing. The development speed of S bank is falling behind other local banks, and its performance is also not satisfactory. Responding to the invitation from the top managers of S bank, our team came to the city-level headquarters to carry out a performance management consultation. The consult team is formed by Professor Steve Liu and me. Professor Liu is the leader of our team who guides the overall process of this project and supervises my progress during the project. As the system designer and project coordinator of the term, I arrange and carry out interviews with the managers of S bank, design and adjust performance management system, and help the bank to implement the framework. The purpose of this consultation is mainly to investigate and diagnose the bank's current state and the existing problems in management, especially performance management, and to propose suggestions for improvement. Since S bank is a branch of the Agricultural Bank of China, its strategy, organizational structure, personnel assignment, and job position design are all directly managed by headquarters and the provincial branch. Its organizational structure is relatively stable, which is suitable for the performance management framework for a general commercial bank mentioned in Chapter Five. In the designing stage discussed latter, the general framework presented in Chapter Five will be applied.

6.1 Project Summary

As was mentioned above, in this project, our purpose is to make improvements to the current performance system of S bank. In order to do this, I firstly need to interview the top

management about the current situation and major problems of S bank. Our framework will be compared to the current performance management practice so that the possible improvements could be made. This project has three stages: 1) information collection; 2) design of a new performance management system; and 3) implementation and suggestions.

The first stage aimed to identify the current organizational strategy and objective of S bank. I will also try to understand how the performance is managed in S bank and explore the main issues of operations. The process is carried out by in-depth interviews with employees from top to bottom level of the bank.

In design stage, our commercial bank performance management framework was applied to S bank based on the information I collected. The performance management framework included six circulating steps, as discussed in Chapter Five. Based on the performance management framework and current issues of S bank, I proposed some improvement plans after many interviews and meeting between the project team and bank managers.

In the implementation and suggestions stage, due to resource and labour constraints, the project group are unable to execute the improvement plans, and the implementations exceed the scope of my dissertation. However, based on the understanding of current performance management practice and our framework, the potential difficulties of implementation can be discussed and some suggestions will be given in order to improve current performance management practices in S bank.

The case of S bank is a classic one, which does not require many adjustments or changes to our performance management framework presented in Chapter Five. S bank could carry out the improvements and implementation by itself, and thus the implementation was given to S bank, although I have been providing help and advice as described later.

6.2 Stage One: Information Collection

Here, information collection was through in-depth interviews and a questionnaire. The in-depth interviews were carried out with the senior managers, heads of departments in the administrative branch, and the branch managers' representatives, as well as representatives from the department and front-line employees. They were used to understand the overall situation, business development strategy, characteristics of management culture, and the main issues in current management. The questionnaires were mainly distributed to the branch managers. The content of the questionnaire was designed according to the performance management six steps discussed in Chapter Five. I wished to see and understand how each of the sub-branches carried out the steps in performance management through this survey.

6.2.1 Basic Information of S Bank

We first set up the performance working group in order to facilitate the subsequent work. The key members of this group were the external performance management experts, representatives from the senior managers of S bank, and the main executor of the performance management project from S bank. After the formation of the group, we carried out in-depth, semi-structured interviews with top managers, the heads of departments, representatives of the branch managers and representatives of the branch employees. The content of the in-depth interviews mainly included the daily work content, work focus, strategy objectives, management methods and current issues. For example: what is your position? What do you do in daily work? how do you carry out your operations? How do you manage your subordinates? Is there any problems in your daily work? We first carried out the in-depth interviews with the senior managers, including the manager and the vice manager, and then summarized and extracted the competitive strategy framework. Secondly, we constantly cross checked, adjusted, and refined the specific content of the competitive strategy through interviews with the heads of department. Finally, after multiple discussions of feedback from frontline employees, we summarized the competitive strategy and management mode as follows.

Competitive Strategy

Through the in-depth interviews with the senior managers at S bank, we learnt about the state of business and the development strategy detailed below.

Focus on local key enterprises S bank has a good reputation and a long track record in the local area. It is one of the oldest commercial banks in the local financial market. After years of business development, S bank has built up relationships with various local large enterprises. The development of its banking business with these enterprises has advantages in comparison with other businesses. At present, the large factories and mines still have an important role in the local economy. Therefore, the main strategy for S bank is to focus on the key enterprises and the bank's current advantages.

Quickly entering the emerging markets S bank wishes to be able to quickly enter emerging markets which still clinging to relationships with large enterprises. With the development of the banking industry in recent years, various types of commercial banks are in the local market, which makes the competition very intense. As a result, it is even harder to compete for the banking business of traditional key enterprises. Some new commercial banks have reduced their business profits voluntarily in order to expand their business in the local area. They hope to get a competitive advantage by using bargain prices. This has resulted in a rapid decline in market share in local key enterprises for S bank. In this context, S bank want to be able to quickly enter into the emerging markets. Here, emerging markets refers to other industries outside of factories and mines, Such as the service industry, tourism, hotels and restaurants, etc.

Develop and promote online banking and telephone banking, develop and manage the business using new channels S bank hopes to make changes to its marketing methods and customer maintenance channels. For a long time, the level of innovation in business development and types of products has been low in S bank. Moreover, the sales people have serious fixed-thinking patterns and limitations that result in a lack of innovation in finding new sales modes and customer channels. At present, online and telephone banking are still in their infancy stage in the local area and customer acceptance and credibility is not high. However, in the long run, the upgrade of business development channels is inevitable. Based on this idea, S bank will focus on the emerging business channels, such as online banking and telephone banking.

Improve staff quality and working attitude As one of the oldest commercial banks in the local area, the staff problem of aging is quite serious in S bank. Many of the employees that started with the foundation of the bank are still on the job. The aging of employees brings many negative issues, for example, a lack of positive working attitude, muddling along, not wanting to take the initiative to use more advanced tools, a lack of service awareness, and so on. These issues have already deeply affected the daily operation and development of S bank. So the improvement of staff quality and the change of staff working style are key.

The Department Structure of S Bank

After the interviews with the top-level managers of S bank, we had further interviews with the heads of department. The main functions of each department are summarized in the table below.

Name of department	Main functions				
Rural Industrial and Finance	Performance evaluation and assessment of rural industrial business in lower-level branches.				
Department	Rural industrial related project and product development reporting.				
	Provide product information training and supervision for front-line managers.				
	Undertake research and statistics reporting for local governments and banking regulators.				
	Undertake other missions from top management.				
Farmers' Finance Department	Performance assessment and evaluation of related business in lower-level branches.				
	Rural banking products marketing and management.				
	Cooperate with Rural Industrial and Finance Department to carry out projects.				
	Guiding and supervising the collection of non-performing loans from farmers.				
	Provide product information training and supervision for front-line managers.				
	Related project and product development reporting.				
Enterprise Business & Small	Business development planning according to headquarters' strategy; implementation of the plan; and performance assessment.				
Enterprise Business Department	Carry out marketing, customer relationship management and maintenance, and after-sales management of related business.				
	Carry out international business, bill business, and cooperate with relevant departments to carry out business operations.				
	Collecting customer feedback, make recommendations on marketing and product development, assist in marketing and testing of new product				
	Carry out the detection and analysis of bank business, and provide guidance, supervision and inspection.				
	Research and make recommendations related to banking business risk management policies, regulations and processes.				
	Carry out the implementation of risk prevention and internal control.				
Personal Banking Department	Business development planning of related business according to headquarters' strategy.				
	Carry out performance assessment for lower-level of branches.				
	Implement the annual marketing plan and thematic marketing programs from provincial branches.				
	Undertake the brand building and maintenance of personal financial products and services.				
	Organize publicity and marketing of personal financial products.				
	Provide recommendations for related product developments and process optimization according to customer feedback.				
	Organize and implement the related business risk management. Monitor, analyse and resolve risks, provide suggestions for risk managemen				

Table 6.1: Department structure of S bank continued on next page

ucts. at and report major risk events on time.

Name of department	Main functions					
Electronic Banking Department	Electronic banking business development planning according to headquarters' strategy.					
	Carry out performance assessment for lower-level of branches.					
	Organize and implement the e-banking business risk prevention and internal control.					
	To carry out self-service banking routine inspections and maintenance.					
	Cooperate with other departments to carry out electronic banking business and marketing promotions.					
	Organize electronic banking business training.					
	Handle related business complaints from call centres.					
Agricultural Business Risk	Plan risk management and credit management according to headquarters' strategy.					
Management / Agriculture	Organize and implement performance assessment of the lower-level branches.					
Credit Management / Credit	Monitor, aggregate, analyse and report the overall risk management situation.					
Management Department	Deal with the significant risk matters.					
	Organize and carry out loan management, supervision and post-loan management.					
	Suggest risk mitigation measures for potential risk of customers.					
	Build up and manage the credit risk managers' team, and organize and carry out training on risk management and credit loan business.					
	Manage and provide operational guidance to credit review and approval centre.					
Asset Disposal Department	Develop the asset disposal plan according to headquarters' strategy.					
	Organize and implement performance assessment and evaluation of lower-level branches.					
	Carry out the investigation of disposal business and the follow up of the implementation of asset disposal programs.					
	Carry out the implementation of online monitoring and risk warning of large non-performing assets.					
Finance and Accounting	Develop the annual work plan and implement financial and accounting strategy according to headquarters' financial and accounting strategy.					
Department / Agricultural	Organize and implement the accounting operations, and report the accounting work according to the external information disclosure and interr					
Business Evaluation Centre /	Measure, monitor and manage the financial risks.					
Rural Accounting Centre	Carry out fixed assets maintenance and management.					
	Carry out payments and other operations of income tax, turnover tax and property tax.					
	Carry out cash management.					
	Build up and train the accountancy team.					

Table 6.1: Department structure of S bank continued on next page

ternal management requirements.

Name of department	Main functions						
Operation Management	Develop and implement the annual operation management work plan according to headquarters' strategy.						
Department	Review and guide counter operations.						
	Carry out settlement and anti-money laundering operations.						
	Manage the treasury, important blank vouchers and valuable documents.						
	Build up and manage the operation management team.						
	Manage the qualifications of the accounting supervisor, accountant managers, etc.						
IT Management Department	Develop and implement the annual work plan for IT according to headquarters' strategy.						
	Organize and carry out relevant operations performance assessment and evaluation in lower-level branches.						
	Implement the overall IT policy and technical standards.						
	Carry out the operation and maintenance of equipment and systems.						
	Develop new systems and provide related training to users.						
	Carry out the risk management of the information systems.						
Party Propaganda Department /	Develop the annual work plan according to headquarters' strategy.						
Communist Youth League	Carry out document drafting, communication and preservation.						
	Carry out propaganda work.						
	Support other departments.						
HR Department	Develop the annual work plan for HR according to headquarters' strategy.						
	Carry out employee selection, appointment and assessment.						
	Carry out daily performance management activities.						
	Manage the welfare and benefits of employees.						
	Organize and carry out staff training programs.						
	Manage the welfare of retired employees.						
Discipline / Supervision	Develop and implement the annual work plan for discipline and supervision according to headquarters' strategy.						
Department	Organize and implement clean government and anti-corruption work.						
	Prevent violations of law and discipline.						
	Receive and verify complaints and petitions.						
	Carry out supervision, inspection and education of party style and discipline.						

Table 6.1: Department structure of S bank continued on next page

Name of department	Main functions
Security Department	To develop and implement the annual work plan for security according to headquarters' strategy.
	Guide, supervise and inspect the security of the treasury, cash transport and business premises.
	Organize and carry out skills training, education and risk prevention.
Union Commission Department	Develop and implement the annual work plan for union commission according to headquarters' strategy.
	Organize social welfare, employee aid and other activities.
	Manage the union funds.
	Organize skill competition and sports activities.
Risk Management and	Carry out responsibility audit for important positions.
Compliance Department	Carry out compliance check and management, legal affairs and anti-money laundering management.

Table 6.1: Department structure of S bank



The above departments were set according to the higher-level branch department structure. In the top levels of headquarters, the department structure is much more specialized. There are about 30 departments at headquarters and some departments are combined to form the departments in the lower-level branches. The branch's department structure is drafted by the branch and approved by higher management. Not just the department structure, but also the job positions within the department, need to be approved by higher management. For example, based on the requirements of the higher level branch, S bank is able to set a middle management team of 38 people, 14 of which are managers, and 24 are assistant managers. The same kind of requirements also applies to the lower branches of S bank. It can be seen that S bank is limited in setting up middle management teams since it is a city level branch. The constrain should be considered during the later design stage of performance management system.

Job Position Setting in S Bank

According to the requirements from S bank's headquarters, the job positions are classified into three categories. In each category, there are three professional levels. The three categories are:

Management positions: including all the positions which make strategic decisions, such as the manager and vice manager.

Expert positions: including positions that require a certain level of expertise, such as risk manager, product manager, credit loan approval, marketing manager, IT support, law and compliance operations, etc.

Operational positions: mostly refers to the front-line operators, such as counter staff, cashiers and administration & support positions.

In each kind of position, there are three professional levels: assistant, expert and senior expert. Employees are promoted to higher levels, which are related to a different base salary.

From the interviews, I also summarized some problems in S bank, which will be discussed next.

6.2.2 Current Issues in S Bank

Through in-depth interviews with the managers at each level in S bank, I summarized the current main issues in S bank as follows:

1. The middle and back office processes are redundant and inefficient

As mentioned by the vice manager in charge of the business development, the biggest issue is the inefficient business processes when the sales people are expanding the business. For example when an agreement is reached for a loan, other banks use less time to finish the following processes, whereas S bank will take as long as several weeks to complete the approval processes. The customers usually choose other banks for their simpler processes and efficiency. According to our knowledge, the time needed for the middle and back office processes (approval process) in S bank is longer in comparison with other commercial banks. It greatly affects the expansion of the business.

The redundancy and inefficiency of the business processes in S bank result from two main issues. The first issue is the high rate of non-performing loans (NPLs) in S bank. Part of the reason for the high rate of NPLs is that S bank undertakes the national policy tasks of supporting agriculture, rural areas, and farmers. There is no guarantee of the rate of return of policy task loans, and they are more likely to result in a NPL. Another reason is that the economic returns of the state-owned big companies, which are the main clients of S bank, are decreasing. This results in an increase of the NPL rate. In order to deal with this situation, S bank have adopted strict business processes to prevent NPLs from happening. The second issue is the large scale of the organization and the rigid regulations. S bank is the city-level branch of the Agricultural Bank of China (ABC). The business processes are managed by the upper-level branches and are also managed by the corresponding business department in the upper branches. This results in many disadvantages in market and customer segmentation. S bank cannot customize their business processes to accommodate to customers' needs based on the local market. In comparison, the relatively small commercial banks are more flexible and have different operation processes for big and small customers.

2. Lack of continued professional development among employees

According to some of the top managers, the current main issues in management is that the employees' quality is not good enough. S bank is one of the oldest commercial banks in the local area. In comparison with other industries, commercial banks provide a stable working environment and employee welfare. Therefore, the employee turnover rate is relatively low and the employees rarely face fierce internal competition. As a result, many employees lack a competitive spirit and do not get into the habit of self-improvement. Over time, this results in many employees being unable to understand and accept new products and new tools. They become less devoted to their work, less motivated to do well, and lack the will and ability to learn. This hinders the innovation and development of the business and management of S bank. For the front-line employees, in comparison with other local commercial banks, the problem is more with the employees' attitude. In the financial services industry, the difference in service spirit, ideas and attitudes greatly affects the customer experience. In this aspect, S bank desperately needs improvement.

3. Hard to keep new talent; lack of newcomers

Currently, the educational level of the employees in S bank is relatively low, which restricts their training of leaders and managers. This issue results from two problems. Firstly, it is hard to recruit suitable employees. Secondly, it is hard to keep the newcomers. The reason for the recruitment difficulty is that the recruitment is carried out by the upper-level branches and then the new employees are assigned to city-level branches. Therefore, the number of formal employees and salary/benefit in S bank are fixed. The top managers do not have the authority to change the situation. In the local area, S bank can carry out some local recruitment, but their salary and benefit cannot be guaranteed. Under this recruitment regulation, it is difficult for S bank to get highly educated employees, since they are more likely to be assigned to national headquarters or provincial branches. For people with high educational levels that are assigned to S bank, they see the work in S bank as a springboard for their professional career in most cases. They start to look for job opportunities with a higher salary and benefits as soon as they start working in S bank. In addition, the current employees in S bank tend to exclude the new employees. The long-term stable organizational environment makes the employees form fixed informal groups. The members inside the group have close relationships in work and in everyday life. This makes it hard for the new employees to fit into the groups and to do their jobs. They usually suffer from being pushed aside and incorporation, especially when the new employees show better ability and performance in their work.

6.2.3 Performance Management in S Bank

Based on the interviews, S bank follows unified performance evaluation standards and methods designed by the national headquarters. In other words, the strategy objectives of S bank and evaluation processes are assigned by national headquarters, then to the provincial branch, and finally to S bank. The department objectives, business line objectives and key content of performance evaluations are therefore assigned by the corresponding departments in the upper-level branch. For employee motivation and promotion, S bank uses the unified post rank system (employees get a higher rank in the job position as a promotion) system designed by headquarters. As mentioned earlier, the salaries are decided based on the post and rank. For example, the manager of S bank is a management post (refer to as M level) according to headquarter's job position and ranking system. Within the M level, it is further classified into M1, M2 and M3. When deciding the post level of the manager of S bank, based on the evaluation results from headquarters last year, the business scale and the span of management are taken into consideration. Different post classifications (management post is M level, expert post is P level and operator post is L level) not only have different

basic wages, but also different wage growth rates. The Agriculture Bank of China that S bank belongs to uses unified post classification and evaluation standards, and they have a strict requirement on post formation.

In combination with the previous interviews, I conducted further questionnaires with the heads of the sub-branches of S bank. This questionnaire was divided into two parts: the first part was the basic information and the branch rank, which shows the general performance level of the branch among others. The second part of the questionnaire was for learning the current specific ways of carrying out performance management in the branches. The design of the questionnaire generally follows the performance management six steps in Chinese commercial banks mentioned earlier, in order to learn the specific ways of carrying out the six steps in performance management in S bank. For example, I asked about the strategy formulation process and method in the sub-branches so I could know how they carry out the process normally, etc. After getting the information, I carried out a further cross-tab analysis (see Table 6.2 as an example) in order to learn about and compare the relationship between performance level and performance management mode (the details are in Appendix 2). Through the analysis, we discovered that, in general, the sub-branches with a higher ranking in performance evaluations have performance management activities that fit more with the content of our performance management framework. For example, I mentioned in our performance management framework that the strategy setting of the sub-branches should be carried out by the sub-branch managers and the key sales people. Through cross-tab analysis I find out that the sub-branches adopting the above method get a relatively higher performance level ranking.

Performance. Rank*	ʻ 1.Who will be pai	ticipated in the strategy formulation process of your	branch? Cross-tab				
			1. Who will be participated in the strategy formulation process of your branch? To				
	A. I do not discuss with anyone B. I discuss only with the top C. I discuss with the top ma			C. I discuss with the top management			
			when I make the local strategy for	management team about how to	team and representatives of staff		
			the branch	make the local strategy	about how to make the local strategy		
Performance. Rank	top ranked	Number	0	0	4	4	
		Performance. Rank %	0%	0%	100%	100%	
		1. Who will be participated in the strategy	0%	0%	67%	31%	
		formulation process of your branch? %					
		total %	0%	0%	31%	31%	
	middle ranked	Number	0	3	2	5	
		Performance. Rank %	0%	60%	40%	100%	
		1. Who will be participated in the strategy	0%	50%	33%	38%	
		formulation process of your branch? %					
		total %	0%	23%	15%	38%	
	bottom ranked	Number	1	3	0	4	
		Performance. Rank %	25%	75%	0%	100%	
		1. Who will be participated in the strategy	100%	50%	0%	31%	
		formulation process of your branch? %					
		total %	8%	23%	0%	31%	
Total		Number	1	6	6	13	
		Performance. Rank %	8%	46%	46%	100%	
		1. Who will be participated in the strategy	100%	100%	100%	100%	
		formulation process of your branch? %					
		Total %	8%	46%	46%	100%	

Table 6.2: Cross-tab analysis of performance rank and strategy formulation participants in branches of S bank

We can see Table 6.2 that the top ranked branch managers account for 31% of total branch managers. The top ranked managers tend to discuss with the top management team and representatives of staff about how to make the local strategy. While among the bottom ranked branch managers, they tend to keep the local strategy making power to their own or only discuss with the top management team.

Based on the information collected from the interviews and questionnaires I found that the main issues in performance management of S bank as follows:

1. Lack of proper performance management for departments

S bank applied a very detailed performance management system (mainly measurement systems) for front-line staff. Their performance was evaluated not only by their superior managers (head of branch), but also by some departments. Comparatively, the performance measurement for a department is quite simple; its performance is largely dependent on how well the front-line staffs are doing. For the management and expert positions, it is difficult to identify their workload due to lack of quantitative indicators. The adage is usually: "If the performance of branches is good, our performance will be good too." As a result, staff feel less pressure to carry out their operations on time, which leads to a low efficiency in department operations.

2. Training is not well designed and the trainees are not targeted well

In S bank, the training content is decided by the provincial branch of the ABC. In fact, the training content covers every aspect of the bank's daily operations, from the key points of management, current banking policy to improvements in professional skills. However, the training is provided according to administration level. For example, some professional training is only provided to employees ranked higher than vice manager. When there is no administration level limit, it means that everyone needs to attend the training. Many managers complained that much of the training is pointless to them. "I do not need training of how to carry out the business operations; I no longer deal with such business. The

training should be provided to employees who actually deal with the operations." Not only the managers are complaining; many employees also believe that there are some problems in the training system. One employee said: "There are too many kinds of training, some of them are irrelevant to me, but I have to attend. It costs me a lot of time." The training should be more targeted to certain employees; asking them to attend all the training lowers their interest. As a result, they are too exhausted to attend the really useful ones. It also makes the training inefficient, and leads to the low quality of staff.

3. Lack of communication and use formal communication channels

S bank is a traditional bureaucracy. There are clear administrative levels in the organization and there is little communication between different levels. In such an environment, too much communication between administrative levels is considered improper behaviour. Besides, with a very stable working environment and a low turnover of employees, employees have formed many informal groups within S bank. Such informal groups are formed according to area, for example the members are from same area; or according to the academic background, for example the members come from the same college. There is little communication between different informal groups. As a result, the problem of lack of communication is becoming increasingly serious in S bank. This situation hinders new staff development, and it also impacts the introduction and retention of talent. New staff feel that they cannot blend in with the informal groups in S bank. As a result, it is difficult for the new staff to perform well without coordination and communication channels.

In addition to the above problems, I also found out other problems in management in S bank after many interviews and the questionnaire. However, the problems are not the major target of this performance management project; therefore I will not discuss them here.

After the in-depth interviews with the managers of all levels in S bank, I found that it has a stable organizational structure, clear job responsibilities and a clear operation process. In this case, I could apply the performance management framework which I introduced in Chapter Five. Therefore, the framework will be applied to S bank in the following section.

6.3 Stage Two: Design of new performance management system

Applying our performance management framework to S bank

In order to make possible improvements to the existing performance management practice of S bank. Our commercial bank performance management framework is applied to S bank based on the information that we have collected. Our framework includes serval main steps: strategy intervention and formulation, decomposition, measurement, performance planning, performance assessment and feedback (details see Chapter Five). Based on our understanding of S bank, we made some minor changes in our framework so that it could fit better into the actual environment of S bank. Such as the first step of strategy intervention, originally, the strategy of the bank is mainly formed by the strategy apex. For different types of operations, the strategy formulation process varies. For highly specialized and variable operations (HH operations), the relevant staff normally participate in the formulation process. However, S bank is only a city-level branch of the ABC. On top of S bank, there is a provincial branch and a national headquarters. The overall strategy is formulated and decomposed level by level from the national headquarters to the provincial branch, and then to S bank. Therefore, for the top manager of S bank, the main task is to execute the higher level strategies of the provincial branch. As a result, the strategy formulation of HH operations in S bank needs to be adjusted in the framework. The top manager of S bank rarely participates in this process. In more cases, they play the role of supporter and coordinator. Therefore, in the following framework, some content will be adjusted according to the specific situation of S bank. After many meetings with bank managers and debates about the management structures, we made a few changes in our framework. The overall framework of S bank can be found in Table 6.3 (at the end of section 6.3).

This table was generated based on the general performance management framework of commercial banks explained in Chapter Five. It shows how to implement the framework in S bank and tackles the issues such as: "Who should be responsible" and "How to do". For example, in the original framework, I mentioned that the strategy setting in Chinese commercial banks is mainly carried out by the strategy apex, which is the board of members,

presidents and vice presidents. In many cases, the top managers are also on the board of members. Usually, the overall strategy is drawn up by the board of members at headquarters. Then the specific content is filled in by the vice presidents and department heads. It will be handed back to the board of members to be approved in order to generate the final formal strategy. In this process, the department employees do not participate in the strategy setting. However for the departments that have a high degree of specialization and authority in their professional field will participate as a representative in the strategy setting process.

In S bank, the top level strategy is set by the upper-level branches. The job of top managers in S bank is to mainly execute the given strategy. However at the local level, the local strategy of S bank is set by the manager and vice managers of S bank. In this process, the manager of S bank will discuss with some of the functional department heads in order to draw up the strategy. Then, the draft will be passed on to the manager and vice managers for discussion and approval. On this basis, the department heads can set up the development plan and departmental strategy according to the local strategy of S bank. For the sub-branches, the sub-branch managers can set the strategy content based on the combination of S bank's strategy and the development plan of each department. The strategy setting at this level is mainly carried out by the manager and the vice managers and the employees are not involved in this process. Based on the above content, we can form the specific content in the first step of the performance management framework.

Strategy decomposition and deployment

As mentioned in the above framework, in Chinese commercial banks, strategy decomposition is carried out level by level, following the management structure. The method of strategy decomposition varies, such as the BSC method and decomposition based on processes, etc. With the development of management methods and management ideas, more and more Chinese commercial banks have adopted the process standardization method of strategy decomposition and deployment. However the high diversity of core operations (the sales part) makes it difficult to standardize the operation process.

The work allocation needs to take into consideration employees' characteristics and skills. This is mainly for core operations. Since the core operations of Chinese commercial banks are diversified, the employees' characteristics need to be taken into consideration when assigning work. Therefore, the ideal situation is for line managers who are familiar with the core staff to allocate the work. So at the city branch level, the strategy decomposition in S bank should rely on the management framework provided by the upper-level branch. This means that the decomposition is based on the department's structure and job position system.

The specific strategies are decomposed level by level based on the department and job position responsibilities. Moreover, the nature of different jobs in core operations is fully taken into consideration when designing the job position system. Therefore, different job categories are generated, which lays down the basis of the performance evaluation system and the remuneration system. However, on choosing and assigning the employees, S bank is restricted by the upper-level branch. S bank cannot recruit formal employees on its own. Any changes in human resources need to be approved by the upper-level branch.

In the decomposition process, the top managers divide the overall strategy into several main parts according to the job responsibility of each vice manager. Then, each vice manager and the department head carries out the strategy decomposition and assignment. Within each department, strategy decomposition and the work assignment is carried out by the department head. For some departments with a high level of specialization, the professional authority may direct the decomposition and assignment process in some cases. In the sub-branches of S bank, firstly the strategy decomposition should be based on the strategy decomposition framework of the bank. The managers of the sub-branches should direct the strategy decomposition, and the key employees participate in the process. Beside the above approach, based on the product line management, S bank adopts the decomposition and assignment of related work by the departments of upper level branch. For example, the work of the agriculture production department includes not only the work decomposed from the S bank, but also the work decomposed and assigned by the corresponding department of the upper-level branches. After that, the department head decomposes and assigns the work to the corresponding department in the sub-branches.

Based on the above content, we can form the specific content in the second step of the performance management framework.

Performance measurement

As has been discussed in Chapter Five, generally the performance evaluation indicators of Chinese commercial banks should come from the strategy decomposition. After the formal strategy is generated, it should be decomposed level by level in order to form the indicators. In the case of S bank, the main performance evaluation indicators come from the province-level branch. They usually include the overall branch indicators and departmental indicators. The overall branch indicators are for the province-level branch to evaluate the overall business and operation performance, and they are also the main indicators for evaluating the top managers of S bank. The departmental indicators of S bank are set and assigned by the senior department in the upper-level branch on the product line. For example, the indicators for the sales department are assigned by the sales department of the province-level branch. However, from the results of our interviews and questionnaires, the top managers designed an extra set of indicators for the purpose of realizing local strategies, and they are assigned and implemented into the related departments and all the sub-branches. The managers of each sub-branch also set up extra indicators in order to improve the development of their sub-branch. Although these indicators do not affect the performance pay when evaluating the employees' work, they provide a means to manage the sub-branches. Through questionnaires, the sub-branches with extra management objectives and performance evaluation content that are decomposed to each employees have better results in the ranking of department heads. From this, we think that the sub-branches with detailed management can get a higher performance. Thus we suggest that each level set extra performance evaluation indicators based on their actual situation and management requirements on the basis of indicators given by the upper-level branches. Therefore, at S bank, the performance indicators for each department are selected and generated by the top

managers in S bank. The indicators come from direct assignment of the upper-level branch, as well as the top level managers, based on the local strategy and the KPs. The departmental performance indicators should be designed mainly by the department head. For the sub-branches of S bank, the overall indicators are set and assigned by S bank. The local indicators are set by the manager of the sub-branch according to the business environment of the sub-branch. The evaluation indicators for the base-level employees include the indicators assigned by the city-level branches, as well as those designed by the manager of the sub-branches based on their specific situation.

Performance planning

As mentioned before in the framework summary, the performance plan is a management step that enables the employees of all levels to communicate, and receive guidance, work plans, supervision and motivation. In performance planning, the specific work content of the work plan will be discussed by the employees and their managers in order to highlight the key work and the direction of the future work. It is also used to convey the management intention of top managers. At the same time, the previous work progress will be evaluated, and given feedback on.

The key activities in the performance plan include: supervision activities, guidance activities, and motivation activities. The specific content of performance planning changes according to the different work responsibility of the subjects. I have summarized the performance planning framework for different types of work in general commercial banks. For the simple and repetitive LL type of work, such as counter staff, the direct supervision is carried out by the line managers. Here, the direct supervision of counter accountants and cashiers is carried out by the chief accountant. Since the work content is simple, the pre-work training, and unified and regular operation skill training is adopted in a standard form. In motivation, the number of operations or the accuracy will be used when calculating the performance pay.

For the second type of LH work with a higher degree of variability, such as customer managers, their work can hardly be effectively supervised. Therefore, in most cases, the work result is the only aspect to be evaluated. The supervision and evaluation of the sales results are carried out by the direct managers of the sales people, and it is usually the sub-branch manager. In some Chinese commercial banks with mature product line management, the sales people are also supervised by the product line managers through technical means. The unified and formal training is not much use to the LH-type of sales work in commercial banks. Since the sales work does not require a high degree of specialization (long-time training), the corresponding training and guidance should focus on the ability to deal with specific problems and to be flexible. In this situation, the sharing of the experiences of a senior sales person is usually more effective. As for motivation activities, the main component of sales people's income is the commission and the performance pay related to their sales. Their revenue will be greatly impacted if they fail to complete the business development missions.

For the highly professional bank operations (HH operations), such as investment banking operations, the monitoring activities should be carried out by the professional authority (e.g. the head of the investment banking department). Such operations are highly specialized and require high skill levels and years of professional training to fully understand the specific content of the operations. For training and guidance, the specially-designed training on current polices is believed to be more helpful for such operations, which can significantly enhance the performance of such operations. For motivation, besides commission, the stipend of professional level is also an important part. The higher professional level (a higher level of qualification), the greater the stipend that will be given. The purpose of the professional stipend is to encourage the employees to voluntarily improve their professional skills.

Performance assessment and feedback

In the framework, I have summarized how to carry out the performance assessment and feedback. For the LL operations, the feedback and assessment are normally carried out at

the same time. Since the operations are normally simple and easy to understand, it is relatively easy and convenient for the managers to directly supervise and monitor the operators when they carry out their operations. For example, the counter operators get daily feedback from the senior manager (normally the major accountant manager in the commercial bank). For LH operations, such as the sales staff, their assessments and feedback are normally carried out regularly by the branch manager or the head of department. Occasionally, there might be a case-dependent assessment and feedback due to unforeseen circumstances of one business operation, for example, a non-performing loan. For the third type of operations, which are the highly professional operations, the assessment and feedback normally takes a longer cycle (such as quarterly or annually) by the professional authority. For example, the internal auditing project is carried out by the departments of the commercial bank and normally takes 3-4 months, or even longer.

It should be noted that the risk management activities are integrated into the framework, especially in the performance plan part. These risk management activities are developed based on the reviewed literature in Chapter Two, they indicate the main risks that banks should pay attention to. For example, the sales manager and head of branches should pay attention to the credit risk management, in order to avoid non-performing loans. This is reflected in the performance plan step in the framework. The related activities may include internal rating, customer information updating, and risk monitoring. However, the specific activities are to be decided though discussions with the key stakeholders.
Performance		Management paths	Actors
Management			
Step 1	Strategy Intervene	 In S bank, the top level strategy is set by the upper level branches. The job of top managers in S bank is mainly executing the strategy given. In the local level, the local strategy of S bank is set by the manager and vice managers. Local strategy of S bank is determined based on mostly higher level strategies considering the S city government and banking regulator policies, risk assessments, and local market environments. The manager of S bank will discuss with some of the functional department heads who are in charge in order to draw up the strategy. Then the draft will be passed on to the manager and vice managers to discuss and approve. The department heads can set up the development plan and departmental strategy according to the local strategy of S bank. For the sub-branches, the managers for the sub-branches can set the strategy content based on the combination of strategy of S bank and the development plan of each departments. The strategy setting at this level is mainly carry out by the manager and the vice managers and the employees are normally not involved in this process. 	Strategic apex Head of department
Step 2 and 3	Strategy decomposing and deployment	 At the city level branch, the strategy decomposition in S bank should relay on the management framework provided by the upper level branch. It means that the decomposition is based on the department structure and job position system. The specific strategies are decomposed level by level based on the departments and job position responsibilities. In the decomposition process, the top managers divide the overall strategy into several main parts according to the job responsibility of each vice manager. Then the vice manager and the department heads carry out the strategy decomposition and assignment. Within the departments, the strategy decomposition and the work assignment is carry out by the department heads. For some departments with high level of specialization, the professional authority may direct the decomposition and assignment process in some cases. In the sub-branches of S bank, firstly the strategy decomposition should base on the strategy decomposition framework of the S bank. The managers of the sub-branches should direct the strategy decomposition and the key employees are participated in the process. Based on the product line management, S bank adopt the decomposition and assignment of related work by the departments of upper level branch. 	 Strategic apex Middle Line Tech Departments
Step 4	Performance measurement	 In S bank, the main performance evaluation indicators come from the province level branch. It usually includes the overall branch indicators and departmental indicators. The departmental indicators of S bank is set and assigned by the superior department in upper level branch on the product line. Top managers of S bank designed an extra set of indicators for the purpose of realizing local strategies and they are assigned and implemented into the related departments and all the sub-branches. The heads of each sub-branches also set up extra indicators in order to improve the development of their sub-branch. The evaluation indicators for the base level employees includes the indicators assigned from the city level branches as well as that designed by the manager of the sub-branches based on the specific situation. We could also generate key performance indicators though 3E theory based on the key processes. The 3E theory considers performance from the perspective of efficacy, efficiency and effectiveness, and then generates indicators from each perspective. 	Strategic apex Middle Line Tech Departments and external experts

Table 6.3: Performance management framework of S bank continued on next page

		Management path	Actors Management paths		Actors	Management paths	Actors					
		(for LH operations: sales managers)		(for LL operations: accountants)		(for HH operations: some department						
					staffs)							
	Performance	1. The supervision and evaluation of the sales results are	Techdepartments	1. The direct supervision is	The senior	1. The monitoring activities should be	Head of					
	planning	carried out by the direct managers of the sales people	Middle	carry out by the line	accountant	carried out by the professional	departments,					
		and it usually is the head of the sub-branches.	Line(mainly the	managers. Here the direct	manager, the	authority (head of department).	external					
		2. In S bank, sales people are also supervised by the	head of branches)	supervision of counter	post-supervision	2. For training and guidance, the	regulators, such					
		product line managers through technical means.		accountants and cashiers are	center, audit	specially designed training of current	as CBRC.					
		3. The unified and formal training is not much used to the		carry out by the chief	department.	polices is believed to be more helpful	Superior line					
		LH type of sales work. Training and guidance should		accountant.		for such operations, which can	manager.					
		focus on the ability to deal with specific problems and		2. The pre-work training,		significantly enhance the performance						
2		to be flexible. The sharing of the experiences of a		unified and regular operation		of such operations.						
tep		senior sales person is usually more effective.		skill training are adopted in a		3. For the motivation, the stipend of						
\mathbf{N}		4. For the motivation activities, the main component of		standard form.		professional level is an important part						
		sales people's income is the commission and the		3. In motivation, the number of		of motivation. The higher professional						
		performance pay relate to their sales. Their revenue		operations or the accuracy		level (a higher level of qualification),						
		will be greatly impacted if they failed to complete the		rate will be used when		the more stipend will be given. The						
		business development missions.		calculating the performance		purpose of professional stipend is to						
				pay.		encourage the employees to						
		5. Credit risk management should be carried out by		4. The operational risk control		voluntarily improve their professional						
		reviewing the customer information and keep it		is the key to manage the LL		skills.						
		updated. Sales managers should participate in this.		operations.								
Step 6	Performance	1. For the LL operations, the feedback and assessment are normally carried out in the same time. Since the operations are normally simple and easy to understand, it is relatively easy and										
	assessment	convenient for the managers to directly supervise and monitor the operators when they carry out the operations.										
	and feedback	2. For the LH operations, here we mainly refer to the sales staffs of commercial bank, their assessments and feedback are normally carried out regularly by the head of branch or the head of department. Occasionally, there might be a case dependent assessment and feedback due to unforeseen circumstances of one business operation.										
		3. For the high professional operations, the assessment and feedback normally takes a longer cycle (such as quarterly or annually) by the professional authority.										

Table 6.3: Performance management framework of S bank

Following the above table, we could apply the performance management framework to S bank. By doing so, we could figure out how to carry out the performance management activities in the daily operations of S bank, and identify the responsible employees or managers of the activities. For example, we can design a performance evaluation table for the Electronic Banking Department, see Table 6.4.

The evaluation table consists of two main parts, key performance indication evaluation and key process evaluation. The weights of these parts are to be decided. Normally the objectives of indicators can be accomplished by undertaking related key processes. The contents in Table 6.4 are organized and summarized from the application of the performance framework. Following the framework, we could get detailed key processes (as well as key performance indicators) and identify the responsible departments so that the department evaluation tables can be formed. With this table, the performance of Electronic Banking Department can be easily managed by the top managers of S bank. The evaluation table can be designed for departments, branches or even individuals with corresponding KPs and KPIs given.

It can be seen that risk management related processes and indicators are demonstrated in the table. These details are developed based on relevant literature reviews and communications with key stakeholders. Some of the activities are currently undertaken in their daily operations but not being properly evaluated. With the evaluation table, the risk management related processes and indicators could be monitored and evaluated.

Employee Number	Name	Position	1	Departm	ient					E	valuation time
				Electronic Banking D	Electronic Banking Department						
			1 VDI(Van Darformanas Indiadas)								
							TX KI I(Key Fe)		
KPI	Definition	KPI	Actual KPI	Evaluat	tion cycle	Data source	Total score	Actual score	Weight		
		objectiv	/e								
Number of new electronic b				Quarter					15%		
Amount of spending through				Quarter					15%		
banking, and online banking											
Replacement rate of electron				Quarter					10%		
NPL ratio of electronic banking business					Quarter					15%	
Number of training hours provided to sales										5%	
people											
Subtotal											
2、KP (Key Process)											
KP Definition		n Key p	oints	Objective	Deadline	С	ontrol indicator	Weight	Self-evaluation		
Electronic banking busin	ess							20%			
development											
Risk control and management								10%			
of electronic banking business											
Teambuilding and staff								10%			
training											
Total:											
Confirmation											
Sign: Date											

Table 6.4: Performance evaluation table for Electronic Banking Department of S bank

Explanation
Feedback and evaluation

In the following section, I will discuss how to implement the framework and the potential difficulties during the implementation. Some suggestions are also given in the next section.

6.4 Stage Three: Implementations

I have explained in the beginning of the case study, the project team are unable to carry out the implementations since I do not have enough labour and resources. However, based on the understanding of current performance management practice and our framework, the potential difficulties can be discussed, and some suggestions will be given in order to improve the current performance management practices in S bank.

Potential difficulties in future implementation and suggestions

1. The current management concepts and traditional management habits in S bank may lead to some difficulties in implementation. For example, in the environment of bureaucracy organization, the decision-making power is mainly controlled by the top managers. Therefore, for some branch managers (also some heads of department) of S bank, it may be difficult for them to allow the participation of other employees in the process of strategy formulation. Moreover, most of the employees lack the ability to participate in the strategy formulation process. They are not even aware that they should participate in such a process as a stakeholder. Such traditional concepts may hinder the application of the different management approaches that we suggested in our framework.

2. Managers often lack skills and experience in performance management. Certain skills are required in order to carry out certain operations of performance management. For example, in the decomposition step, the managers need to understand how to decompose the mission and strategies in order to carry out the following steps. Moreover, managers need to know how to generate and select indicators from KPs in order to connect the performance management to their management emphasis. Therefore, before we carry out the implementation of the framework, we suggest training the top managers, heads of

department and branch managers with the essential skills and basic theories of performance management, so that the implementation of the framework is consistent and systematic across the bank.

3. There might be a lack of proper hardware, software, and IT support. An IT system support is necessary in building a modern performance management system. Without its support, the daily operations of performance management could be exhausting for both managers and employees. The data collecting, sorting and calculating in the performance management system also requires the support of the IT system. However, as a city level branch, S bank is relatively limited in its information system design and development. To implement the performance management framework, their current IT system may need to be redesigned to make the performance management activities more efficient. For example, in the step of performance plan, the manager needs to have individual face to face interviews with his employees. In the interview, the manager needs to discuss the work plan with the employee and provide guidance. The process and results need to be recorded and updated continuously. If all the operations are carried out manually, both the manager and the employee need to fill out a lot of forms, and such documents need to be carefully kept and updated. The activities undoubtedly increase the burden and workload of all employees. Without the support of a corresponding IT system, the implementation of the performance management system would be seriously compromised.

4. Staff may be resistant to change and innovation. The implementation of the performance management framework will lead to many changes in the daily operations of S bank. Not only the employees, but also the managers are required to change their daily routine. It is very common to see resistance to changes, especially when the staff do not understand the situation or if they are unmotivated. To avoid the problem, we suggest providing training and designing a proper motivation system for employees based on a thorough discussion of what performance management is, and what it is for. It is important to let the staff understand that the performance management system is to help them achieve their objectives, and not to punish them.

Based on our performance management framework and suggestions, the top managers of S bank hope to make improvements in two areas. The first is to set a formal strategy formulation and decomposition process for top and middle managers. The major content of such a process should be the management emphasis on daily operations in S bank. So that the management ideas of top management team could be executed through the performance management system. Secondly, S bank want to design a performance plan system according to their current classification of job positions (management positions, expert positions and operational positions). Such a performance plan system should include a more tailored training program for different kinds of positions, and more communication channels. In addition, S bank also agrees that they need more training for managers to learn essential skills, and for employees to understand the project. Therefore, after several rounds of communication with top managers and branch managers, S bank conducted a test run of the performance management framework in some of the branches in September 2014. The test run had initial positive results. S bank is prepared to carry out the implementations in all its branches after further improvements. However, due to limits of time and resources, I can only provide help and guidance in the design stage and the early part of the implementation stage, and cannot participate in the later implementations.

6.5 Summary

In this project, we go through three main stages to diagnose the current situation and propose possible improvements for S bank. We applied the performance management framework in this case study and provides some improvement suggestions. The related documents were submitted to the top management of S bank (diagnosis report and performance management implementation plan). After many rounds of meetings and debates with the bank, the top management agrees with our improvement plans and going to carry out the strategy formulation/decomposition process and design of the performance plan system.

Chapter Seven: Performance Management in a Dynamic Changing Organizational Environment

As has been discussed, the method and process we applied in developing the performance management framework was based on the assumption of a stable management structure in the organization. For example, the balanced scorecard (BSC) is used to demonstrate, decompose and deploy the organizational strategy (Kaplan and Norton 1996). In the "decompose and deploy" step, the BSC matches the decomposed strategy with the current organizational structure based on the existing business processes (Kaplan and Norton 2007). However, if the method is applied in a rapidly changing environment, the decomposition and deployment will rely on the existing structure and therefore hinders further adjustments and optimization. During the ongoing process-oriented banking reforms of Chinese commercial banks, the adjustments in organizational structure based on optimized processes is one of the most important aspects of the reform (Lu 2008). In this context, a key for developing a performance management system is to adapt and improve such adjustments in the organizational structure (Zhao 2007). Therefore, we introduced the performance tree method, which decomposes and deploys the organizational strategy based on key performance processes, so that the organizational structure can be adjusted and improved according to performance generation process. Such adjustments could provide help and suggestions for the building of a process-oriented bank.

In the next section, I will introduce the performance tree method. This method facilitates an approach to designing a performance management system for an organization operating in a rapid changing environment, in cope of the change of organizational management structure from the view of performance generation process. Performance generation process describes that how a performance is generated from a list of purposeful activities, and aggregated to achieve an objective. The performance tree method is an on-going research carried out by the performance management team lead by Professor Wenbin Liu at Kent

Business School. The method is developed based on studies of Liu et al. (2012) and Wang et al. (2015). In order to introduce the method, I will first explain some key concepts.

7.1 Some Key Concepts

In order to introduce the performance management tree method, I will first discuss the concept of a performance network and associated concepts. From a network point of view, performance exists in different levels of an organization: at the macro level, performance is a measurement of how well the organizational objectives are being achieved, the required processes that are completed, and the expected influence that is made (Liu et al. 2012).

On the other hand, at a micro level, an organization contains a set of activities, which carry out the strategy of the organization, and lead to the satisfactory completion of organizational objectives (Tsang et al. 1999; Knoke 1999). For each of the activities, there is a corresponding performance to measure the process; achievement and influence of it. Clearly, according to the needs of deployment and implementation these activities may need to be further split into sub-activities which detail how the superior activity is to be achieved (Knoke 1999). Therefore, for each of the sub-activities, there is also a corresponding performance to measure how well its process, achievement and influence are accomplished. Thus, the performance can be decomposed and aggregated accordingly. The performance forms a network structure showing how it is decomposed and aggregated. We name this structure as a performance network. The concept of performance network is developed based on the decomposed activities which achieve organizational objectives. These activities are decomposed level by level, which can also be seen as a network structure (Liu et al. 2012). Starting from the concept of performance network, a series of concepts are developed, and summarized as follow.

Performance network: based on the activities, we can form the performance network structure. If we consider each performance of an activity as a node, a performance network

can be formed by performance nodes and aggregation paths between nodes; it describes performance at all levels and how the corresponding actions are carried out.

The aggregation paths indicate how the performance is aggregated. Simply speaking, these paths show the relationships between each of the activities in the process of performance generating. The top nodes of the performance network should be the overall performance of the organization, and the bottom nodes should be the performance nodes that represent the performance of the finest activities limited to the management resolution(how details the organization want to manage) (Liu et al. 2012).

Based on the performance network, we can identify the performance tree of an organization, which is the main (key) part of a performance network.

Performance tree: an organization often has different performance or objectives; some are more important than others. The organization could identify some key performance, and then those activities which are necessary to achieve key performance are called key activities (Wang et al. 2015). Correspondingly, we can have key performance nodes and paths which could also form a performance network. This part of performance network is the key part of overall performance network; we call it a performance tree as it often has a tree structure.

The performance tree is the crucial part in this method. Performance management concentrates mostly on key activities and key performance (Armstrong 2000). In our method, we try to identify and form the performance tree structure, and then set up suitable ways to manage it in order to improve the organizational performance.

The structure of the performance tree is dynamic, and will be updated and adjusted according to the current strategy and objectives. The current strategy indicates the how the key stakeholders want to achieve the organizational objectives (Wang et al. 2015). Clearly,

management style is reflected in the performance tree structure. To some extent, a performance tree structure reflects the managerial preferences of the organization.

In Figure 7.1 I demonstrate a simple example of a possible performance network in a commercial bank. For convenience, I only list some parts of the performance of the bank.



Performance network

Figure 7.1: Performance tree in a commercial bank

In the figure above, the top level performance is the overall organizational performance, namely a bank's overall performance. In this particular case, the overall performance consists of business development performance, cost control performance, and so on. In this organization, business development performance is the key performance of the bank. The business development performance can be further split into, for example, two main parts: deposit performance and loan performance.

Performance unit: A performance unit consists of a sub-network which is sufficient to achieve a set of performance, and some stakeholders of the sub-network. Performance units can be coincident with the existing management structure or virtual.

If the organization decides to manage the performance tree based on the performance unit hierarchy, it often implies that the organization is going to assign responsibility and allocate resources accordingly to some of the performance units. In this case, performance unit structures are coincident with some of the management structure of an organization, which consists of job positions, departments, and so on (Ferreira and Otley 2009). It is clear that performance units are defined mainly from the perspective of performance generation. It indicates that I mainly consider how to improve the performance and how to improve the efficiency of the performance aggregation process. The difference in management structure has impact on performance aggregation process, it influence the way a performance is aggregated. Performance unit is designed for the purpose of performance management, it looks for the most efficient way of performance aggregation. In contrast, when designing the organizational management structure, many other factors (as well as constraints) need to be considered (Halachmi 2005). Performance units are logically optimized structures that are formed for the purpose of performance management. Meanwhile, they could also provide possible improvements to the organizational management structures.

7.2 Main Steps of the Performance Tree Method

Below I introduce the main steps of the performance tree method, which could help to set up a new performance management system for an organization operating in a rapidly changing environment; it also facilitates a redesign of the organizational management structure based on the performance generation process. Based on the concepts above, the method can be described as: according to the key performance of the organization, build performance tree (this step acts as the first three steps of the framework in Chapter Five, here is a different way to decompose and deploy objective/strategy in a rapidly changing organizational environment), and then manage the performance tree through performance units (this step is similar as the last three steps of the framework in Chapter Five). Below, I develop the following three-step approach to apply the method (see Figure 7.2):



Figure 7.2: Three steps of the performance tree method

In the end, a corresponding performance management system could be designed based on KPIs and the performance plan system (Liu et al. 2012). Here, the three steps are only indicative. In practice, they may not be clearly separated or carried out one by one; they may often interact with each other and adjustments must be made accordingly.

Step one: The first step in applying the three-step approach is to form a performance tree for the organization according to its key objectives and strategies. In order to do this, we usually need to clarify the organizational key objectives and strategies first (Armstrong 2000; Liu et al. 2012). High level managers are involved in this process to discuss and identify key strategies and key performance of the organization (Wang et al. 2015). Thus, the top part of the performance network could be initially formed, which shows the organization's key performance.

In order to identify more detailed key activities and key performance aggregation processes of the organization, we could further split the objectives and strategies into key processes by using Soft System Methodology (Liu et al. 2012), and then repeat the process to get more detailed sub-processes (activities).

An organization may have already identified its key processes and sub-processes, and so the decomposition process would mainly follow the sub-processes based on discussions with stakeholders following the soft system methodology (SSM) procedures (Mingers et al. 2007; Liu et al. 2012; Wang et al. 2015). If there is currently no sub-process, we need to

understand what people need to do in this process, what the correct order of different activities is and what the rules are, in order to form a formal sub-process.

For example, the credit loan business processes in a bank vary in different banks. After discussions based on soft system methodological with relevant stakeholders, the following key steps were identified for a particular bank: identify potential customers; investigate customer information; contact customers; counter operations; return visits; and customer relationship maintenance. Based on this decomposition, if necessary, one can further set up rules and regulations for each step in the process, such as: manners; communication channels (telephone or face to face); timetables; and so on. How detailed the final decomposition is depends on the management of the organization.

During this process, we often need to have thorough communication with the stakeholders from each of the management levels in the organization in order to understand how they achieve their objectives and what activities are important. Often we use SSM (Mingers et al. 2007; Liu et.al 2012) to discuss the possible activities to achieve a performance, and then compare them with current operations. By doing so, we may find possible improvements.

After that, the performance tree can be formed according to the activity set (Tsang et al. 1999; Knoke 1999). Although we concentrate on the performance tree, other parts can also be formed (rest part of performance network). In this method, the focus is on managing performance tree, since other part can be easily managed through routine management.

The following figure (Figure 7.3) is a simple example of a bank's performance tree. It shows how a performance tree could be formed in a bank. For convenience, only a short version of a real case is shown, which demonstrates only part of the performance in a commercial bank.



Performance tree

Figure 7.3: An example of a bank's performance tree

Step two: The second step is to build and optimize performance units for managing the performance tree. During this step, we firstly build initial performance units based on the performance generation process. Usually we start from regrouping of top performance to have a clearer view of how the performance units should be designed. For example, in the above figure, we can build corresponding performance units for cost control performance and business development performance. The build of performance units needs to be thoroughly discussed with relevant stakeholders in order to understand their management intentions and preferences (Wang et al. 2015). Such discussions may even start in the first step.

In order to improve the overall performance of an organization, the design of performance units needs to follow some principles. Firstly processes contained in each of the units should be independently managed so that they will not affect each other in operation. Secondly, if some activities (with the same function) exist in many processes (or use the same resource), one should consider integrating these activities into a performance unit in order to improve the overall efficiency of the organization. Such principles are in line with the theory of business process reengineering (BPR) suggested by Goodstein (1988). Some questions might be helpful when communicating with stakeholders, for example one may ask key stakeholders: how they are going to manage a key performance in the performance tree; who will be carrying out the key activities; and how the resources will be allocated. Such questions may lead to a rethinking of the organizational management structures, which facilitates possible improvements and adjustments from the perspective of performance management (Liu et al. 2012). In practice, the above processes are much more complicated, since they involve constant negotiations with stakeholders and continued adjustments in the performance units.

At the beginning of this step, the performance units may be virtual in the sense that the organization has not yet decided to adopt them, and they still can be eliminated or changed. The management structure based on the performance units can provide possible improvements and adjustments in organizational performance, since it provides a holistic management perspective from the view of performance generation (Liu et al. 2012).

If necessary, sometimes the finest activities could be further analysed, categorized and regrouped in order to reconstruct the performance units, which will lead to a redesign and possible improvements of job positions (Zhao 2007). During this process, some important factors need to be considered, such as: the workload of each activity; the nature of the work; and the requirement for each activity (Liao 2004).

For example, in the customer investigation process (in a commercial bank), the activities of social background investigation and field visits require bank employees to travel and talk to different people. Therefore, these two activities may require employees to have good communication skills, the ability to improvise, and sharp insight.

In the contrast, activities such as document collection and credit records checks do not require employees to be flexible with people or to have good social skills. For those employees, they are required to strictly follow the regulations and always be very careful. Most importantly, they may need to acquire some qualifications, such as a lawyer license or accounting certificate.

Therefore, above activities could be regrouped into two sets: one includes a social background check and field visit; the other includes document collection and credit records checks. This new sets could be considered as new job positions, thus we get: customer manager position A, which is responsible for social background checks and field visits; and position B, which is responsible for document collection and credit records checks.

It needs to be emphasized that the adjustments of the internal structure in a performance unit may affect the organization's decision-making process, which could lead to a change in the global structure of the performance units. For each of the performance units, its set up requires thorough discussion and agreement from key stakeholders. Its final application also requires comprehensive discussions between key stakeholders. For those organizations which are willing and capable to make innovative adjustments in their management structures, one could carry out a more aggressive innovation in management structure based on the performance tree and performance units. Normally, organizations may face some pressure from employees about the innovations, as well as other issues, such as lack of resources. In this case, this approach could be applied to only some key parts of an organization. Sometimes, an organization may not be ready for this, and then the key performance could be firstly assigned to the current departments, and of organization then gradually carry out the application.



Figure 7.4: A demonstration of composing objectives and regrouping key activities into new groups

Compared to the first three steps in Chapter Five, above steps do not rely on the existing business process and organizational structure to carry out decomposition and deployment of objective strategy. Instead, above steps focus on how the performance is actually aggregated and how should the performance being managed through performance units. As a result, improvements could be made in performance management for the organization.

Step three: This step is similar to the last three steps in the framework in Chapter Five, in which KPIs and KPs are used to build up performance measurement and plan system (Qi et al. 2010). However, here the KPIs and KPs are designed and allocated differently since they are developed from different decomposition and deployment method. Based on the performance tree and performance units, we can further develop the corresponding

performance management/measurement system. The performance management system can be designed based on the newly-designed performance unit structure (or current departments). In our framework, the main approach is based on KPIs and the performance plan. We often develop KPIs from each of the key activities in the performance tree using classical 3E theory (Meng et al. 2007), which measures the efficacy, efficiency and effectiveness of each of the key activities. These three steps are similar to the steps of our performance management framework in Chapter Five, but here step one actually carries out the strategy formulation and decomposition process of our performance framework. Step two carries out the strategy deployment, and step three is about how to design the performance measurement (KPI) and performance plan systems based on the above steps, which is the same as the last three steps in our framework. After building up the performance measurement system, a performance plan is designed according to the performance aggregation path in the performance tree. It assigns the performance to corresponding stakeholders and keeps track of the process of achieving the performance. Often the performance plan is made level by level from top manager down to staff. The content of the performance plan depends on the particular performance and corresponding key processes.

In a rapidly changing organizational structure, the performance tree method could directly bind the strategy, process and performance to the responsible actors and stakeholders. It does not rely on the existing organizational structure. It only need to identify key performance and responsible stakeholders, no matter what department or position are the stakeholders. Therefore, as long as the key strategies and process remain unchanged, it will be relatively straightforward to identify the responsible actors and stakeholders (Wang et al. 2015). Moreover, the performance tree method does not only adapt to the organization's structural changes, but also improves the optimizing of the structure according to the process. It suggests how to change the organizational structure in order to manage the process more efficiently. In summary, our methods start from the objectives and strategies of a company, and convert the objectives into key processes. Performance unit structures are formed according to the performance generation processes and used to manage the performance tree. A performance management system can be built according to the performance tree and performance units.

The method focuses on reengineering and redesigning from the perspective of performance generating and actual working processes; it looks for a more efficient way to carry out the processes. Therefore, it could highlight possible improvements for organizational management structures. More importantly, in this method, the KPIs and KPs are generated together with the adjustments of the management structures. In this way, the performance management system is tailored for the adjusted management structures.

In Chapter Eight I will give a detailed case study to show how to apply the performance tree method in a Chinese commercial bank.

Chapter Eight: Case Study of D bank

8.1 Project Summary

D Bank was founded in 2012, through the approval of the Zhejiang Banking Regulatory Commission. It is a local joint-stock financial institution built based on the D rural cooperative bank. Its registered capital is 700 million Yuan and it has a total of 40 branches in its precinct (including 16 lower-level branches and 24 operation stations). With 15 internal functional departments and more than 550 employees, D Bank has the most branches, largest service scope, and the most staff of any financial institution in the local area and has excellent service quality.

The founding of D Bank was the result of the evolution and development of Rural Credit Cooperatives. D Bank always focuses on the development of the country market, and serves and supports rural areas, farmers and the agricultural industry. It gradually developed into the main force of agricultural finance. At the end of December 2012, D Bank had a debit balance of 13.652 billion Yuan, a credit balance of 9.844 billion Yuan, revenue of 1.051 billion Yuan and a profit of 401 million Yuan. It has been ranked in the top ten Chinese banks serving the county economy, is a Zhejiang Province "advanced bank" and has many other honours.

D Bank takes the unique "virtue" culture as its core value that sets a good corporate image and reputation in the local market. While maintaining relationships with local customers, D Bank adopts the strategy of "expand", that is to expand the market and set up branches in places like Henan, Tianjing, etc. It carries out further market, segmentation in the local market, and the loan center for small and micro companies was established for providing financial services to local residents with a good credit status. In terms of management, D Bank is committed to promote the development of regulations and detailed management. It promotes the building of a process-oriented bank and total risk management.

While carrying out market expansion and institutional development, D Bank also pays a lot of attention to internal management. Under the initiative of senior regulatory institutions, like the CBRC and the Provincial Rural Credit Cooperative, D Bank has carried out the building of a process-oriented bank for several years. At the primary stage, D Bank was in the transition stage of building a process-oriented bank. On the one hand, D Bank was combining and optimizing their business processes. On the other hand, it was carrying out adjustments to its departments' responsibilities and job functions. Under the violent changing of internal structure in D Bank, the traditional performance management system was either helpless or too rigid to promote changes. Therefore, in response to D Bank's invitation, our work group carried out a performance management consultation. The work group is formed by Professor Steve Liu and me. Professor Liu is the leader of this group who guides the overall process of this project and supervises my progress during the project. As the system designer and project coordinator of the term, I arrange and carry out interviews with the managers of D bank, design and adjust performance management system, and help the bank to implement the framework. In this project, targeting the specific situation in D Bank and the issues emerging from building a process-oriented bank, we designed and built a performance management system based on performance tree theory. Starting with the fundamental logic of performance aggregation, this performance management system closely combined the organizational performance aggregation process and operation processes and it broke through the limitations of department-oriented management (the limit of department-oriented management is discussed and demonstrated in Figure 8.5). We proposed a performance management structure that is suitable for building a process-oriented bank and process-oriented management. The case can be divided into two stages. The first stage is for information gathering and diagnoses, and the second stage is for system design and implementation. I will introduce each stage in detail in the following sections.

8.2 The First Stage: Information Gathering and Diagnoses

We first set up the performance working group. The key members of this group were the external performance management experts, representatives from the senior managers of D Bank and the main executor of the performance management project from D Bank. After the formation of the group, we carried out semi-structured in-depth interviews with the main managers, the heads of departments, some department employees, branch manager representatives, and branch employee representatives. The content of the in-depth interviews mainly included the daily work content, work focus, strategy objectives, management methods and current issues. The structure of the interview generally followed the performance management six steps framework in Chinese commercial banks mentioned above, in order to learn their specific ways of carrying out the six steps in performance management. For example, we asked the interviewees how their work tasks are decided, how they decompose and assign the work tasks, how to carry out performance assessment and management of their subordinates, etc. Since the interviewees included employees from top, middle and front line, their quality, personal styles and customs differ greatly. Therefore, it is hard to adopt a completely fixed interview structure and questions. Therefore we need

to constantly guide the interviewees to provide useful information according to their reactions during the interviews. We first carried out the in-depth interviews with the senior managers including the top manager and the vice manager of D bank, and then summarized and extracted their competitive strategy framework. Second, we constantly cross checked, adjusted and refined the specific content of the competitive strategy through interviews with the heads of the departments. Finally, through the feedback of the front line employees and site observation, after multiple discussions, the competitive strategy and management mode of D Bank are summarized as follows:

D Bank competitive strategy

D Bank takes the unique "virtue" culture as their starting point and pays great attention to building enterprise culture. D Bank gradually developed a complete set of competition strategy. With the full understanding of the local customs and the local credit environment, the above strategy plays an important role in laying a good customer base and establishing a good brand image. In the following section, the strategy is explained in several aspects:

Customer targeting: keep close to customers, support agriculture and SMEs, be quick and flexible.

A) "The state-owned banks deal with state-owned companies and big enterprises, the joint-stock banks deal with general middle sized companies, therefore we should deal with local farmer entrepreneurs, small and micro-sized companies." concluded by the top manager of D bank. D Bank takes full advantage of their specialty in being close to the local market and customers, being flexible, quick and responsive. D Bank focuses on developing the small companies, customers and farmers' loans. D Bank insists on doing what it is good at in a familiar market.

B) D Bank has great amount of customer managers at the base level to build a powerful social and information network. Currently, D Bank has more customer managers, more than 100, than any other local commercial bank.

C) Based on the market segmentation, D Bank focuses on small and micro-sized companies and local individual customers instead of big companies. (It does not develop business with big companies that co-operate with more than three banks due to risk control reasons. The small and micro-sized company loan centre uses low-cost salesmen to promote on the streets. D Bank builds its information network in order to issue unsecured small loans. The local people with no bad credit histories can get 50,000 Yuan loan without strict credit approval.)

D) On the basis of developing the traditional business, D Bank strives to develop the intermediate business and investment banking business, etc. D Bank further develops the market and uses the new business to drive the development of traditional business. For example, the investment business between banks and the inter-bank borrowing which have a relatively high profit margin, such business need to be emphasized in the future development of D bank. Professional analysis teams have been building on these businesses.

Market Expansion: Deeply explore and maintain the local market, as well as actively expand the new market in other provinces with the policy advantages.

E) Maintain good relations with local government and various organizations at all levels, relying on the social network and local connections. Expand the business through personal connections starting with relatives of staff.

F) Make full use of the preferential policies to expand business to other provinces. Build branches (town and village banks) in Henan, Tianjing, and so on. D Bank strives to develop the related business with the help of government subsidies. While developing business, D Bank promotes the local economy. It not only occupies the market, but cultivates it. G) Govern the branches in the other provinces with the culture and regulations of D Bank's headquarters (provide them with the blueprint of the company culture and regulations). The headquarters sends business experts and experienced managers to transplant the company culture into the branches in other provinces. The employees hired from other provinces should first go back to D Bank headquarter to experience the company culture.

Company Culture: Internally, D Bank focuses on building cohesiveness; externally it focuses on improving organizational reputation and social image.

H) D bank consciously cultivating the existing organizational culture. D Bank hired Edgar Singapore to summarize and extract the "virtue" company culture.

 D Bank pays great attention to corporate social responsibility and company reputation. D Bank provides support to improve local economic development in order to create a good corporate reputation and image.

J) For D Bank, teamwork is an important aspect in building a brand and expanding business. (It improves the influence of D bank, and emphasizes the company and teams instead of individuals.)

K) D Bank focuses on the building and maintenance of mutually-beneficial customer relationships. For customers with a good credit history, D Bank will provide supports to those businesses in their difficult times. This embodies the spirit of "virtue" culture. D Bank is determined to go through difficult times with the customers.

L) Internally, D Bank promotes rectitude, and encourages communication, building good interpersonal relationships and forming a strong team spirit. The close relationship between employees and the very positive atmosphere are all parts of D Bank's culture.

M) D Bank pays great attention to the employees' interests and welfare. High salary, welfare, material incentives and soft incentives are all combined. D Bank cares about its staff's situations and provides various humanistic cares.

N) D Bank provides good salaries and welfare to front line staff. D bank pays attention to the total income and the internal fairness of the middle and base level employees (the top 10 best employees will be given priority to be transferred to the higher level of branches.)

Management: Using the characteristics of the company culture, D Bank can enhance its internal cohesiveness and focus on team building.

O) Establish an effective communication and coordination mechanism and create a platform and channel for opinion exchange for employees at all levels (e.g. weekly meetings to communicate problems and issues; the managers should maintain fairness in work).

P) The management style is mainly "soft" management, which encourages staff to work conscientiously and voluntarily.

Products: Product innovation should be in response to market demand and should keep track with competitors.

Q) The product designing process should put customers' needs in the center and the product design process should be convenient and quick.

R) Based on customer demand, learn from product design experience from other banks.

Personnel training: D Bank takes internal training and promotion as the core of personnel training. The main channel of post promotion is through internal talent selection.

S) D Bank pays attention to develop staff skills and actively cultivate talent. Each new employee is assigned to a mentor. D Bank encourages employees to participate in all kinds of activities to better fit in the environment. D Bank encourages employees to learn related skills voluntarily and acquire various qualifications. D Bank gives their employees indications of their career path and helps its employees in career planning.

T) D Bank is determined to establish a fair competition environment. D Bank will establish an internal public competitive platform for middle managers.

U) D Bank puts talent in the key positions and lets them learn through practice, and to accumulate experiences in the key positions.

Cost control:

V) D Bank requires staff to follow a strict expenditure regulation; the funds need to be used on the development of core business.

W) D Bank has established a strict expenditure approval system, which centralizes approval authority in order to control costs.

X) D Bank actively promotes cost control. It saved 20 million more Yuan compared with Province Rural Credit Cooperatives Association required cost amount.

In summary: during 2012-2014, the guideline of the development strategy of D Bank is as follow: D Bank determined to fully implement the scientific outlook on development and to serve the countries, agriculture industry and farmers. D bank should target the small and medium-sized enterprises market and be cautious in management and be steady in development. Through continuous reform and innovation, D Bank has make efforts to achieve good management, first-class service, remarkable profits, high quality assets, high quality employees, a strong competitive advantage and to be the most respected modern bank.

The specific development strategy includes: implement structural adjustment; promote financial innovation; achieve service upgrade and brand promotion; implement total risk management; implement the talent strategy, etc.

Strategic objectives

1 Core regulatory indicators (indicators deployed by CBRC and high-level regulators)

1.1 Capital Adequacy Ratio: The capital adequacy ratio was 13.50% at the end of 2013; at the end of 2014 it was expected to be 13.41%. (D Bank's capital adequacy ratio is quite good according to the requirement of Basel in Chapter Two.)

1.2 Core Capital Adequacy Ratio: The core capital adequacy ratio was 12.08% at the end of 2013; at the end of 2014 it was expected to be 12.03%.

1.3 Return on Assets: In 2013, the ROA was 2.33%, while in 2014; the expected ROA was 2.22%.

1.4 Cost to Income Ratio: In 2013, the cost to income ratio was less than 40%; in 2014, this ratio was expected to be controlled to be less than 40%.

1.5 Non-Performing Loan Ratio: The NPL ratio was controlled to be within 1.5% at the end of 2013. In 2014, this ratio was expected to be controlled within 1.5%.

1.6 Provision Coverage Ratio: At the end of 2013, this ratio was 450%. In 2014, this ratio was 500%

It can be summarized that D Bank is under very strict supervision from regulators, and its regulatory objectives are far higher than the minimum requirements of Basel Three. In other words, D Bank is currently operating healthily and safely.

2 Business development objectives

2.1 Total Assets: At the end of 2013, the total assets were about 19 billion Yuan, which includes 11.5 billion Yuan of loans, 2.8 billion Yuan of provision reserves, 800 million Yuan of settlement funds, 3.3 billion Yuan of investment banking capitals, 200 million Yuan of constructions, and 400 million Yuan of receivables and long-term assets.

2.2 Total Deposits: At the end of 2013, the total deposits reached 16 billion Yuan.

2.3 Total Loans: At the end of 2013, total loans reached 11.5 billion Yuan. In 2014, the total loans were expected to be 13 billion Yuan. Meanwhile, at the end of each month, quarter and year, the loan-deposit ratio was expected to be less than 75% by strengthening management and control.

2.4 Total Revenue: In 2013, the total revenue was 1.2 billion Yuan, which consisted of 860 million Yuan in loan interest (71% of total income). In 2014, the total revenue was expected to be 1.3 billion Yuan, and the loan interest was expected to be 930 million Yuan.

2.5 Non-credit Business Revenue: In 2013, non-credit revenue was 340 million Yuan, of which investment banking business contributed 322 million Yuan and intermediary business revenue 18 million Yuan. In 2014, the total non-credit business revenue is expected to be 370 million Yuan. Investment banking business was expected to be 350 million Yuan, and intermediary business revenue to be 20 million Yuan.

Management style, principle and models of D Bank

D bank pays a lot of attention to cultivate its organizational culture. As a result, it established a unique organizational culture named "virtue". In this organizational culture, behaviours showing higher moral standards are highly advocated and praised. Therefore, in management, managers are encouraged to take more "soft" approaches to influence, rather

than control, their employees. For example, managers often provide suggestions and guidance rather than direct orders to employees. Moreover, managers are required to set themselves as good examples in work ethics, attitude and habits. In this way, employees could carry out their work spontaneously, independently and voluntarily in a good atmosphere. D Bank believes that in this way, the employees are not forced to carry out their daily work, and they are not working just to get paid.

Through this cultural development, D Bank creates a good atmosphere which has influence in many aspects. In employees' management, self-management and self-discipline is highly emphasized; managers rarely control employees' behaviour by direct commands. In the distribution of benefits and personnel selection processes, D Bank promotes an open and transparent allocation process, to try to distribute benefits according to one's workload and contribution. Managers and leaders are set to be good examples to employees, and they are required to influence employees by the power of a good example. In communication, open and informal communications are encouraged. In this way, the employees' needs and customers' demands can be quickly reflected to the managers and decision makers. In personnel training, D Bank values both ability and integrity. The employee's virtues are important considerations when considering promotions. In daily life, D Bank encourages colleagues and employees to form harmonious relationships and mutual assistance, and thus to improve the working environment.

In such a management style and environment, an important prerequisite is to establish and unify the common values of the whole staff. Therefore, D Bank focuses on improving the overall quality of staff, and pays attention to employees' ethics, character, sense of responsibility and sense of honour, especially in the stage of personnel selection and assignments. By selecting employees who agree with and believes in the corporate culture and values, it is easier to form a united and appealing work environment, so that the organizational culture can be more effective in influencing the employees' behaviours.

Department structure and functions of D Bank

The overall organizational structure is shown as follows:



Figure 8.1: Organization structure of D bank

The headquarters and top management team

After the in-depth interviews with the top management team (including the chairman of the board, manager and vice managers), and heads of each department, I have summarized the main functions of each department as follows:

Department	Main function
Auditing Department	A function department in charge of internal auditing projects. It also assists in external auditing projects when there is an external auditing team. The direct orders from board of directors and board of supervisors.
Administrative Office	A supporting department; it plays the role of coordinator. The major jobs for this department include organizing meetings, arranging visitors and gue
Human Resource Department	A supporting department which in charge of staff management, salary administration and employee training. This department also deals with issues and discipline inspection and supervisions, and party-related works.
IT Department	A functional department in charge of information system building and maintenance, software and hardware maintenance, and system operation safet
Security Department	A supporting department in charge of all security issues, such as monitoring equipment on ATM and branch counters, security of armoured vans, and
Operation Management Department	In charge of maintaining daily operations, especially cash management, settlement management and supervision of tellers. It makes sure that for payments; it also produces, distributes and manages blank accounting vouchers, which are important recording documents for daily business operat monitoring their work and organizing training and tests.
Financial Planning Department	Is responsible for all the financial issues of the bank; it collects and analyses financial data for high-level strategic decisions. It also monitors regulators.
Credit Approval Department	Evaluates and gives approvals for credit loans and other related business. The department decides how much a customer can get as a credit loan base
Risk Management Department	Deals with all kinds of risks that may occur. It also deals with legal issues, such as reviewing contracts. This department sets up risk control policie perspectives.
Credit (Business) Management Department	Is responsible for credit loan business development (credit loan business is the most important business for the bank). It includes market research, pricing policy formed by top managers) and marketing. This department manages all sales managers and sales managers; it supervises these mana also collects feedback from customers, which helps with the new product design.
Electronic Banking Department	Is responsible for all electronic banking systems, such as POS machine and debit & credit cards. This department is also in charge of developing operation process in order to ensure that electronic banking policy is in compliance with the overall credit policy, payment systems rules. It m activities and carry out monitoring, supervising and coordinating activities to improve the performance of electronic banking business. It also condu
Inclusive Financial Department	Is responsible for all the personal banking business and business with small and micro-sized enterprises. It is also responsible for the develop organizes, coordinates and controls all personal banking activities, including product design, market research and operation process control. Me training on personal banking products to sales managers.
Corporate Business Department	Mainly deals with large companies or state-owned companies. Such business is usually more beneficial, and therefore more important to band department is responsible for making a strategic development plan for corporate business, and setting up related regulations. It also needs to an department organizes training on corporate business; this training is mostly for the employees in this department. Normal sales managers do not need is also in charge of popularizing new corporate business products.
International Business Department	Mainly dealing with foreign exchange business. It operates and manages all the foreign exchange transactions. It also organizes and provides related

Table 8.2: Department structure and function of D bank

his department plays the role of a supervisor, who takes

ests, maintaining office equipment, and so on.

of letters and visitors (mostly anonymous complaints)

ety management.

d management of security guards.

r each counter there is enough cash for withdraws and tions. This department also manages all accountants by

the bank rating data, which is required by the bank

sed on an analysis of customer information.

es and monitors bank operations from the legal and risk

business planning, product pricing (implementing the agers and organizes training for them. This department

g related business policy and regulations, as well as the nakes the development plans of all electronic banking ucts ongoing analyses for the top management.

pment strategy of personal banking business. It plans, eanwhile, this department also organizes and provides

aks. However, it is also more competitive to get. This analyse related data and provide reports regularly. This eed to deal with large company clients. This department

l operations training for its staff.

Under the headquarters and departments, D Bank has 39 branches. D Bank assigns the top managers and accountant managers in the branches. The following table is a general classification of jobs in the

branches:

Title	Responsibilities
Branch Managers (Including Appointed Managers)	The overall management of the branch, especially the risk management of the branch. Staff management, training and supervision. Large-customer service and relationship maintenance in the branch's area.
Sales Manager	Sales of all kinds of bank products. Collects customer information and feedback. Takes care of normal customer relations.
Accountants / Assistant Manager / Lobby Manager	Helps customers to finish their transactions. Sells some bank products. Accounting operations in counters and cash management.

Table 8.3: Main job position and structure in branches of D bank

Large transaction reviews and approvals for the branch.

Diagnosis

Through in-depth interviews with staff at all levels, we discovered the main difficulties in their daily operations, especially in performance management. After discussions and analysis with the top managers of D Bank, we summarize the main issues of D Bank as follows: Generally, D Bank prefers a "soft" management approach, and tries to create a harmonious working environment. As a result, the relationships between employees and managers are generally close. In such an environment, most employees voluntarily complete the work without much supervision. Meanwhile, the relatively relaxed working environment enables the organization to take flexible strategies, and facilitates the fast and efficient flow of information. However, the "soft" management approach and relaxed working environment also leads to the problem of insufficient execution power. In other words, the regulations, punishments and accountability can hardly play their due role in such an environment. Moreover, D Bank values teamwork and team spirit; however, the outstanding performance of individuals is relatively restricted, leading to egalitarianism among employees. The above problems exist in many aspects of daily operations in D Bank, and have a great impact on employees' behaviours. Therefore, in the following section, we will discuss some of the main issues of D Bank.

The lack of execution power

As has been discussed, D Bank prefers a "soft" management approach to managing its employees. As a result, most employees carry out their work without much supervision. "I only need to deploy the work to my staff, and they could carry out their missions, I do not really need to monitor them, they are all good employees," said by a middle manager. In fact, this situation is quite common in D Bank, because for most employees, the specific content of their work is directly related to their personal interests. In other words, their workload and quality is directly linked to their performance and therefore their income. However, in some departments, the manager is not satisfied with the employees' efficiency and execution power. In such departments, the manager often needs to deploy some short-term but important tasks to employees. These tasks are normally assigned by higher level of management, and the performance and results of these tasks can hardly be related to a specific employee. More importantly, these tasks do not have a systematic supervision and tracking system to follow up the progress. As a result, the efficiency and performance of such tasks are not satisfactory. "Sometimes the manager assigns a task to me, but there is no formal record of this task. After a while, even the manager himself forgets about this task, and no one even care about the progress," complained by some employees. Based on the employee interviews, we found that the problem of lack of execution power mainly exists in some functional departments at headquarters. In these departments, some work is hard to be quantified; therefore the performance of such work is mostly based on subjective evaluations. However, in the current harmonious interpersonal relationships and harmonious working atmosphere of D Bank, the subjective evaluation is reflected to be not as useful as expected. "We do not want to give negative feedback to employees, after all we are good friends," some managers argued. In fact, it is normal to get high scores in subjective evaluations in D Bank. As a result, the problem of lack of execution power becomes more serious due to this inefficient evaluation system.

Problem of personnel training

Currently, D Bank is experiencing rapid development and expansion, and needs a lot of high-quality staff. However, the current personnel training system is not efficient. The previous mentoring system failed because of lack of incentives for mentors. The mentoring system selects some experienced staff to be mentors, and then sends newly-recruited employees to each mentor to get trained during the day's work. "Being a mentor does not have any benefit, one can apply to be a mentor if qualified, but he will not get any reward for training new employees," said a mentor in a branch of D Bank. Another training system is mostly applied to young managers, especially at headquarters. The candidates are assigned to certain important job positions. Simply speaking, they get trained through practice. These two personnel training systems both have some problems. Firstly, the mentor system relies highly on the skill and experience of mentors; each mentor has his own training style and method. An employee may not be suitable for the style of his mentor,

even if he has good potential. This could lead to a waste of human resources. Secondly, the job position training method requires employees to be trained in different key job positions in a short period of time. At headquarters, the rapid change of personnel worsens the current problems of organizational structure due to the process-oriented bank reform. "The job position has been assigned to many different people recently, I am not sure who is responsible for this now," said an employee in the risk management department. Currently, D Bank is carrying out organizational structure adjustments based on the process-oriented bank reform. The department structure is changing rapidly during this process, which makes it difficult to identify the responsibilities of key processes and key job positions. Lastly, D Bank values teamwork and team spirit in daily work. This is also reflected in its personnel training; trainees are treated in the same way with the same method, so that some talented trainees feel frustrated in such an environment.

Problems in management of sales managers

The sales managers are front-line managers who deal directly with bank customers and sell bank products. In D Bank, the majority of revenue is from credit loan interest; therefore the management of sales managers is very important here. Currently, the main problems in management of sales managers are lack of efficient risk management and skill improvement. D Bank did not pay enough attention to the risk management of sales managers and it has suffered from the problems of non-performing loans recently. It is hard to track the responsible staff of the NPL (non-performing loan); since they were issued a long time ago and the sales managers may be transferred to another job position or simply left the bank. After a thorough discussion and research with experienced sales managers, we have summarized the key aspects of management of sales managers. The first key issue is to improve the skill of sales managers; and the second is to correct the attitude of the sales managers. The skills mainly refer to the ability to identify potential risks with bank customers. Such ability requires a large amount of working experience and the flexibility to deal with different kinds of customer. For example, the sales manager may find it difficult to get authentic information from customers, therefore, in order to know the real situation of a customer; the sales manager may need to investigate their income tax and utilities bills.
Such skills can hardly be gotten through formal training since such skills are very detailed and case related, it is impossible to summarize all of them or explain how to use them in real situation. Therefore sales managers may benefit more if the experienced staff would like to share their working experience. Such experience should include working habits, customer negotiation skills, customer relationship maintenance skills and information collection skills. The second key issue of managing sales managers is to correct attitudes and improve risk management. In order to develop business, sales managers are prone to problems of moral hazards. They may lower the standard of investigation to get more loan customers who are not qualified for a credit loan according to D Bank's regulations. To deal with this issue, some managers suggest building a tracking system or spot test system. For example, the branch manager needs to double check some customer's information in order to verify a sales manager's work.

Problems in D Bank's performance measurement system

Currently, D Bank carries out many kinds of performance measurement, especially for the front-line staff. The performance of front-line staff is not only measured by their direct manager, but also by headquarters. However, managers and staff all complain that some content is evaluated repeatedly and that the evaluation is not focused, which leads to a waste of time and energy of both the employee and his manager. Based on thorough interviews, we summarize the problems in the performance measurement system as follows:

Performance measurement and plan at headquarters

The performance measurement at headquarters is generally reflected to be important but difficult, for many reasons. Firstly, the problem of lack of execution power is serious. It is very common to see assigned tasks left uncompleted and unattended. Such tasks normally lack tracking and recording process; as a result, it is difficult to measure the actual workload of departments. "Everyone seems very busy and tired every day, maybe because that there are too many unexpected tasks. Some tasks are very important at the moment, but no one cares about them after a while. However, once started, we are supposed to finish these tasks anyway." said by an employee in department. Secondly, D Bank is experiencing rapid

expansion and changes in department structure. The job positions and job responsibilities are changing very frequently. Meanwhile, the personnel changes between departments are quite common during this time. In fact, D Bank is exploring a more suitable management structure for their current situation. Currently, the existing performance evaluation tends to follow the principle of egalitarianism. There is little difference in performance salary between departments, and between managers and staff. Employees and managers at all levels are generally not satisfied with the current performance measurement system, but fail to provide possible solutions. Some department managers suggest classifying departments into core departments, functional departments and support departments, and to treat departments differently according to the classification. Others argue that taking into account the flexibility and uncertainty of operations in departments, it is very difficult to identify the workload or to compare the importance of the operations in different departments. Some employees believe that the egalitarianism will lead to the phenomenon of "passing the buck". Employees shirk responsibility because "why would I take more responsibilities for the same money?" Thanks to the good organizational culture of D Bank, employees at all levels still believe in the good principle of carrying out work voluntarily, and so far the phenomenon of "passing the buck" is not very common. However, from the long-term perspective, it is essential to set up regulations and design an incentive system in order to improve the situation.

The incompatibility of the current performance management system with the process-oriented bank

According to the top management, D Bank has already carried out the redesign and optimization of some operation processes. However, the optimized processes are not executed in daily operations. "We carry out the processes as usual, process-oriented bank does not concern me," said a counter operator. After a lot of discussions, we found that the current performance management system is not associated with building a process-oriented bank. Although some processes are optimized and redesigned, it is not clear who should be responsible and who should carry out each step of the process. As a result, when D Bank adjusted the department function and structure according to optimized process, it found that

the current performance management system couldn't keep up with the adjustments. After the department function adjustments, often there was a situation where a department was responsible for certain process, but there was no supporting evaluation system to assess its performance. Since there was no corresponding evaluation and supervision system, employees tended to carry out the process in the same way as before. Sometimes, after the adjustments, part of a department's function had been removed, but the evaluation system remained the same was still trying to evaluate the performance, which led to an invalid performance evaluation result. "This part of work has been shifted to another department long time ago, but I am still being evaluated for this. In fact I cannot do anything about this work, so the evaluation result is based on other people's efforts." The above problems mean that the optimization of processes cannot be applied to daily operations. The original performance management system cannot deal with the rapid changes in organizational structure and department responsibilities. Therefore, a more suitable performance management system should be designed to improve the situation and promote the building of a process-oriented bank.

Problems in selection of performance indicators

Performance indicators were also said to be "unreasonable". However, staff members gave different opinions about how and where to make improvements. "In the past, we mostly focused on business development and expansion. Now the situation has been changed, we should focus on our internal management and try to improve our management efficiency." "Every year we get a higher objective, like 10% more than last year. Sometimes it is easy to achieve, if the general economy was good. But sometimes it is just impossible. We are facing economic downturn recently, however the objective is still 10% more than last year; it is a great pressure for me." "We should set different objectives for branches with different economic environments. Some branches are located in more developed areas, and it is easier for these branches to develop business." "The indicators for sales managers are not reasonable. As a sales manager develops more customers, he will need to spend more time managing the existing customers rather than developing more customers. Therefore, a sales manager can hardly get a good performance on the incremental indicators (such as number

of new customers)." Such detailed problems exist in many aspects of performance management in D Bank. In the design of the new performance management system, we will try to solve some of them, since some problems are beyond our scope.

8.3 The Second Stage: Designing a New System

In the following, we firstly point out the weakness of the existing procedures in designing performance management in a commercial bank. Then we design the new system for the D bank.

In a stable environment, we normally need to acquire the objectives, visions and competitive strategies of the bank. On this basis, also taking organizational characteristics and special requirements into consideration, firstly applying the performance management framework in Chapter five, we decompose the bank's strategic objectives level by level using the decomposition tools (most commonly the Balanced Scorecard method). After that, the key actions/key processes (KPs) can be obtained from the decomposed strategies according to the existing processes and department structure. Furthermore, we could generate the specific key performance indicators (KPIs) from the KPs (by e.g., applying 3E theory). Then the KPs and KPIs are assigned to departments and individuals in order to form the measurement and supervision system. Details of above processes can be found in Chapter Five. However, the above decomposition using the BSC or similar methods is not suitable for D Bank, since D Bank is in the process of building a process-oriented bank. The existing way of decomposition is based on the current management structure that greatly relies on the departmental structure, and hinders the further adjustments of department structure. Therefore, we propose to design the new performance management system based on the performance tree method. The detail of performance tree method has been explained in Chapter Seven.

This new system relies on the optimization of the business process and performance units to carry out the decomposition. Firstly the performance tree is built up for the bank, which starts from the strategy apex of D Bank. Based on optimized processes, the key performance of D Bank is decomposed level by level. Here, the building of the connection between process and performance enables us to explore the aggregation process of the performance. Then, in the design of the performance units, the direction and feasibility of the organizational structure changes and adjustments are discussed. Based on the performance units, the corresponding performance management and measurement system are built. The people responsible for related performance units and processes are identified, and corresponding KPs and KPIs are designed. In following, we will carry out the design work step by step.

8.3.1 Building Performance Tree for D Bank

Before building performance tree for D Bank, we firstly introduce the current strategy formulation, decomposition and deployment in D Bank. In the step of strategic formulation and decomposition, the real practice of D Bank is basically in line with the content of our framework in Chapter Five. Therefore, we will only briefly introduce the process: the strategy formulation is mainly carried out by the top management of D Bank (including the chairman of the board, president and vice presidents) and some of the heads of department. The strategy content mainly comes from higher-level authorities, such as the CBRC and Provincial Credit Association. The local market environment is normally considered in the strategy and the business environment of the local area. Local strategies of the branches are made jointly by the branch manager and the staff representatives (normally the branch sales manager). In the strategy decomposition step, we mentioned many possible methods to carry out the decomposition. The most commonly applied method is the BSC. In the follows, we will explain why the BSC is not suitable for D Bank.

Why BSC is not Suitable in D Bank

Normally, the BSC can be applied to develop some KPIs and build up a performance measurement system. In this system, objectives are decomposed into the four perspectives of the BSC, and further supporting key processes are developed for each objective. The following figure is a demonstration of how to apply the BSC framework in D Bank:



Figure 8.4: Demonstration of how to apply the BSC framework in D bank

In general cases, D Bank could use KPIs generated from objectives and key processes in the above figure, and distribute the KPIs to related department according to department responsibilities and functions to form a performance management system.

A company could apply different methods to design its performance management system, but the result (mainly the selection of KPIs) is similar. However, the design and selection of KPIs is not the only key part of a performance management system. Another key part of a performance management system is to distribute the KPIs to responsible department and employees. In other words, identifying who should be responsible for a KPI and how the KPIs should be allocated.

In the above system, it can be seen that KPIs are generated based on KPs. However, the departmental structure is not based on KPs. As a result, many KPIs could be allocated to more than one department. This could be explained as a result of team work, but in practice, when these departments are jointly responsible for a KPI, it also means that no one would really care about it in real practice, because they expect the others to work on it.

Here is an example of a credit business operation process from the profit objective. When we allocate the process to the current company structure (departments), we get the following result:



Figure 8.5: Example of credit business process allocating to current departments

In the above figure, the upper part is the steps or sub-processes of a credit business process; the lower part is the related departments. The lines and arrows indicate which department is responsible for a step or sub-process. It can be seen that in the current company structure, the credit business process needs to go through many management levels, from branches to headquarters and headquarters' top managers. It also goes through many departments: credit approval department, credit management department, law and risk management department and the financial department. What is worse, for some steps it needs to move between departments many times before proceeding to the next step.

All of these departments and employees are responsible for the KPI of credit business development. However, when having a bad result, everyone claims that it is not their fault and they can do little about it.

In practice, sales managers and branch managers are considered to be more responsible for the KPI of credit business development. However, it can be seen from the above figure that they are only responsible for a small part of the entire process. As a result, employees with less authority and power are given even more responsibilities and burdens; many departments are related and participate in the process, but no one is really responsible for the KPI.

D Bank could use the BSC method to decompose the objectives and allocate KPs and KPIs to the current company structure (departments), which need to be redesigned and adjusted based on the KPs before allocating KPIs. Otherwise, when KPIs and KPs are decomposed and allocated to the existing departments, the existing department structure affects the efficiency of the process because the process needs to be carried out by employees in many different departments. From the perspective of MTP (manage through process), the company structure should be designed according to its processes.

Thus, through in-depth interviews with D Bank's top and middle managers, we applied the performance tree method to design the performance tree for D Bank. We firstly built the upper part of the tree, which is an initial decomposition of the main objectives. It is shown in the following figure:



Figure 8.6: An initial decomposition of the main objectives in D bank

The first level in the figure is the three main performance objectives of D Bank: profitability, security and innovation. The second level shows how the main objectives are aggregated from sub-performance. Each sub-performance is achieved by one or more key processes. For example, the performance of loan business development goes through a process which consists of loan business strategy making, marketing, operations, and risk control activities. Here, we mainly apply the SSM (Soft System Methodology) which we introduced in Chapter Four, to carry out the strategy and objective decomposition. SSM could help the manager think about the innovation possibilities of the organization from the perspective of performance generation.

At this stage, we need to consider the establishment of performance units from the perspective of the implementation of performance management (we firstly identify and establish the performance node, then consider how to form appropriate performance units). We normally raise a series of questions to understand the management intentions of the stakeholders; in other words, to understand how the stakeholders want to manage the organization. For example: are you going to build the general organization's performance management system according to the above three main parts? Can we identify the specific person who should be responsible for managing each part? Are we going to allocate resources and authority power to the people responsible? These questions push the stakeholders to rethink the organizational performance generation process from the perspective of management and implementation in order to make the performance management system more practical and to fit the real situation of organization. In the following stages, whenever a performance node is formed, we will repeat this process, in order to discuss with the stakeholders how to form and manage the related performance unit.

Next, for each of the performance we mentioned above, we carried out an open discussion with the stakeholders. The content of discussion included how to achieve the performance goals, the related processes, the key steps of the process and the personal (manager's) preference of how to manage the process. For example, for the performance of profit, we may discuss with the stakeholders how to achieve the current profit performance. What are the key points in the process of achieving profit performance? What strategies are applied to support the current profit performance? What do you think should the profit performance be achieved?

With this initial performance tree, we carried out further decomposition of KPs to analyse what actions need to be taken in order to finish each process. In order to clarify the details of the above KPs, the performance team needs to be constantly looking for related stakeholders. For example, for the credit loan business, we need to understand the key points of how to carry out the credit loan business. Therefore, we identified the key stakeholders of the credit loan business: vice manager X, and the heads of the credit

management department and credit approval department. Through the discussion with the three key stakeholders, we discovered that D Bank is currently focusing on the marketing and business operation processes of the credit loan business. However, we also heard that the strategy-making process is very important to the development of the credit loan business, but that it does not get enough attention. Similarly, we understood that credit risk prevention and control are also very important, but there have always been problems in D Bank due to a lack of resources and technical support.

Therefore, we proposed a redesigned credit loan business development plan, including strategy development, marketing business process operations and credit risk control, and other KPs. Based on these KPs, we further discussed how to measure the performance of each process (and possible indicators). We also discussed whether or not to build up performance units according to these KPs. Following the above process, we conducted in-depth interviews with stakeholders of each performance, in order to discuss how to improve the structure of the performance units at the micro-level. In this way, we discussed the possible improvements based on a thorough understanding of the performance generation process and finally formed the performance tree.

After building the performance tree, we carried out repeated discussions with stakeholders at all levels of the organization to confirm the overall network. In this process, adjustments in performance tree and related measurements were applied, some coming from high-level stakeholders according to the bigger picture of overall organization management, some coming from operators based on their feasibility in real practice. There are three key aspects in the performance tree of D bank: profit, safety and innovation. The profit is about how to develop business. The safety refers to risk management in every aspect. The innovation mainly refers to new product design and new management methods applications. In the end, the performance tree, performance units and even the detailed information of each performance node was formed after repeated discussions. We summarized some details about the credit loan activities, as can be seen in the following table:

-								
Process		Sub-process	More Detailed activities					
		Market analysis and customer targeting (local market, agricultural business and small companies).	D Bank has a good image and background in the local area, which helps to attract local customer these customers trust local banks rather than state-owned commercial banks. D Bank also tries companies and wealthy customers.					
Cradit	loon	Customer information collection and background check (collect information of potential customers, look for business opportunities).	D Bank formed a team of sales managers (more than 100 employees) to collect customer in which covers the local area. They look for potential customers instead of waiting for cu government institutions to get customer information, such as the business bureau.					
business customer	IUall	Analysis of customer information.	D Bank not only checks the paper documents that customers provide, but also pays visits to cu creates a communication centre for sales managers to share experiences and information.					
strategy.		Analysis of customer information is summarized in a report.	The quality of the report is very important, since it affects the credit approval decision. If a recustomer, D Bank would suffer a loss in the end.					
		Make business plan according to the report.	Compared with other commercial banks in the local area, D Bank is more flexible because it is a result much more quickly to the local market. As a result, D Bank has an advantage in providing tailored b					
		Customer service and after-sales service.	Sales managers pay visits to customers regularly in order to get feedback and updates. Through competitive advantage for D Bank.					
		Set sales objectives.	D Bank sets credit loan business objectives annually.					
		Objective decomposition to branches.	When composing and allocating objectives to branches, D Bank need to consider the economic devorder to make the branch objectives challenging and reasonable.					
Credit business marketing	loan	Build up and maintain sales channels (mainly government institutions).	D Bank looks for cooperation and business opportunities with local government and pub agricultural development bureau.					
strategy.			D Bank makes the best of local market background and its good image; it keeps a close relationsh introduced.					
		Customer relationship maintenance.	D Bank has realized that good customer relationships will be not enough for the future developm new value-added products and services.					

Table 8.7: Some details about the credit loan activities decomposition continued on next page

ers, especially local farmers and small companies, since es to attract different types of customers, such as large

nation. These managers build up an information network ers to come to them. D Bank also makes good use of

mers in order to find out their real situation. D Bank also

eport fails to reveal the real situation of an unqualified

relatively small bank, and headquarters is able to respond banking products to customers.

e visits, a strong customer relationship is built, which is a

velopment conditions and potential of the branch area, in

institutions, such as public hospitals, schools and the

ip with customers, and as a result, many new clients are

nent of the business. Therefore it pays great attention to

Process	Sub-process	More Detailed activities					
	Initial investigation.	D Bank provides various training for sales managers because they are at the frontline, dealing wi managers is to investigate customers when they apply for a credit loan. Sales managers need to ma Sometimes, the head of the branch also pays a visit to customers in order to confirm the initial investigate					
	Credit limits approval process.	Usually, D Bank gives approval limits to a customer so that they do not need to apply for approchanges, the approval limits will also be adjusted.					
Credit Ioan	Credit management.	To coordinate with the credit approval process; speed up the process transaction of credit loan busin					
business process	Payments of loans and interest.	To collect interest payments on time, monitoring and updating loan conditions.					
operations.	Post-loan management and non-performing loan management.	This process is mainly for non-performing loans. D Bank has set up different policies for bad l customer of the bank, more time will be given to the customer to repay the loan and interest. I to deal with bad loans.					
	Inspection and supervision.	D Bank does not emphasise inspection and supervision; it expects and encourages employees to and supervision is mostly to avoid mistakes and loss; therefore there is no severe punishment.					
	Relevant statistical data and reports.						
	Credit risk control by information network.	The information network is formed by sales managers. It contains information from different sour bank to understand the real situation of customers.					
Credit risk	Credit risk control by training sales managers.	D Bank pays great attention to staff training, especially for sales managers. The sales managers are of and report the potential risks to the bank. More importantly, D Bank values good character, suc moral hazards.					
control.	Credit risk control by setting up inspection and supervision regulations.						
	Credit risk control develops a good credit environment.	D Bank contributes to the local economy, builds up a good relationship with local companies and efforts leads to a trustful marketing environment. D Bank also benefits from such a marketi					

Table 8.7: Some details about the credit loan activities decomposition

ith customers. One of the major responsibilities for sales ke the initial investigation and find out the real situation. stigation.

oval every time. When the customer's financial situation

ness.

as: if the customer has a good credit record or it is a loyal ank has set up a non-performing loan management centre

e careful and self-disciplined. The purpose of inspection

rces about local market and local customers. It helps the

e all qualified and experienced so that they can be aware ch as honesty and integrity, in order to control and avoid

establishes a good image to local people. Such an attitude environment in terms of credit risk control.

In the above table, we further decomposed the credit loan business process to show the sub-processes which are necessary. We also explained some details about the activities, especially for the strategic ones. Here, we have only demonstrated the credit loan business process as an example; the overall decomposition contents can be found in the Appendix. Followed by the more detailed activities, there are corresponding actors and KPIs. Due to the large size of the table, these contents are shown in Table 8.10.

8.3.2 Building and Optimizing Performance Units

Based on the discussion of how to form performance units, we therefore build the performance units according to the performance aggregation process. The building and optimizing of the performance units follows two principles: 1. To minimize the interaction between performance nodes in different performance units; For example, we could build a credit loan business department performance unit, which is in charge of strategy making, marketing, operations, and the credit risk control process of credit loan business development, the main processes are carried out within one department so that there is few interaction between performance nodes in different performance units. 2. To integrate some common functions in order to improve the operation efficiency in the organization. When we designed the performance units, we followed the basic principles and tried to, as far as it takes, make each unit independent in process operation. Meanwhile, we also needed to consider the integration of some functions in order to improve the operation efficiency in the organization. For example, in many operation processes, there is a step to deal with related legal documents. If we assigned an individual staff member to each legal process, it would waste a great deal of organizational resources. Therefore, we integrated the function of processing legal documents and formed a performance unit called the legal document processing centre, to specially deal with legal documents for all the processes.

Based on above principles, we carried out some integration and adjustments in the performance units of D Bank. For example, we can re-group the activities of the credit loan business process according to the keyword of "customer". We selected all the activities that contained the keyword of customer: customer information collection; customer investigation reporting; customer information updating and tracking, and customer relationship maintenance. These activities require the actors to deal directly with customers. We then created a job post to carry out these activities: sales manager.

Based on the above method, we decomposed and re-grouped all the main processes for each of D Bank's objectives. With the virtual posts and departments, we can show how the performance of profitability is achieved:



Figure 8.8: Profitability performance generation processes

As can be seen in the above figure, there are some virtual departmental structures. These structures are formed or adjusted in accordance with current KPs. In this figure, most of the KPs are carried out by a single department, which means that the processing efficiency is greatly increased due to more efficient departmental coordination. Some functions of the departments were also regrouped and adjusted.

In the adjusted company structure, most of the KPs are carried out by a single department. As a result, less KPIs are shared by different departments. For example, the KPIs for credit loan business development are the major responsibility of the credit loan department. The credit loan department directly manages sales managers (those managers used to be directly managed by the branch manager). The credit loan department is also in charge of making strategic business development plans, designing new credit loan products, and marketing activities. Some other functions, such as cost control and risk control, are now handled by other functional departments. As a result, the credit loan department can focus on business development; it now has the authority to manage the front-line managers. Meanwhile, it can respond more quickly to the market and customers, since it no longer has to report everything to high-level managers before taking action. After the adjustments, department functions are more specialized, and it is much easier and clearer to allocate KPs and KPIs. Above adjustments is only a starting point, normally an organization needs to consider more aspects when setup or adjust the organizational structures, such as the availability of staff, organizational resources, location and personal conditions.

It needs to be noted that the detailed adjustments and redesign may lead to a change in organizational decision making, and therefore the overall performance unit structure may be changed accordingly. Thus, it should be carefully considered and thoroughly discussed with related stakeholders before making any decision about performance units. The establishment of performance units means to set up a management relationship and allocate resource to some part of the organization. The existing organizational structure can be adjusted and changed according to the performance units, or to set up a completely new structure if necessary. For some organizations with a strong ability and willingness to carry out structural innovations, we could redesign the entire organizational structure according to the developed performance units. For those limited by organizational resources, the

performance units can be compared with the existing organizational structure, and only improved in part. In some cases, the organization needs more time to clarify and decide on the performance tree and units; thus, the decomposed processes, performance units and activities can be temporarily deployed to the current or a part of current organizational structure, and then gradually adjusted in the future.

The above implementation in our case have taken a long period of time; it only points out a direction of adjustment following the principals of MTP (managing through process).

Similarly, we decomposed and re-grouped the processes that support the security and innovation objectives of D Bank. We used the adjusted activity set to form the virtual company structure. This is shown in the following.

After continuous discussions with stakeholders and adjustments, we now have the adjusted company structure figure as shown below:



Figure 8.9: Adjusted department structure of D bank

As shown in the above figure, there are now six parts to the new structure, in which the front-line staff includes sales managers and tellers in the branches, who deal directly with customers and sell all kinds of bank products. However, these employees are no longer managed by the branch manager. Tellers are managed by the operation management department and sales managers are managed by the product lines department.

The product lines department is in charge of making strategic plans and implementing their product business. It is also in charge of marketing, allocating objectives and supervising front-line employees.

Risk management part deals with all kinds of risks to the bank. The credit approval process is considered an important risk control process, and so the credit approval department is re-grouped in the risk managing part, instead of the business development part.

The capital and fund planning part is responsible for cost control, fund planning, accounting, etc.

The IT and new product design part is responsible for: information technology system maintenance; new information system design; and new product design. The new product design process starts with the business development departments, which draft new product proposals based on market research or customer feedback. A temporary team would be built to design the new product. Team members consist of specialists from all of the related departments.

The administrative support part is responsible for human resources, security and construction activities.

There are some advantages to this company structure:

Fewer management levels: The business development processes are now carried out by front-line employees who are directly managed by the corresponding departments. Branch heads now function as a support instead of directly managing front-line managers. At headquarters, the responsibilities of the departments were adjusted so that each business process can be operated by one department in most cases. It also means that there are fewer management levels between departments at headquarters.

The process-oriented department setting: The company structure of D Bank was adjusted according to KPs. There are now fewer KPs that need to go through different departments. Now, each product line is relatively more independent when developing its business. It means that less coordination is required between departments. As a result, the operation processes can be much more time efficient, which leads to a better customer experience.

The modularized function part: Management functions were centralized and modularized into corresponding departments. Some new structures were formed in order to specialize the management functions. Now, the department responsibility and function is much clearer and more complete.

In the implementation stage, we discussed with the top management how to carry out the improvements and adjustments in department structure according to the performance units. The top management team needs more time to discuss the establishment of each performance unit because it will lead to changes in many aspects of D Bank. Therefore, we will temporarily deploy the performance nodes to their current departments at the beginning, and then change step by step.

8.3.3 Constructing Performance Management System

Based on the performance tree and performance units, we can further develop the corresponding performance management/measurement system. The performance management system can be designed based on the newly-designed performance unit structure (or current departments). In our framework, the main approach is based on KPIs and the performance plan. We often develop KPIs from each of the key activities in the performance tree using classical 3E theory (Meng, Li and Liu 2007). The 3E theory evaluates the activity's performance from the perspectives of efficacy, efficiency and effectiveness in order to generate the corresponding KPIs (Liu, Cheng and Mingers 2010). However, the characteristics of Chinese commercial banks, the needs of business development and operation, the requirements of the CBRC, and the current technology level should be all taken into consideration in the design stage of the indicator system (Shen, Lu and Wu 2009). So, on the basis of the original performance evaluation content of D Bank, and also based on the results of the strategy decomposition using the performance tree, we get the KPIs of the main departments of D Bank's headquarters. We add the indicators generated from the strategy decomposition using the performance tree on the original performance evaluation content. Also, the corresponding KPIs of tasks given by the regulatory institutions are added to some departments. Most importantly, the risk management related indicators are assigned to related departments to evaluate and control all kinds of bank risks (details of risk management can be found in Chapter Two). Since these KPIs are generated from the performance generation and operation processes of D Bank, the department structure of D Bank are only used in the final assignment of performance indicators. The department structure does not affect the design and selection of KPIs. In other words, the performance generation process and the operation process of the organization is always there, no matter how the department structure and the departments' responsibilities change. Thus we only need to identify the relationships between performance, process, KPIs, and the responsible people when assigning the corresponding indicators. The specific name of the department, or the management relationships, would

not be important anymore. Some key departments and their corresponding KPIs are summarized and demonstrated in Table 8.10.

It should be noted that the emphasis of risk management is reflected in the summary of indicators. For each department, some risk management related indicators are added. These indicators are designed and allocated based on the risk management literature reviewed in Chapter two. When interviewing with the department managers, we ask them how to carry out risk management in terms of their operations. A comparison is made between their current risk management approach and approaches suggested in the literature. Continuous discussions are followed with the key stakeholders about the most suitable and desirable risk management approach, as well as related performance indicators. There are several difficulties in this process. The risk management approaches and methods suggested in literature maybe not feasible due to different data standards, a lack of software/hardware, or a lack of professional skills among employees. Alternative approach should be found for the specific situation. Another difficulty is to identify and persuade the responsible actors to carry out risk management activities. In D bank, department managers normally believes that risk management is only the responsibility of Law and Risk Management Department. Therefore they are quite reluctant to perform risk management activities, and complaining about their risk management indicators. This requires the consulting team to be familiar with commercial bank operations and related risk management issues in order to provide suitable and objective suggestions. Here is an example of added risk management indicators, the non-performing loan (NPL) of electronic banking business is suggested to be added in Electronic Banking Department. D bank need to provide supporting data by identifying which NPL is related to electronic banking business. Meanwhile, the department manager of Electronic Banking Department should agree with the indicator and commit to perform related key processes of risk management. Similar risk management indicators can be found in each of the departments in Table 8.10.

Department	Electronic Banking Department	International Business Department	Auditing Department	Law and Risk Management Department	Human Resource Department	Credit Approval Department	Credit (Business) Management Department	Operation Management Department	Financial Planning Department	Investment banking Department	Inclusive Financial Department
	Number of approval operations of opening bank card account	Error rate of international settlement business	Timely completion rate of audit program and related regulation making	NPL ratio	Timely completion rate of routine HR operations	Timely completion rate of credit business approval operations	Liquidity ratio	Timely completion rate of accounting staff training program	Timely completion rate of annual budget plan and clearing work	Profit of interbank business	Timely completion rate of deposit mission
	Timely completion rate of approval and review operations	Timely completion rate of international settlement business	Timely completion rate of various types of internal audit project	Score of missions in mission monitor system	Timely completion rate of employee benefits and compensation management	Error rate of credit business approval operations	Percentage of SME loan	Hours provided for accounting staff	Timely completion rate of quarterly financial situation analysis and monitoring	Growth of rediscount business	Profit of new (intermediate and personal banking)product in the first year
	Replacement rateTimely completionof electronicrate of filesbanking businessmanagement andoperation systemexmaintainingmaintaining		Number of mistakes that failed to be examined by audit projects	NPL amount and percentage of first three level of NPL	Error rate of employee benefits and compensation management	NPL ratio	Loan-deposit ratio	Timely completion rate of accounting inspection operations	Timely completion rate of warning and alerting of abnormalities	Timely completion rate of warning and alerting of financial market	Total growth of intermediate business
Indicators	NPL ratio of electronic banking business	Error rate of file check and review	Quality of audit report	Contracts and legal documents drafting time (timely completion rate)	Timely completion rate of discipline inspection and supervision operations	Timely completion rate of approval before issuing loan	Adequacy ratio of loan loss reserve	Number of mistakes that failed to be examined by accounting inspection operations	Timely completion rate of financial report	Growth of market rates related products	Percentage of SME loans/total loans
	Profit of new (electronic banking)product in the first year	Number of accounts in international business	Timely completion rate of audit file and document collection, organizing and management.	Timely completion rate of NPL classification, review and approval	Satisfaction rate of board of supervisors	Error rate of approval before issuing loan	Provision coverage	Timely completion rate of anti-money laundering operations	Timely completion rate of payments review and accounts processing operations	Growth of shadow banking-related business	Loan-deposit ratio
	Score of missions in mission monitor system	Hours of related training provided to employees	The adequateness of original audit data, evidence and elements	Provision coverage rate	Score of missions in mission monitor system	Number of mistakes that failed to be examined by supervision approval	NPL ratio	Timely completion rate of accounting reconciliation operations	Timely completion rate of daily approval management	Score of missions in mission monitor system	Growth of new agriculture-related loans

Table 8.10: Summary of departments and corresponding KPI continued on next page

	Electronic Banking Department	International Business Department	Auditing Department	Law and Risk Management Department	Human Resource Department	Credit Approval Department	Credit (Business) Management Department	Operation Management Department	Financial Planning Department	Investment banking Department	Inclusive Financial Department
	The number of consumption in traditional POS	Score of missions in mission monitor system	Hours of related training provided to employees	Timely completion rate of anti-money laundering missions	etion Error rate of file Score of missio oney and documents in mission moni g management system		Number of new agriculture-related loans	Timely completion rate of payment and liquidation operations	Capital adequacy ratio	Liquidity ratio	Growth of new SME loans
Indicators	Number of account in personal online banking and mobile banking	Total amount of international settlement business	Score of missions in mission monitor system	Timely completion rate of supervision and inspection missions		Rate of credit concentration of single group	Number of new SME related loans	Error rate of important materials management(seals, important blank accounting documents and files)	Adequacy ratio of loan loss reserve		Growth of all loans
	Number of account in enterprise online banking and mobile banking			Timely completion rate of training missions			Number of new loans	Accident rate of operational risk	Provision coverage		Growth of deposit

Table 8.10: Summary of departments and corresponding KPI

Selection of KPIs

Considering the practical situation that we learned about from the discussions with different department heads, we carried out the selection of KPIs mentioned above. The purpose of the KPI selection is to make it easier for departments to carry out performance evaluations. It is also aimed at showing the actual workload and the contribution to the organization's objectives by the departments. Meanwhile, considering that it is the first time for the headquarters of D Bank to carry out strict and systematic KPI evaluation, we carried out a certain amount of downsizing of the KPIs, to make them easier to implement. In the final implementation, there are on average three to five KPIs in each business department (with at least one risk control indicator), one to two KPIs in each functional department, and no KPIs in some support departments. In this way we greatly simplified the performance evaluation system and we lowered the difficulty of implementation and the orientation of the performance evaluation system is clearer.

Design of the performance plan system

The performance plan is the performance management tool that incorporates the planning, tracking, supervision, guidance and feedback into one system based on the KPs. After composing the organizational strategic objectives layer by layer to get the KPs, the corresponding individual performance plan should be generated by the employee himself/herself based on the assigned KPs. In this performance plan, each employee needs to explain their work methods, work schedule, possible problems, issues, and the resources and help needed, etc. After the plan has been set up, the direct senior manager will carry out regular performance appraisals to give guidance and to track the work progression of the employees in order to improve execution power.

The performance plan system can be linked with the company strategy and the key ideas of the managers. In times of strategy changes and management idea changes, the performance plan system needs to be updated quickly in order to help managers improve the execution power. For this reason, in principle, the organizational strategic objectives should be decomposed layer by layer to get the KPs. The corresponding individual performance plan should be generated by the employee himself/herself based on the assigned KPs.

In this performance plan, each employee needs to explain their work methods, work schedule, possible problems, issues, and the resources and help needed, etc. The tracking and recording of these details is different from the evaluation of only the work results. The performance plan can build up an efficient formal communication channel between an employee and their senior manager. It is not only a method of supervising and promoting work, but also an opportunity to give guidance for work methods. The performance plan system enables the employees to envision how to carry out the key works in order to prepare and plan in advance. It is an active work method. In comparison with the performance evaluation which is based on results, the performance plan system is able to improve the execution power of the employees. It provides active promotion of the soft work and temporary work.

In designing the departmental performance evaluation system, in general, after we carry out the strategy decomposition, the decomposed KP and KPIs are assigned to departments and posts to be evaluated. For example, in the case of T Company (Liu 2010), the sales department was based on the KPs assigned: how well the regulations of sales people are executed and how much guiding are provided.

The department evaluation chart that was formed is as follows:

Employee Number	Name	Position		Depa	rtment		Evaluation time				
				Sales	department						
1, KPI											
КРІ	Definition KPI	[objective	Actual H	KPI	Evaluation cycle	Information source	Total score	Actua	al score	Weight	Explanation
Number of salesman					Quarter					20%	
Passing rate for sales expertise					Quarter					20%	
assessment of sales people											
Sales Department unit (region or					Quarter					15%	
individual): fulfilment rate of sales											
target ;											
Satisfaction rate of sales people in					Quarter					15%	
service with training of sales skills											
Subtotal											
2、Key Process (KP)											
КР	Definition	Key p	oints C	Objective	Deadline		Control indicator	Weight	Self-ev	aluation	Feedback and evaluation
Sales force management reg	ulation							40%			
implementation; Sales training implementation											
Total:											
Confirmation											
Sign: Date											

Table 8.11: Example of department evaluation table in T Company

The above chart is the performance evaluation form for the sales department, as well as the head of department. The form is divided into two parts: the first part is the KPI evaluation, and the second part is the KP evaluation. Generally the departmental KPIs are extracted from the departmental KPs that come from the departmental strategy decomposition. The KPs are integrated here in order to simplify the operation, and so the KP evaluation in the second part is formed. The department heads communicate with their senior managers about the work content, work ideas, methods and the expected results of the KPs in order to form the specific performance plan. The forms are normally filled out by the department heads.

8.4 Implementation of the Performance Plan in D Bank

However, the above plan may need some adjustments in Chinese commercial banks, especially in the functional departments at bank headquarters. We mentioned at the start of the case study that D Bank is a commercial bank formed from the Rural Credit Cooperatives. In the Chinese commercial bank system, it is still supervised by the Province Rural Credit Cooperatives Association and the CBRC, etc. Therefore, many of the work objectives and work methods in D Bank cannot be decided independently. In many instances, D Bank needs to complete tasks which were instructed by the regulators and external institutions. In the performance evaluation, it is hard to form guidance and tracking performance evaluation plan that is pre-set and systematic, since the tasks and work objectives of D Bank are uncertain. These temporary and out-of-plan tasks will usually land in some of the functional departments, since they are directly managed by the higher level authority. In this system, the management style of the higher level authority will be inevitably passed on.

In this situation, after the generation of KPs and KPIs for functional departments at headquarters, we keep the KPIs the same, but decompose the KPs according to management

style. The KPs are reallocated inside based on the needs of management practice. After the reallocation, the evaluation of the functional departments is divided into three parts (weights to be determined): KPI evaluation, routine core work and special core work.

The routine core work is the work content that needs long-term continuous operation. It can usually be planned as a whole at the beginning of the year, and the implementation can be constantly supervised. The routine core work is separated from other operations and assigned to a specific employee in the department. In theory, this separation can often extract the work content that needs unique skills. It fits the principle of work classification in our performance management framework of banks. It not only promotes the stability and the high efficiency of the organization's core operations, but also improves the specialization level of the employees. The special core work includes temporary specific tasks given by upper management and complex tasks that need team coordination. The special core works are usually evaluated using the mission monitor system (the related content of the mission monitor system will be explained in detail later). However, after getting the mission score from the system, the responsible person will need to give an evaluation, guidance and feedback about all aspects of the task fulfilment.

The mission monitor system is an E-office system developed by D Bank. It was originally designed to track the temporary but important missions assigned by upper management. For each mission, the final fulfilment is comprehensively evaluated. This is usually carried out by the vice manager in charge in order to evaluate the department heads. However the evaluation results have a limited effect on organizational management and employee training. For the employee that carried out a certain mission, the evaluation score cannot show how he/she performed in completing the mission in any aspect, so he/she cannot get specific guidance and training. For this reason, based on our understanding of the work content of D Bank's functional departments, combined with performance management literature on the functional departments (Huang and Zhang 2008), especially the employee competency model (Lucia and Lepsinger 1999), we proposed the general and special skills

that are needed for each department, and we also proposed the plan of further decomposition for each special core mission. While matching the management style of D Bank, it makes the management operations more structured and it also provides practical tools for management practices. The following is some screen-shots of the mission monitoring system (below is the original source which contains Chinese characters):



Figure 8.12: Screen-shots of the mission monitoring system

Thus, we adjusted the performance evaluation plan for each department. Here, we will use the law and risk management department as an example; the performance plan form is shown in the following chart:

Employee	Name	Position	Departme	ent	Evaluation time										
Number															
			Law and r	risk management department											
	KPI and KP measurement														
	KPI objectives														
KPIDefinitionTargetActual valueCycleData providerKPI scoreWeightF															
									n						
NPL ratio					Quarter	Financial department		20%							
NPL amount	and percentage of				Quarter	Financial department		20%							
first three level	l of NPL														
Contracts and	d legal documents				Quarter	Law and risk management		15%							
drafting time	(timely completion					department									
rate)															
Timely compl	letion rate of NPL				Quarter	Law and risk management		15%							
classification,	review and approval					department									
Provision cove	erage rate				Quarter	Financial department		10%							
Timely com	pletion rate of				Quarter	Law and risk management		5%							
anti-money lau	undering missions					department									
Timely com	pletion rate of				Quarter	Law and risk management		5%							
supervision and inspection						department									
missions															
Timely comple	etion rate of training				Month	Law and risk management		10%							
missions						department									

Table 8.13: Example of department evaluation table in D bank continued on next page

	KP measurement											
Routine core work												
Key process	Description	Key points tactics	and Object results	ive and	expected	Evaluation time		Monitoring indicator weight			Self-evaluation	Final evaluation
NPL management	Identifying and recover NPL, surveillance and alert of related business								60%			
Legal documents and contracts management	Drafting, reviewing and dealing with all legal documents and contracts								25%			
Training management	Making training plans, organizing and coordinating related training programs							15%				
Subtotal												
			·		Special c	ore work			ŀ			
Missions	Content of missions	Information	Ability to	Ability	to M	ission progress	Expla	in if mission is	weight	Self-evaluat	tion Final ev	aluation and score
		collecting ability	understand policy and execution	communic and coord	cate linate	not		ompleted				
Mission 1	Supervision and inspection											
Mission2	Anti-money laundering											
Mission3												
Subtotal												
Employee Sign:	Date					Superior man	nager si	gn:	Date		<u>.</u>	

Table 8.13: Example of department evaluation table in D bank

In the new departmental performance measurement system, we still use the KPIs that were decomposed from the strategies. Routine core work refers to the operations that need to be carried out every day. The content of routine core work is usually fixed and can be planned at the beginning of the year. Here the routine core work is mainly about credit risk management and legal risk management. The credit risk management requires the department to be able to identify, evaluate and recover non-performing loans. More details about credit risk management can be seen in Chapter Two. The legal risk management requires the department to understand their legal responsibilities, not only for the customers, but also for the bank employees and other related organizations. Details about risk management can be found in Chapter Two, in which we discuss how to manage different risks and some existing methods. The special core work refers to the important missions from higher level authorities, such as the provincial credit association. The content of this kind of work is not fixed; it mostly depends on current banking and economic policies. Here the special core work is also about risk management. The missions can be different according to the current policy and general situation of local banking industry.

In the following, we will discuss some advantages of the new system.

8.5 Comparison between the Existing and the New Performance Management System

The new system could help to improve the performance management of D bank in many aspects, we summarized some as below:

To improve execution power

According to the analysis in the first stage, D Bank adopts a soft management approach and tries to encourage employees to work voluntarily. But this management approach also results in a lack of execution power. In the case of lack of execution, even a perfect system, plan or strategy is in vain. In order to improve execution power, we suggest the implementation of the performance plan system, including management tools such as supervision, guidance and feedback on staff work schedules on the basis of combining and decomposing core business processes. Since the contents in the performance plan system are developed by the first and second step of performance tree method, the job responsibilities are clearer and the responsible employees are clearly identified. Through the combining and decomposition of core business processes, each employee will be closely associated with the indicators of a core business or process. These indicators will be used to supervise and track employees' progress, and they will be incorporated into the performance plan of each employee.

To improve formal communication

Benefiting from open, equal and human-based management, D Bank has a good working environment, and harmonious interpersonal relationships exist between employees. Good informal communication channels also exist inside the company. The employees tend to use informal communication to deal with problems and conflicts in work, and there is a lack of formal communication. Using this communication mode, the employees may intend to break the regulations with regards to saving someone's pride. This results in a decrease of the execution power of the regulations. So, building up a thorough formal communication channel, encouraging and enhancing formal communication is necessary. Even though there are some formal communication methods in D Bank, such as weekly meetings, there are many issues, such as the lack of a unified form of communications, hard to implement, etc.

Because of that, D Bank needs to build up a formal communication mechanism with large coverage, a unified form, clear content, and complete records. Therefore in our new design, we use the performance plan and appraisal system as the carrier of the formal communication. The content of a performance plan should be based on the decomposition of the core business processes in order to link it with the execution of the company's strategic objectives. At the same time, the formal communication channel is established between each employee and their direct superior. Since the contents in the performance plan system are developed based on the first and second step of performance tree method, the managers have considered how to optimize and adjust the department structures to fit in the performance aggregation process. As a result, employees are clear about who to report to, and the contents of communications are clearly designed for achieving certain performance.

To improve the talent training mechanism

Regarding the problems in the process of talent training in D Bank, we suggest that a unified and complete talent-training plan needs to be made as soon as possible. This plan should include training for employees' skill levels, work mode, work habits and moral standards, etc. We also suggest promotion of the mentor rotation, which enables employees to change a mentor every few years. D Bank needs to take full advantage of various information sharing platforms. It also needs to formally promote the exchange of internal experiences and introduce the external banking management theories.

In order to guarantee the execution power of talent training, we suggest incorporating the content of talent training into the performance plan of each employee through the decomposition of core processes. This enables D Bank to take care of the talent training in the daily work. At the same time, the tracking and supervision of daily work also facilitates the supervision and guidance of talent training so that the objectives can be reached.

In terms of the problems in the training and managing of the customer managers, we suggest firstly investigating from inside of D Bank. Some internal senior management experts have some original and unique opinions about how to train and manage customer managers, but there is no formal communication platform for them to exchange ideas and experiences, and there is no corresponding regulation to guarantee the implementation of

the training and management. There is also no communication platform between the managers of each branch. Therefore, in our new performance management system, we suggest that, led by the business management department, high quality management experiences need to be extracted and summarized from senior customer managers and managers of branches. These management experiences need to be used to form a unified training plan. The corresponding performance indicators should be designed and implemented in the whole bank. At the same time, we need to design and establish the experience exchange platform for the whole bank through various channels.

We can see that the key steps of our new system are the decomposition of core business processes and a performance plan based on that decomposition. In the following part, we will discuss the implementations of the new system in D Bank.

8.6 The Implementations

As we have mentioned, D Bank combines the KPI system and mission monitor system to carry out departmental measurements. The generation and monitoring of KPIs mainly follows the classical method, which can be found in Chapter Five. Here we focus on the implementation of the mission monitor system in D Bank.

The mission monitor system was developed based by the combination of the KPI system and performance plan system. It is applied to deploy missions, track progress, monitor staff and collect feedback on the missions. The results are directly linked to the related employees' performance salary. Currently, the mission monitor system has been applied in all departments at D Bank's headquarters; further developments will be gradually carried out.

Implementations of mission monitor system on a daily basis

On a daily basis, missions assigned by the senior managers are recorded in the system. The heads of departments and branches have their own access to check their missions. The progress of each mission is examined and tracked at the end of each month/quarter. The highest score for a mission is 100 points, and the missions are scored based on how good the results are. Each mission will get an individual score, and there are five score levels: excellent (90-100 points); good (75-89 points); ordinary (60-74); poor (30-59); not qualified (0-29). At the end of each month/quarter, the average score of each department is calculated. This average score is used to calculate the departmental performance evaluation coefficient and the performance salary of the department head.

Some missions are jointly carried out by many departments; for these missions, the responsible departments are identified to be the leading department or cooperative department. In other words, for a department, the missions can be classified as main missions and cooperative mission. When calculating the average score of the department, the scores of main missions account for 70% and the scores of cooperative missions account for 30%. It can be demonstrated as follows:

The average score of the department = average score of main missions*70% + average score of cooperative missions*30%

If a department only has cooperative missions for a month, the average score of department equals the average score of the cooperative missions. If a department has no missions at all, the average score of the department is calculated as the average score of every department. Normally, the departments with no missions are supporting departments. Such departments share relatively less responsibilities and workloads; therefore, when calculating the average score of such departments using the average scores of other departments, the top three scores are not included in the calculation.
In the mission monitor system, the missions are classified into three levels according to the importance of the mission. The most important missions are classified as first level missions, the second level is less important and the third is the least important level.

The first level missions are normally assigned at the beginning of the year. The head of each department makes their annual work plan and submits it to upper management (the board of directors and party representatives). After the discussion, the key missions are selected from all the work plans of each department, and then deployed.

The second level missions are normally assigned jointly by the vice managers. These missions are made in the regular formal meetings and assigned to each department. Such missions generally require the cooperation of many departments. Such missions are normally about business developments.

The third level missions are assigned by a vice manager to a head of department. The assignment does not need to go through formal meetings and the content normally shows the preference of the vice manager.

Due to the different importance level of the missions, the final score of each mission is multiplied by an importance coefficient. The coefficient of a first level mission is 1.1, the second is 1.05, and the third is 1. For example, if a mission scored as 80 points, and if it is a first level mission, the final score of this mission would be 80*1.1, which is 88 points.

Following the above principles, the average score of a department can be calculated. After the calculation of the average score for every department, an average score of all departments can be obtained. The average score of each department is compared with the average score of all departments in order to get the departmental performance evaluation coefficient: Departmental performance evaluation coefficient = (average score of the department)/ (average score of all departments)

This coefficient shows the performance of a department compared to the average. For example, the result could be 1.2, which means that the performance of this department is 20% better than average. This coefficient is used to calculate the performance salary of department heads for special core work (it is also applied to calculate the total amount of special core work performance salary for the department).

At the end of year, an annual evaluation is carried out. The annual evaluation consists of three main parts. The first part is the result of the daily performance evaluations, including the results from the KPI system, routine core work and special core work. The second part is the extra points given or taken at the end of the year due to excellent work or special praise from higher level authorities. For example, if a mission is completed successfully and praised by the provincial credit association, there will be extra points for the responsible departments. The leading department (sometimes also the cooperative departments) will be given extra points at the end of year. The extra points will be decided by the board of directors, and the points are given on top of the score from the first part of the annual evaluation. The third part is the 360 degree evaluation. Through the above three parts, the annual performance evaluation for the heads of department can be calculated.

The mission monitor system was mainly developed for performance evaluation of department heads by tracking and evaluating the assigned missions. In fact, a head of department normally further decomposes and assigns the missions to employees in the department. However, due to technical reasons, the system cannot support mission monitoring within a department. Therefore, the performance evaluation of the department

staff is carried out by the department head. Currently D Bank is working on further developments of the mission monitor system for branch managers.

The remuneration base

In order to calculate the salary of individuals, we need to know the remuneration base for different positions. Generally there are three bases according to the administrative level of the job position, i.e. the upper management base, middle management base and staff base. The exact figure for each base and each position is confidential, and we will not be demonstrated here.

Until now, the performance management system of D Bank integrates the performance management theories with the corresponding operational system, and makes the daily performance management activities much easier and more efficient. In the final performance management system, the performance of every department is managed through the tables we have shown above; the branch evaluation system is currently in the process of developing and will be applied soon. At the beginning of each performance evaluation term, the department head discusses with the vice manager the work plan and specific content in the evaluation tables. The completed evaluation table will be submitted to the senior manager to get approval, and will then be recorded in the mission monitor system. The performance evaluation data is provided mostly by the financial planning department. Some business-related data is generated automatically when the transaction is carried out. The special core work is evaluated mainly by the senior managers. Other necessary information is provided by the evaluated departments, and the human resource department is responsible to input such information. The maintenance of the system is carried out by the IT department, and the HR department is responsible for the general operation of the performance management system.

Up to now, the system has been running for several cycles in D Bank; the results are confidential, and so that they will not be shown here. Therefore, in the next section, we will show some feedback and suggestions for the operation of the system.

8.7 Communication and Feedback

In general, the performance evaluation system gets the approval and implementation of managers from all levels. It makes the daily work in each department much more convenient, and it also improves the execution power at headquarters. Some feedback and conclusions are summarized as follows:

The project starts from 07, 2013, the main purpose of this project is to build up the performance management system for D Bank (especially for the functional departments in headquarter) in comply with the trend of building process-oriented banks. With the guidance from the management consulting team, the senior bank managers and the active cooperation from employees at all levels, a set of performance management system customized for D Bank is gradually built up.

This performance management system is strongly practicable, which targeted the inefficient execution problem in the functional departments in the headquarter and managed to make a great improvement. In addition, a supporting and easy to operate information management system called the Mission Monitoring System is designed. At present, The performance management system has been gradually promoted and applied in the whole bank and the expected good results have been achieved. The performance management system has been gradually of the managers and this system has been positively promoting the bank's long-term strategic goal of building process-oriented bank.

Till 09, 2014, the performance management project is basically completed. This project achieved the expected result under the joint effort of both sides. This project won the consistent high praise from bank leaders and staffs at all levels.

Chapter Nine: Findings and Conclusions

9.1 Conclusions

In the beginning, the current situations and problems in performance management of Chinese commercial banks are discussed and the existing studies are reviewed. It has been noticed that banking industry is in a rapid changing environment. Many internal and external factors have great impact on the development and management in Chinese commercial banks. More importantly, current performance management system cannot adapt to the complex situation in Chinese commercial banks. Thus in this study, I discuss the solutions of the following research questions:

1. How to design a comprehensive and effective performance management framework, taking into account of organizational structure and operation features of Chinese commercial banks?

2. How to apply the performance management framework in the ongoing reform of process-oriented banking in Chinese commercial banks

3. How to implement this performance management framework in practice?

In order to answer the three research questions, this thesis reviewed the current management structure and important features of Chinese commercial banks, current performance management frameworks and practices in Chinese commercial banks. I notice that it is difficult to implement the current performance management frameworks in Chinese commercial banks. It is mainly because of that these frameworks do not consider the important features of bank core operations and the rapid changing environment caused by the process bank exercise. In fact, many of the existing frameworks are designed originally for government institutions and based on a stable management structure; they are not designed for the process orientated bank and not applicable to process orientated management. These problems cause difficulties in implementation of the existing frameworks in commercial banks. This thesis therefore, reviewed the organizational structure theories and initially developed a performance management framework for Chinese commercial banks. This initial framework integrates the classic performance management theories and Mintzberg's organizational configurations theory, which is tailored for the Chinese commercial banks. However, this initial framework is designed based on some general assumptions and should be adjusted according to some contingency factors (stable management structure and environment). To further implement the framework in current Chinese commercial banks, it is necessary to consider the process orientated bank exercise in Chinese banking sector. Therefore a new method is applied for Chinese commercial banks in rapid changing environment. This framework facilitates an approach to design performance management system for organization operating in a rapid changing environment, in cope of the change of organizational management structure from the view of performance generation process. Finally, I apply the framework in two real Chinese commercial banks. During the case studies, I demonstrate the important steps and key points of applying the framework. The results are satisfying and the positive feedbacks are received from the bank managers.

9.2 Contributions

The thesis majorly contributes in below aspects:

1) The organizational configurations theory is integrated in developing the performance management framework for the Chinese commercial banks. The new framework analyzes the features of core operations and congregational structure of Chinese commercial banks based on the findings of organizational structure theories. Therefore, it is a tailored framework for Chinese commercial banks.

2) Considering the ongoing reform of process-oriented bank and the rapid changing internal and external environment of Chinese commercial banks, this thesis provides a practical performance management framework to deal with the complex situations and to promote the reform from the perspective of performance management. In this framework, I apply the performance tree method to build up the performance network. The performance tree method focuses on the generation and aggregation process from individual performance to organizational performance. It also proposes an adjusted organizational structure from the perspective of managing performance. The framework fits the principle of process-oriented bank reform, and it provides a management tool for the further development of Chinese commercial banks.

3) Finally it applied the new performance management framework into Chinese commercial banks. During the case studies; I demonstrate the important steps and key points of applying the framework. The results are satisfying and the positive feedbacks are received from the bank managers. The case studies show that the framework is practical and effective to solve real problems. The contribution of this thesis includes not only the results, but also the processes of diagnosing, designing, and implementing the framework.

9.3 Further Research

Some further research is suggested as follow:

In this thesis, I introduced the performance management framework for Chinese commercial banks. The framework is tailed for Chinese commercial banks because it considers the main features and characteristics of the organizational structure of Chinese commercial banks. Therefore, for other type of organizations, different features and characteristics of organizational structure could also be considered. More type of tailored

performance management frameworks could be designed for companies with significant features. Meanwhile, some contingent factors should also be taken into consideration when designing the performance management framework such as different size and ownership of the organization.

The framework can be applied in other type of banks, such as policy banks and investment banks. These banks have similar features with commercial banks. They are supervised by external institutions and emphasis the risk management functions in internal operations. However, it should be noted that the core operations of such banks maybe different, which result in a different design of performance management system. Thus, it is necessary to analyze and understand the core operations of the specific bank before applying the framework. The framework can be also easily applied in other financial institutions, such as insurance companies, the similar core operations and business mode requires only slight adjustments in the framework. From the perspective of organizational configuration theory, commercial banks, together with many other financial institutions, share the characteristics of mechanical bureaucracy organization, thus similar coordination methods should be applied.

Following the same principle, the performance management framework could be further extended to fit into other kind of organizations, such as universities, hospitals, and research institutions. The core operations of these organizations are generally HH operations, and the organizational structures are similar to the professional bureaucracy organization. A tailored performance management framework can be designed based on the characteristics of professional bureaucracy organization, and HH core operations, which emphasize skill standardization as a key to improve organizational performance.

In general, our performance management framework suggests a list of activities which helps to manage performance. However, there is no fixed procedures to implement the activities in practice. One of the difficulties in implementations of the framework is to adjust these activities and negotiate with the stakeholders about how to integrate the activities into their daily work. In the case of D bank, I demonstrate the mission monitoring system, which is an integration of the performance plan step in the framework and their administration system. Similarly, there could be other application of such kind of integration, which makes the framework more practical and easier to apply.

The application of performance tree method is one of the key points in this thesis. Here the performance tree method is used to fit the process-oriented bank reform, which emphasizes process redesign and managing through process. In fact, the performance tree method focus on the basic performance generation process, it describes how the organizational performance is generated from scratch, and such process does not necessarily follow the operation process of the organization. In other words, the application of performance tree method is not limited in process-oriented banking reform of Chinese commercial banks. It can be applied in other kinds of organizations or in more complex situations. Therefore, further study should be conducted on more applications of performance tree method.

One possible application of performance tree method is in a newly established organization or in a new industry. It is not clear how to achieve organizational objectives, and there is no routine or tradition of how to carry out the core operations. Under this circumstance, the performance tree method could be applied by the key stakeholders to firstly identify the performance generation process, then form the core operations. More importantly, the management structure and performance management system could be designed based on the performance generation process and the newly formed core operations. The naturally matched management structure and performance management system should improve the management efficiency as well as the execution power of the organization.

The method could also be a powerful tool in change management, it can identify and compare the desired and actual performance generation processes in an organization, especially when experiencing changes. These changes could be a major shift in business strategy, an upgrade of software/hardware, or a major change in personnel. The performance tree method could be very helpful in many ways. However, it should be noted that the applicants are required to have certain expertise in both academic and industrial area. The application processes of performance tree method also require frequent discussions and communications with different stakeholders in order to develop the actual performance tree for the organization. A lack of industrial experience may lead to an unfeasible improvement plan. On the other hand, a designer may fail to describe and summarize the actual performance generation process if not familiar with the performance tree method. Thus, there could be further researches about the method itself, to make it easier to learn and use for applicants from both academic and industrial area.

References

- Aghion, P., Bolton, P. and Dewatripont, M. (2000). Contagious bank failures in a free banking system. *European Economic Review*, 44(4), 713-718.
- Aharony, J. and Swary, I. (1983). Contagion effects of bank failures: Evidence from capital markets. *Journal of Business*, 305-322.

Aharony, J. and Swary, I. (1981). Effects of the 1970 bank holding company act: Evidence from capital markets. *The Journal of Finance*, 36(4), 841-853.

- Aiken, M. and Hage, J. (1968). Organizational interdependence and intra-organizational structure. *American Sociological Review*, 912-930.
- Allayannis, G., Ihrig, J. and Weston, J. P. (2001). Exchange-rate hedging: Financial versus operational strategies. *The American Economic Review*, 91(2), 391-395.
- Allen, F. and Santomero, A. M. (2001). What do financial intermediaries do?. *Journal of Banking & Finance*, 25(2), 271-294.
- Allen, F. and Santomero, A. M. (1997). The theory of financial intermediation. *Journal* of Banking & Finance, 21(11), 1461-1485.
- Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The Journal of Finance*, 23(4), 589-609.
- Altman, E. I., Haldeman, R. G. and Narayanan, P. (1977). ZETA< sup> TM</sup> analysis A new model to identify bankruptcy risk of corporations. *Journal of Banking & Finance*, 1(1), 29-54.
- Altman, E. I. and Saunders, A. (1997). Credit risk measurement: Developments over the last 20 years. *Journal of Banking & Finance*, 21(11), 1721-1742.
- Alvesson, M. and Willmott, H. (1992). On the idea of emancipation in management and organization studies. *Academy of Management Review*, 17(3), 432-464.
- Arezki, R., Candelon, B. and Sy, A. (2011). Sovereign rating news and financial markets spillovers: Evidence from the European debt crisis. *IMF Working Papers*, 1-27.
- Ariff, M. and Can, L. (2008). Cost and profit efficiency of Chinese banks: a non-parametric analysis. *China Economic Review*, 19(2), 260-273.

- Armstrong, M. (2000). Performance Management [Electronic Resource]: Key Strategies and Practical Guideline. Kogan Page.
- Armstrong, M. (2000). Strategic Human Resource Management: A Guide to Action. Kogan Page Limited.
- Armstrong, M. and Baron, A. (2000). Performance management. *Human Resource Management*, 69-84.
- Avgouleas, E. (2009). Banking supervision and the special resolution regime of the Banking Act 2009: the unfinished reform. *Capital Markets Law Journal*, 4(2), 201-235.
- Bai, L.N. (2011) Necessity of development mode shift from the profit model of commercial banks--- Comparative Analysis of profitability[J]. *Hebei Finance*, (06):31-32.
- Bahnisch, M. (2000). Embodied work, divided labour: subjectivity and the scientific management of the body in Frederick W. Taylor's 1907Lecture on Management'. *Body & Society*, 6(1), 51-68.
- Barth, J. R., Caprio Jr, G. and Levine, R. (2004). Bank regulation and supervision: what works best?. *Journal of Financial Intermediation*, 13(2), 205-248.
- Barth, J. R., Caprio, G. and Levine, R. (2001). *The Regulation and Supervision of Banks Around the World: A New Database*. Vol. 2588. World Bank Publications.
- Bartholomew, P. F. and Whalen, G. W. (1995). Fundamentals of systemic risk. Research in Financial Services: Banking, Financial Markets, and Systemic Risk, 7, 3-18.
- Berger, A. N., Hasan, I. and Zhou, M. (2010). The effects of focus versus diversification on bank performance: Evidence from Chinese banks. *Journal of Banking & Finance*, 34(7), 1417-1435.
- Berger, A. N., Hasan, I. and Zhou, M. (2009). Bank ownership and efficiency in China:What will happen in the world's largest nation?. *Journal of Banking & Finance*, 33(1), 113-130.
- Berger, A. N. and Udell, G. F. (1991). Securitization, Risk, and the Liquidity Problem in Banking.

- Bindseil, U. (2000). Central Bank liquidity management: theory and euro area practice. *European Central Bank*.
- Bisbe, J. and Otley, D. (2004). The effects of the interactive use of management control systems on product innovation. *Accounting, Organizations and Society*, 29(8), 709-737.
- Blundell-Wignall, A. and Atkinson, P. (2010). Thinking beyond basel iii: Necessary solutions for capital and liquidity. OECD Journal: Financial Market Trends, 2010(1), 5-6.
- Bonin, J. P. and Huang, Y. (2001). Dealing with the bad loans of the Chinese banks. Journal of Asian Economics, 12(2), 197-214.
- Brehm, S. and Macht, C. (2005). Is a new broom sweeping clean? The emergence of the China Banking Regulatory Commission. *Aussenwirtschaft-the Swiss Review of International Economic Relations*, 60(2), 169-207.
- Buchanan, D. A. and Huczynski, A. (2004). *Organizational Behaviour: An Introductory Text*. Prentice Hall Harlow.
- Cai, M.Z. and Cunliffe, J. Regulatory reform and bank profit models [J]. *China Finance*, (4):12-14.
- Calomiris, C. W. and Mason, J. R. (1994). *Contagion and Bank Failures during the Great* Depression: The June 1932 Chicago Banking Panic.
- Campbell, J. P. (1993). A theory of performance. *Personnel Selection in Organizations*, 3570.
- Cantor, R. and Packer, F. (2006). The credit rating industry. *Quarterly Review*(Sum), 1-26.
- Caprio, G. and Klingebiel, D. (1996). Bank Insolvency: Bad Luck, Bad Policy, Or Bad Banking? *Annual World Bank Conference on Development Economics*. The World Bank Washington.
- Catarineu-Rabell, E., Jackson, P. and Tsomocos, D. P. (2005). Procyclicality and the new Basel Accord-banks' choice of loan rating system. *Economic Theory*, 26(3), 537-557.

- Cebenoyan, A. S. and Strahan, P. E. (2004). Risk management, capital structure and lending at banks. *Journal of Banking & Finance*, 28(1), 19-43.
- Chase, A. G. (1971). Emerging Financial Conglomerate: Liberalization of the Bank Holding Company Act, The. *Geo.LJ*, 60, 1225.
- Chavez-Demoulin, V., Embrechts, P. and Nešlehová, J. (2006). Quantitative models for operational risk: extremes, dependence and aggregation. *Journal of Banking & Finance*, 30(10), 2635-2658.
- Checkland, P. (2000). Soft systems methodology: a thirty year retrospective. *Systems Research and Behavioral Science*, 17, S11-S58.
- Checkland, P. (1999). Systems thinking. *Rethinking Management Information Systems*, 45-56.

Checkland, P. and Poulter, J. (2006). Learning for Action. J. Wiley & Sons.

Checkland, P. (1981) Systems thinking, systems practice [J].

Chen, L. and Chiou, T. (1999). A fuzzy credit-rating approach for commercial loans: a Taiwan case. *Omega*, 27(4), 407-419.

Chen, R. and Ma, S. (2004). Production and operation management. .

- Chen, T. and Tang, L. (2002). Analysis of the bank's internal rating system. *Financial Research*(9), 88-93.
- Chen, C.H. (2013) From "sector banks "to "process bank"[J]. China Finance, (2):44-44.
- Chen, X. and Huang, X. (2013) Performance management issues in management department in large Chinese commercial bank[J]. *Financial Forum*, 2013(4).
- Chen, W. (2006). WTO: Time's Up for Chinese Banks-China's Banking Reform and Non-Performing Loan Disposal. *Chi.J.Int'l L.*, 7, 239.
- Chen, X., Skully, M. and Brown, K. (2005). Banking efficiency in China: Application of DEA to pre-and post-deregulation eras: 1993–2000. *China Economic Review*, 16(3), 229-245.
- Child, J. (1972). Organizational structure, environment and performance: the role of strategic choice. *Sociology*, 6(1), 1-22.

China Banking Regulatory Commission (2009). Annual Report 2009.

- China Banking Regulatory Commission (2007). Report on the Opening-up of the Chinese Banking Sector. *People's Republic of China*.
- China Banking Regulatory Commission (2004). Guidelines on Corporate Governance Reforms and Supervision of Bank of China and Construction Bank of China. *Beijing*).*Available Via the Internet at Www.Cbrc.Gov.Cn*.
- Chuanchen, X., Guiting, Z. and Shutian, Q. (2002). On the Economies of Scale in the State-Owned Banks and Strategy Analysis of Financial Reform [J]. *Economic Research Journal*, 10, 003.
- Cole, G. A. (2004). Management: Theory and Practice. Cengage Learning EMEA.
- Cole, R., Gunther, J. and Cornyn, B. (1995). FIMS: A New Financial Institutions Monitoring System for Banking Organizations. *Federal Reserve Bulletin*, 81, 1-15.
- Congdon, T.(2009). The Failure of Northern Rock-A Multidimensional Case Study. SUERF-The European Money and Finance Forum.
- Cornett, M. M. (2011). Liquidity risk management and credit supply in the financial crisis. *Journal of Financial Economics*, 101(2), 297-312.
- Cross, K. F. and Lynch, R. L. (1988). The "SMART" way to define and sustain success. *National Productivity Review*, 8(1), 23-33.
- Crouhy, M., Galai, D. and Mark, R. (2001). Prototype risk rating system. *Journal of Banking & Finance*, 25(1), 47-95.
- Crowston, K. (1997). A coordination theory approach to organizational process design. Organization Science, 8(2), 157-175.
- Cruz, M. G. (2002). *Modeling, Measuring and Hedging Operational Risk*. John Wiley & Sons New York.
- Cull, R. and Xu, L. C. (2000). Bureaucrats, state banks, and the efficiency of credit allocation: The experience of Chinese state-owned enterprises. *Journal of Comparative Economics*, 28(1), 1-31.
- Daft, R. L. (2009). Organization Theory and Design. South-Western Pub.
- Davis, G. F. and Marquis, C. (2005). Prospects for organization theory in the early twenty-first century: Institutional fields and mechanisms. *Organization Science*, 16(4), 332-343.

- Demyanyk, Y. and Van Hemert, O. (2011). Understanding the subprime mortgage crisis. *Review of Financial Studies*, 24(6), 1848-1880.
- Den Hartog, D. N., Boselie, P. and Paauwe, J. (2004). Performance management: a model and research agenda. *Applied Psychology*, 53(4), 556-569.
- Diamond, M. J. (2005) Establishing a performance management framework for government[M]. International Monetary Fund.
- Diamond, D. W. and Dybvig, P. H. (1983). Bank runs, deposit insurance, and liquidity. The Journal of Political Economy, 401-419.
- Ding, S. (2009). Improvement of our performance management system of commercial banks. *Financial Capital*, 9.
- Duffie, D. and Singleton, K. J. (2009). *Credit Risk: Pricing, Measurement, and Management*. Princeton University Press.
- Euske, N. A. and Roberts, K. H. (1987). Evolving perspectives in organization theory: Communication implications. *Handbook of Organizational Communication: An Interdisciplinary Perspective*, 41-69.
- Fan, W. and Dong, W. A Literature Review on Development of Local Financial Platform and Its Standard Management. .
- Fayol, H. (1977). Industrial and General Administration. Library of Congress Photoduplication Service.
- Fayol, H. (1949). GENERAL AND INDUSTRIAL MANAGEMENT...
- Ferreira, A. and Otley, D. (2009). The design and use of performance management systems: An extended framework for analysis. *Management Accounting Research*, 20(4), 263-282.
- Fitzgerald, L. and Moon, P. (1996). *Performance Measurement in Service Industries: Making it Work*.
- Fisher, J.G. (1998) Contingency theory, Management Control Systems and Firm Outcomes: Past Results and Future Directions [J]. *Behavioral Research in Accounting*, 10: 47.
- Folan, P. and Browne, J. (2005). A review of performance measurement: Towards performance management. *Computers in Industry*, 56(7), 663-680.

- Froot, K. A. and Stein, J. C. (1998). Risk management, capital budgeting, and capital structure policy for financial institutions: an integrated approach. *Journal of Financial Economics*, 47(1), 55-82.
- Galati, G. (2002). Settlement risk in foreign exchange markets and CLS Bank. *BIS Quarterly Review*, 4, 55-65.
- Galbraith, J. R. (2002). Organizing to deliver solutions. *Organizational Dynamics*, 31(2), 194.
- Galbraith, J. R. and Jay, G. (1977). Organization Design. Addison-Wesley Reading, MA.
- Gao, L. (2006). Assessment the operational risk for Chinese commercial banks. In: *Computational Science–ICCS 2006*. Springer, pp. 501-508.
- García Herrero, A. and Santabárbara, D. (2004). Where is the Chinese Banking System Going with the Ongoing Reform?.
- García-Herrero, A., Gavilá, S. and Santabárbara, D. (2006). China's banking reform: an assessment of its evolution and possible impact. *CESifo Economic Studies*, 52(2), 304-363.
- Ge, Q. (2008). A research of job design in a Branch of People's Bank. *Financial Research*.
- Gilman, M. and Raby, S. (2008). High Performance Work Systems in Small-to Medium Sized Enterprises (SMEs): Do They Really Exist?. .
- Ge, Z.Q. (2000) Research of Chinese State-owned Commercial Banks and Government Relations [J]. *Social Sciences in Ningxia*, (1): 18-24
- Ge, Z.Q. (2007) Strategic Management, Growth and Strategic Transformation of Commercial Banks[J]. *Journal of Guangdong University of Finance*, 22(1): 3-14.
- Godlewski, C. J. (2005). Bank capital and credit risk taking in emerging market economies. *Journal of Banking Regulation*, 6(2), 128-145.
- Goodhart, C. (2008). Liquidity risk management. *Banque De France Financial Stability Review*, 11, 39-44.
- Gruening, G. (1998). Origin and Theoretical Basis of the New Public Management (NPM) IPMN Conference in Salem/Oregon.

- Guan, X. (2003). Construct a reasonable commercial bank performance evaluation system. *China Central University of Finance*, 7, 17-21.
- Guest, D. E. (1997). Human resource management and performance: a review and research agenda. *International Journal of Human Resource Management*, 8(3), 263-276.
- Guojie, Z. and Hongmei, Z. (2004). On Structuring the Performance Evaluation System of Commercial Banks Based on the Balanced Scorecard [J]. *Modern Finance and Economics*, 5, 001.
- Gupta, A. K. and Govindarajan, V. (1991). Knowledge flows and the structure of control within multinational corporations. *Academy of Management Review*, 768-792.
- Halachmi, A. (2005). Performance measurement is only one way of managing performance. *International Journal of Productivity and Performance Management*, 54(7), 502-516.
- Hanafizadeh, P. and Aliehyaei, R. (2011) The application of fuzzy cognitive map in soft system methodology [J]. *Systemic Practice and Action Research*, 24(4): 325-354.
- Hannan, M. T., Freeman, J. and Hannan, M. T. (1993). *Organizational Ecology*. Harvard University Press.
- Hansen, E.L. (1995) Entrepreneurial networks and new organization growth [J]. Entrepreneurship: theory and practice, 19(4): 7-20.
- Hao, C. (2006). Development of financial intermediation and economic growth: The Chinese experience. *China Economic Review*, 17(4), 347-362.
- Hatch, M. J. and Cunliffe, A. L. (1997). Organization Theory: Modern, Symbolic, and Postmodern Perspectives. Vol. 379. Oxford university press Oxford.
- He, J. (2006). The evolution of market-oriented personnel system in chinese state-owned commercial banks, . *Economic and Social Development*, 4(8), 10-12.
- Heilmann, S. (2005). Regulatory innovation by Leninist means: Communist Party supervision in China's financial industry. *The China Quarterly*, 181(1), 1-21.
- Hendricks, D. and Hirtle, B. (1997). Bank capital requirements for market risk: The internal models approach. *Economic Policy Review*, 3(4).

Herzberg, F., Mausner, B. and Snyderman, B. B. (1959). *Motivation to Work*. Transaction Publishers.

- Hellwig, M. (1995) Systemic aspects of risk management in banking and finance [J]. REVUE SUISSE D ECONOMIE POLITIQUE ET DE STATISTIQUE, 131: 723-738.
- Ho, C. and Zhu, D. (2004). Performance measurement of Taiwan's commercial banks. International Journal of Productivity and Performance Management, 53(5), 425-434.
- Hofstede, G. (1993). Cultural constraints in management theories. *The Academy of Management Executive*, 7(1), 81-94.
- Hou, H. (2004). Reform of state-owned commercial banks and the non-dominant mechanism problem. *Economics University Journal*, 20(4).
- Jacobides, M. G. (2007). The inherent limits of organizational structure and the unfulfilled role of hierarchy: Lessons from a near-war. *Organization Science*, 18(3), 455-477.

Jensen, M. (1998). Organization theory and methodology.

- Jia, R. (2013) The building of operating performance indicator system for rural banks[J]. *Guide to Business*, 2013(19).
- Jiang, W.J and Zhang, S. (2012) Application of Balanced Scorecard in Performance Management in Commercial Banks[J]. *Technology and Innovation Management*, 33(6):639-641.
- Jianhua, Z. (2003). DEA Method on Efficiency Study of Chinese Commercial Banks and the Positivist Analysis from 1997 to 2001 [J]. *Journal of Finance*, 3, 002.
- Jing, H. (2011). Kingdee K/3 Cost Management Implementation Experiences. *Heilongjiang Textile*, 1, 011.
- Johnson, R. A., Kast, F. E. and Rosenzweig, J. E. (1963). The theory and management of systems. .
- Kahn, C. M. and Roberds, W. (1998). Payment system settlement and bank incentives. *Review of Financial Studies*, 11(4), 845-870.
- Kanji, G. K. and e Sá, P. M. (2002). Kanji's business scorecard. *Total Quality Management*, 13(1), 13-27.

Kaplan, R. S. and Norton, D. P. (2007). Balanced Scorecard. Springer.

- Kaplan, R. S. and Norton, D. P. (2001). Transforming the balanced scorecard from performance measurement to strategic management: Part I. Accounting Horizons, 15(1), 87-104.
- Kaplan, R. S. and Norton, D. P. (1996). Using the balanced scorecard as a strategic management system. *Harvard Business Review*, 74(1), 75-85.
- Kast, F. E. and Rosenzweig, J. E. (1974). *Organization and Management: A Systems Approach*. McGraw-Hill New York.
- Kast, F. E. and Rosenzweig, J. E. (1973). *Contingency Views of Organization and Management*. Sra.
- Kates, A. and Galbraith, J. R. (2010). *Designing Your Organization: Using the STAR* Model to Solve 5 Critical Design Challenges. Jossey-Bass.

Kazami, I. (2001). Business Operation Management System.

- Kennerley, M. and Neely, A. (2003). Measuring performance in a changing business environment. *International Journal of Operations & Production Management*, 23(2), 213-229.
- Kennerley, M. and Neely, A. (2002). A framework of the factors affecting the evolution of performance measurement systems. *International Journal of Operations & Production Management*, 22(11), 1222-1245.
- Kennerley, M. and Neely, A. (2002). Performance measurement frameworks: a review. Business Performance Measurement: Theory and Practice, 145-154.
- Kim, D. and Santomero, A. M. (1988). Risk in banking and capital regulation. *The Journal of Finance*, 43(5), 1219-1233.
- Kloot, L. and Martin, J. (2000). Strategic performance management: A balanced approach to performance management issues in local government. *Management Accounting Research*, 11(2), 231-251.
- Knoke, D. (1999). Organizational networks and corporate social capital. In*Corporate social capital and liability* (pp. 17-42). Springer US.

Koch, T. W. and MacDonald, S. S. (2009). Bank Management. South-Western Pub.

- Kochan, T. A., McKersie, R. B. and Cappelli, P. (1984). Strategic choice and industrial relations theory. *Industrial Relations: A Journal of Economy and Society*, 23(1), 16-39.
- Kuritzkes, A. and Schuermann, T. (2006). What we know, don't know and can't know about bank risks: A view from the trenches.
- Kuritzkes, A., Schuermann, T. and Weiner, S. M. (2003). Risk measurement, risk management, and capital adequacy in financial conglomerates. *Brookings-Wharton Papers on Financial Services*, 2003(1), 141-193.
- L Pinheiro, D. (2006) Bank for International Settlements. *Wiley-Blackwell Encyclopedia* of Globalization.
- Lall, R. (2009). Why Basel II failed and why any Basel III is doomed. *Global Economic Governance Programme, GEC Working Paper*, 52.
- Länsiluoto, A. and Järvenpää, M. (2008). Environmental and performance management forces: Integrating "greenness" into balanced scorecard. *Qualitative Research in Accounting & Management*, 5(3), 184-206.
- Lau, L. J. (1999). The macroeconomy and reform of the banking sector in China. Strengthening the Banking System in China: Issues and Experience, 59-89.
- Laurenceson, J. and Chai, C. (2003). *Financial Reform and Economic Development in China*. Edward Elgar Publishing.
- Leavitt, H. J., Dill, W. R. and Eyring, H. B. (1973). *The Organizational World*. Harcourt Brace Jovanovich.
- Leavitt, H. J. and Whisler, T. L. (1958). Management in the 1980's. .
- Lee, S.M. Rho, B.H. and Lee, S.G. (2003) Impact of Malcolm Baldrige National Quality Award criteria on organizational quality performance [J]. *International Journal of Production Research*, 41(9): 2003-2020.
- Lei, T., Yang, X. and Li, Y. (2012). Sustainable development of China's financial industry and Evaluation Index System. *Statistics and Decision*, 14, 022.
- Levinson, D. J. (1959). Role, personality, and social structure in the organizational setting. *The Journal of Abnormal and Social Psychology*, 58(2), 170.
- Li, J.J. (2004) International Comparison of Commercial Bank Evaluation System Design

and Demonstration [J]. Finance Forum Journal, 9(9): 34-39.

- Li, S. (2001). Comparative performance of Chinese commercial banks: Analysis, findings and policy implications. *Review of Quantitative Finance and Accounting*, 16(2), 149-170.
- Li, T. (2003) International Comparison of Commercial Bank Supervision and Management:

Modes and Effects [J]. Economic Research Journal, 12: 43-51.

- Li, W. and Cao, Y. (2004). Ownership Structure, Governance Mechanism and City Bank Performance. *Economic Research*, 12, 4-15.
- Liao, Q. (2004). Profit model reengineering of state-owned commercial banks . US-China Economic Review, 4(6), 51-54.
- Lin, Y. (2004). Balanced Scorecard Performance Management in the Banking Application. *Financial Theory and Practice*, 9, 6-8.
- Liu, G.P. (2002) *Reengineering of Chinese Commercial Banks [M].* China Financial Publishing House.
- Liu, W. B., Cheng, Z. L., Mingers, J. (2010). The 3E methodology for developing performance indicators for public sector organizations. *Public Money & Management*, 30(5), 305-312.
- Liu, W. B.and Mingers, J. (2012). Developing a performance management system using soft systems methodology: A Chinese case study. *European Journal of Operational Research*.
- Long, X. and Dong, M. (2010). A comparative analysis of financial management module of ERP systems. *Xi'an Institute of Posts and Telecommunications*, 15(2).
- Lu, M.F. (2008) The Strategic Vision of Transformation From Sector Banks to Process Oriented Banks [J], *Macroeconomics Journal*, (12): 35-39.
- Lucia, A.D. and Lepsinger, R. (1999) Art & Science of Competency Models [M]. San Francisco, CA: Jossey-Bass,
- Mao, X. and Ba, s. (2001). Capital Accord of the Basel Committee and the evolution of a new international banking risk management progress. *Studies of International Finance*(4), 45-51.

- Mao, X.X. (2014) Commercial Bank Performance Evaluation using BSC[J]. *Business*, (18):95-95.
- March, J. and Simon, H. A. (1958). Organizations. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.
- Marimin, M. (2007). The Application of Soft System Methodology for Agro Business Micro Financing Policy *Proceedings of the 51st Annual Meeting of the ISSS*.
- Marshall, C. L. and Marshall, D. C. (2001). *Measuring and Managing Operational Risks in Financial Institutions: Tools, Techniques, and Other Resources*. John Wiley.

Maslow, A. H. (1943). A theory of human motivation. Published in.

- Maslow, A. H., Frager, R. and Fadiman, J. (1970). *Motivation and Personality*. Vol. 2. Harper & Row New York.
- Matthews, K., Zhang, X. and Guo, J. (2009). Nonperforming Loans and Productivity in Chinese Banks, 1997-2006. *Chinese Economy*, 42(2), 30-47.

McGregor, D. (1960). The Human Side of Enterprise.

McNamara, C. (2008). Organizational performance management. *Retrieved April*, 2, 2009.

McNamara, C. (2005). Performance Management: Benefits and Concerns.

- McNamara, C. (2005). Field Guide to Consulting and Organizational Development: A Collaborative and Systems Approach to Performance, Change and Learning. Authenticity Consulting.
- Mcnamara, C. (2005). Performance Management: Overall Goal and Basic Steps. Retrieved October, 8.
- McNamara, C. (2000). Organizational culture. *Free Management Library.Retrieved July*, 5, 2008.

McNamara, C. (1999). Employee performance management. .

- Merchant, K. A. and Van der Stede, Wim A (2007). *Management Control Systems: Performance Measurement, Evaluation and Incentives*. Prentice Hall.
- Meyer, J. W. and Scott, W. R. (1983). *Organizational Environments: Ritual and Rationality*. Sage Beverly Hills, CA.

- Min, P. (2006). Corporate Governance of Commercial Banks: A Theoretical Analysis
 Based on the Characters of Banking Industry. *Journal of Financial Research*, 3, 006.
- Mingers, J., Liu, W. and Meng, W. (2007). Using SSM to structure the identification of inputs and outputs in DEA. *Journal of the Operational Research Society*, 60(2), 168-179.
- Mingers, J. and White, L. (2010). A review of the recent contribution of systems thinking to operational research and management science. *European Journal of Operational Research*, 207(3), 1147-1161.
- Mingers, J. and Taylor, S. (1992) The use of soft systems methodology in practice [J]. Journal of the Operational Research society, 321-332.

Mintzberg, H. (2010). Structure in sevens, designing effective organizations. .

- Mintzberg, H. (1991). The effective organization: forces and forms. *Sloan Management Review*, 32(2), 54-67.
- Mintzberg, H. (1984). Power and organization life cycles. *Academy of Management Review*, 207-224.
- Mintzberg, H. (1979). The structuring of organizations: A synthesis of the research. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.

Mintzberg, H. (1973). The nature of managerial work. New York.

- Mintzberg, H. (1971). Managerial work: analysis from observation. *Management Science*, 18(2), B-97-B-110.
- Mintzberg, H. (1993) *Structure in fives: Designing effective organizations [M].* Prentice-Hall, Inc,
- Monfort, B. and Mulder, C. B. (2000). Using Credit Ratings for Capital Requirements on Lending to Emerging Market Economies: Possible Impact of a New Basel Accord. International Monetary Fund.
- Montgomery, H. (2005). The effect of the Basel Accord on bank portfolios in Japan. Journal of the Japanese and International Economies, 19(1), 24-36.

- Morgan, G. (1980). Paradigms, metaphors, and puzzle solving in organization theory. Administrative Science Quarterly, 605-622.
- Neely, A. D. (2002). *Business Performance Measurement: Theory and Practice*. Cambridge University Press.
- Neely, A. D., Adams, C. and Kennerley, M. (2002). *The Performance Prism: The Scorecard for Measuring and Managing Business Success*. Prentice Hall Financial Times London.
- Neely, A., Gregory, M. and Platts, K. (1995). Performance measurement system design: a literature review and research agenda. *International Journal of Operations & Production Management*, 15(4), 80-116.
- Norreklit, H. (2000). The balance on the balanced scorecard a critical analysis of some of its assumptions. *Management Accounting Research*, 11(1), 65-88.
- O'Brien, J. and Dixon, O. (2013). The Common Link in Failures and Scandals at the World's Leading Banks. *Seattle University Law Review*, 36(2), 941.

Oakland, J. S. (1989). Total Quality Management. Springer New York etc.

- O'Hanlon, J. and Peasnell, K. (1998). Wall Street's contribution to management accounting: the Stern Stewart EVA< sup>®</sup> financial management system. *Management Accounting Research*, 9(4), 421-444.
- Otley, D. (1999). Performance management: a framework for management control systems research. *Management Accounting Research*, 10(4), 363-382.
- Pan, M. (2006). Commercial Bank Corporate Governance: a theoretical analysis based on characteristics of the banking sector. *Financial Research*, 3, 37-47.
- Pascale, R. T. and Athos, A. G. (1981). The art of Japanese management. *Business Horizons*, 24(6), 83-85.
- Pearson, M. (2005). The business of governing business in China. *World Politics*, 57(2), 296-322.
- Pfeffer, J. (1982). Organizations and Organization Theory. Pitman Boston.
- Pfeffer, J. and Salancik, G. R. (2003). *The External Control of Organizations: A Resource Dependence Perspective*. Stanford University Press.

- Ping, X. (2001). The Debate on the Reform of China's Rural Credit Cooperatives System [J]. *Journal of Finance*, 1, 000.
- Podpiera, R. (2006). Progress in China's banking sector reform: has bank behavior changed?. .
- Prasad, E., Rumbaugh, T. and Wang, Q. (2005). Putting the Cart before the Horse? Capital Account Liberalization and Exchange Rate Flexibility in China. International Monetary Fund.
- Preston, H. H. (1933). The Banking Act of 1933. *The American Economic Review*, 585-607.
- Pugh, D. S. and Weber, M. (1971). Organization Theory: Selected Readings. Penguin.
- Purnanandam, A. (2011). Originate-to-distribute model and the subprime mortgage crisis. *Review of Financial Studies*, 24(6), 1881-1915.
- Pyle, D. H. (1999). Bank Risk Management: Theory. Springer.
- Qian, Y. (1996). Enterprise reform in China: Agency problems and political control. *Economics of Transition*, 4(2), 427-447.
- Rojas-Suarez, L. (2002). Rating Banks in Emerging Markets: What Credit Rating Agencies should Learn from Financial Indicators. Springer.
- Rountree, B., Weston, J. P. and Allayannis, G. (2008). Do investors value smooth performance?. *Journal of Financial Economics*, 90(3), 237-251.
- Santomero, A. M. (1997). Commercial bank risk management: an analysis of the process. *Journal of Financial Services Research*, 12(2-3), 83-115.
- Sarker, S. (2000). Toward a methodology for managing information systems implementation: A social constructivist perspective. *Informing Science*, 3(4), 195-206.
- Saunders, A. and Allen, L. (2010). *Credit Risk Management in and Out of the Financial Crisis: New Approaches to Value at Risk and Other Paradigms*. Vol. 528. Wiley.
- Saunders, A. (2006). Financial Institutions Management: A Risk Management Approach. McGraw-Hill/Irwin.
- Schroeder, R. G. (1989). Operation management. *Decision Making, the Operalions Function*.

- Scott, W. G. (1961). Organization theory: an overview and an appraisal. *The Journal of the Academy of Management*, 4(1), 7-26.
- Scott, W. G., Mitchell, T. R. and Birnbaum-More, P. H. (1981). Organization Theory: A Structural and Behavioral Analysis. RD Irwin.
- Shafritz, J. M., Ott, J. S. and Jang, Y. S. (2001). Classics of organization theory. .
- Shaw, M. J. and Gentry, J. A. (1988). Using an expert system with inductive learning to evaluate business loans. *Financial Management*, 45-56.
- Shao, J.R. Guan, C.C. and Jia, L.B. (2011) The Current status, issues and reforms in large state-owned Chinese commercial banks[J]. *Financial Forum*, (9):65-70.
- Shen, C.H. Lu, C.H. and Wu, M.W. Impact of Foreign Bank Entry on the Performance of Chinese Banks [J]. *China & World Economy*, 17(3): 102-121.
- Shen, P. (2002). Basel II capital adequacy ratio calculation method . *Financial Research*(6), 22-31.
- Shih, V., Zhang, Q. and Liu, M. (2007). Comparing the performance of Chinese banks: a principal component approach. *China Economic Review*, 18(1), 15-34.
- Shujie, Y. and Chunxia, F. G. J. (2004). The Empirical Analysis of Efficiency of Chinese Banks. *Economic Research Journal*, 8, 000.
- Sun, D.Y. (2012) Improvement of Cost Management of Commercial Banks[D]. Ocean University of China.
- Slovik, P. and Cournède, B. (2011). Macroeconomic Impact of Basel III.
- SONG, Z., LU, Y. and YANG, L. (2009). CEO Compensation and Performance in Banking Industry [J]. Journal of Chongqing University (Social Science Edition), 4, 010.
- Stulz, R. M. (1996). Rethinking risk management. *Journal of Applied Corporate Finance*, 9(3), 8-25.

Suzman, A. (1962). Banks and Other Financial Institutions. Ann.Surv.S.African L., 328.

- Taylor, F. W. (2003). Scientific Management. Vol. 1. Routledge.
- Taylor, F. W. (1914). The Principles of Scientific Management. Harper.
- Tolbert, P. S. and Zucker, L. G. (1999). The institutionalization of institutional theory. *Studying Organization.Theory & Method.London, Thousand Oaks, New Delhi*, 169-184.

- Tong-jian, Z. (2007). The Evaluation System Research of Operational Risk Management Performance in Commercial Banks in China Under The New Basel Capital Accord. *Journal of Guangdong University of Business Studies*, 5, 011.
- Townsend, R. M. and Yaron, J. (2001). The credit risk-contingency system of an Asian development bank. *Economic Perspectives-Federal Reserve Bank of Chicago*, 25(3), 31-48.
- Treacy, W. F. and Carey, M. (2000). Credit risk rating systems at large US banks. Journal of Banking & Finance, 24(1), 167-201.
- Tsang, A. H., Jardine, A. K., & Kolodny, H. (1999). Measuring maintenance performance: a holistic approach. *International Journal of Operations & Production Management*, 19(7), 691-715.
- Van Roy, P. (2005). The Impact of the 1988 Basel Accord on Banks' Capital Ratios and Credit Risk-Taking: An International Study EFMA 2004 Basel Meetings, Forthcoming.

Vasicek, O. (1987). Probability of loss on loan portfolio. KMV Corporation, 12(6).

- Wang, L. (2008) Research on the Incentive Mechanism of the Core Employees Based on the Competency Model [D]. *University of Guangxi.*
- Wang, L. (2006) Thoughts on Staff Training Effectiveness Assessment [J], China Scienceand Technology Information, (18B): 35-35
- Wang W, Liu W, Mingers J.(2015) A Systemic Method for Organisational Stakeholder Identification and Analysis Using Soft Systems Methodology (SSM)[J]. European Journal of Operational Research.

Wang, M. (1995). China Commercial Banking Law. Shanghai Reform(009), 1-1.

Warwick, J. (2008). A case study using soft systems methodology in the evolution of a mathematics module. *The Montana Mathematics Enthusiast*, 5(0), 269-290.

Weber, M. (2009). The Theory of Social and Economic Organization. Free Press.

Wei, L. and Guitian, H. (2002). Challenges for China's Banks Reform: Ownership Structure or Market Structure [J]. *Economic Research Journal*, 8, 000.

- WEI, Y. D. (2001). Decentralization, marketization, and globalization: the triple processes underlying regional development in China. Asian Geographer, 20(1-2), 7-23.
- Wan, W. and Mao, J. (2005). A Comparative Study of Operational Risk in Commercial Banks: Present and Causes [J]. *Studies of International Finance*, 7, 001.
- Wang, Z. (2014) The development and reform path of Chinese commercial banks: From the Finance Political Economy point of view[J]. *Modern economic management*, 36(3):88-92.
- Wang, X.W. (2012) Strategies to reduce non-performing assets of China's commercial banks[J]. *Modern Enterprise Culture*, (36):68-70.
- Wongrassamee, S., Simmons, J. and Gardiner, P. (2003). Performance measurement tools: the Balanced Scorecard and the EFQM Excellence Model. *Measuring Business Excellence*, 7(1), 14-29.
- Winter, M.C. Brown, D.H. and Checkland, P.B. (1995) A role for soft systems methodology in information systems development [J]. *European Journal of Information Systems*, 4(3): 130-142.
- Woodward, J., Dawson, S. and Wedderburn, D. (1965). *Industrial Organization: Theory* and Practice. Vol. 3. Oxford University Press London.
- Wu, H., Chen, C. and Lin, M. (2007). The effect of foreign bank entry on the operational performance of commercial banks in the Chinese transitional economy. *Post-Communist Economies*, 19(3), 343-357.
- Wu, J. (2003). China Banking Implementation IRB prospect analysis and strategy selection. *International Economic Review*, 2, 40-43.
- Wu, X. (2005). Banking Law Practice and Development: "People's Bank of China Law" and "Commercial Bank Law". China Economic Publishing House.
- Xiang, Q. (2008). Study on Patents of Business Method of Chinese Bank Industry by Using Theories of Patent Map [J]. *Chinese Journal of Management*, 3, 025.
- Xiaochuan, Z. (2006). China's corporate bond market development: lessons learned. Bank for International Settlements Press & Communications CH-4002 Basel,

Switzerland E-Mail: Publications@ Bis.Or g Fax: 41 61 280 9100 and 41 61 280 8100, 7.

- Xiaoxuan, L. (2003). The Structure of Property Rights in the Chinese Transition Economy [J]. *Economic Research Journal*, 1, 002.
- Xijun, Z. (2007). WANG Shengbang (International Department of China Banking Regulatory Commission, 100800); Impacts of Capital Regulation on Credit Growth of Commercial Banks: The Empirical Study on Chinese Banking Sector Between 1995 and 2003 [J]. *Finance & Trade Economics*, 7.
- Xing, Y. and Sims, D. (2012). Leadership, Daoist Wu Wei and reflexivity: Flow, self-protection and excuse in Chinese bank managers' leadership practice. *Management Learning*, 43(1), 97-112.
- Xin-hong, G. (2003). Establishing an Efficient Performance Evaluation System for Chinese Commercial Banks [J]. Journal of Central University of Finance & Economics, 7, 004.
- Xu, X. and Wang, Y. (1999). Ownership structure and corporate governance in Chinese stock companies. *China Economic Review*, 10(1), 75-98.
- Yan, Q.Y. and Cao, Y.K. (2002) Discussion of Evaluation Model of Employee Training Effectiveness [J]. *Journal of Jiangxi Administration Institution*, (z1): 21-23.
- Yang, W. (2011) Matrix Management and Commercial Bank Management Innovation[J]. Jilin Financial Research, (7):22-25.
- Ye, X. Guo, J.W. and Feng, Z.X. (2001). From Monopoly to Competition: The Change of Market Structure of Commercial Banking Sector in China [J]. *Journal of Finance*, 11, 010.
- Yifu Lin, J. (2001). WTO accession and Financial Reform in China. Cato J., 21, 13.
- Yong, H. (2006). Study on the Earning Structure Transformation of Commercial Banks in China [J]. *Modern Economic Science*, 2, 010.
- Yu, G. (2007). Non-financial indicators in the commercial banks' performance evaluation. *Financial Theory and Practice*.
- YU-HSIA, L. (2007). A Study on ERP Post-Implementation Using Diamond model. .

- Zhang, D. (2011). Performance impact of research policy at the Chinese Academy of Sciences. *Research Policy*, 40(6), 875-885.
- Zhang, J.G. (2010) Strategic Positioning Mode Analyze of City Commercial Banks[J]. The Banker, 8: 008.
- Zhang, T. (2007). Evaluation System and Operational Risk Control of Commercial Bank Performance. *Guangdong University of Business*, 5, 47-54.
- Zhang, X. and He, C. (2006). A case study of Commercial banking institutions flat management reform - to ICBC branches in Laiwu City, Shandong Province as an example. *Financial Forum*, 11(1), 20-27.
- Zhang, Y. (2009). The global financial crisis and commercial bank profitability model. *Financial Theory and Practice*, 6, 56-60.
- Zhang, Y. (2009). Credit rating system in commercial bank of China under Basel . *Financial Aspect*, 8, 007.
- Zhang, Y. and Li, L. (2009) Study on balanced scorecard of commercial bank in performance management system[C] Proceedings of the 2009 International Symposium on Web Information Systems and Applications (WISA'09) Nanchang, P. R. China, May: 22-24.
- Zhao, B. (2007). Commercial banks' internal process reengineering: Theory, Evidence and Design. *Financial Research*.
- Zhao, G. and Zhao, H. (2004). Performance Evaluation System of Commercial Bank Based on Balanced Scorecard. *Modern Finance and Economics*, 5(4), 3.
- Zhao, Y. and Liu, R. (2003). Research of New Basel Agreement and commercial banks' internal rating systems. *Financial Forum*, 2, 2-9.
- Zhou, J.S. and Guo, F.C. (2006) The Incentive and Restraint Mechanisms of Chinese Joint-stock commercial banks [J]. Journal of Guangdong University of Finance, 21(1): 61-65.
- Zhu, C. (2006). Performance Management System of Commercial Banks and recycling. *Financial Theory and Practice*, 11, 016.
- Zhu, H. (2009). AHP-based commercial bank job evaluation and system design. *Guangzhou University (Natural Science Edition)*, 1, 003.

Zhu, J. (2005). EVA-based small and medium banks relationship between performance and governance structure analysis. *Finance & Trade Economics*, 5, 53-62.