

Issues of Balanced Scorecard and Its Implication for Chinese Companies

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ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial degree has been submitted for the qualification of any other degree or diploma of a university or other institution of higher learning.

Manyi Wang

ABSTRACT

The BSC has been introduced by Robert Kaplan and David Norton for more than twenty years. Many researchers have widely investigated the advantages and challenges of implementing BSC. This paper aims to investigate issues of BSC implementation in Chinese companies through literature review, and provide implications for Chinese companies on BSC implementation taking into account the national cultural characteristics. In total, 48 BSC articles were reviewed out of which 41 articles identified worldwide issues on BSC implementation and 14 articles specifically dealt with issues of BSC implementation in China.

The findings show performance measures, reward system, top management involvement, communication and feedback, and employee involvement are the five most widely discussed issues in literature that relates to BSC implementation. Specifically, within the Chinese context, issues on senior management and employee involvement, communication, strategy, reward system, performance measures, information system and the level of management are important considerations influencing BSC implementation. In addition, the influence of Chinese culture on BSC application was discussed. Suggestions were provided for Chinese companies to better implement the BSC: (1) take the strategy as the orientation; (2) pay attention to top management; (3) balance performance indicators; (4) link BSC to incentive system; (5) improve enterprise information system; and (6) strengthen corporate culture construction.

Two limitations were considered in this study: (1) the articles on BSC implementation in China are limited; (2) it is possible that not all the useful data in the reviewed articles has been picked out and collected.

The study contributes to practice by identifying the challenges of BSC implementation from previous studies and provides an insight into BSC implementation in China. Future research may pay more attention on exploring the actual application of the BSC in Chinese companies.

CHAPTER ONE: INTRODUCTION

The purpose of this study is to review the balanced scorecard (BSC) literature and identify issues about BSC implementation in China. The study also aims to provide insights into the application of BSC in China combined with national cultural characteristics. This chapter provides an overall introduction to this study, which consists of three sections. Section one gives a brief introduction of the background of the study, including the concepts of performance management and the BSC. Section two provides the objectives and research questions of this study. In the last section, the structure of this study is presented.

1.1 Background and Justification for the Study

Performance management is the process set by an organization to ensure organizational goals can be achieved in an effective manner. Over the past decade, performance management techniques have been increasingly applied by organizations to help managers manage performance and achieve strategic goals. The widely used performance management techniques by organizations include benchmarking, strategy maps, lean management and balanced scorecard. Among these techniques, BSC has received considerable attention from both academics and users since it was introduced to the public. The BSC was first put forward by Kaplan and Norton in the paper “The balanced scorecard: measures that drive performance” in 1992. It was designed as a performance management model to help organizations implement strategies and achieve goals. The BSC consists of four perspectives: Financial, Customer, Internal Business Process, and Learning and Growth. Traditionally, organizations have focused mainly on financial measures such as sales and costs, or revenue generated compared to a planned budget (Harden & Upton, 2016). The BSC is an approach that combines both financial measures and nonfinancial measures to ensure a more “balanced” view to support decision making and strategy implementation, which is considered to be the greatest advantage. Financial perspective tracks the organization’s financial performance. Customer perspective measures customers’ satisfaction and requirements. Internal Business Process perspective focuses on identifying key processes that are most critical

for achieving customer objectives. Learning and Growth perspective focuses on internal skills and capabilities of the employees and corporate cultural attitudes. The introduction of the BSC method has changed the fact that organizations only focus on financial indicators for performance evaluation. Focusing only on financial indicators may result in organizations overly concerned about short-term benefits and give up long-term benefits, such as employee training and customer relationship. Therefore, the four perspectives are connected with each other. By the use of the BSC, business strategies can be translated into four perspectives to ensure measures are well linked to business strategies. The BSC is a performance management system rather than a performance measurement system as focusing only on performance measurement may hinder the achievement of organizational objectives (Braam & Nijssen, 2004). It has been widely used by managers around the world for more than twenty years and become one of the most popular performance management techniques. In the UK and the US, half of organizations were reported to use the BSC (Williams, 2001). In Jordan, 35.1 percent of responding companies used the BSC, while a further 30 percent were either using or considering using the BSC (Sawalqa, Holloway, & Alam, 2011). Although the BSC was introduced in China later than Western countries, according to a survey in 2008, 53 percent of the responding firms had implemented the BSC (Sheng, Xiong & Su, 2008). These findings indicate the BSC has become a global performance management tool.

However, BSC has also received much criticism and debate from researchers. Nørreklit (2000) disputed the BSC failed to increase strategy awareness. This is also supported by Lord et al. (2005) that there are difficulties for organizations in linking performance measures to business strategy. Moreover, it is found that organizations still place higher importance on financial measures than non-financial measures, which reflect the objective of “balance” may not be achieved (Blundell, Sayers, & Shanahan, 2003). All these issues may affect the success of BSC implementation, which lead 70 percent of BSC implementation to fail (Lewy, 1998). Therefore, it is necessary to have a comprehensive review on prior BSC studies to identify which issues have significant

effects on successful implementation for BSC practitioners, as well as people who have interest in the BSC.

In recent years, Chinese companies are more interested in learning and introducing Western advanced performance management technologies, including BSC. An essential issue for BSC implementation in China is the national cultural differences, as the BSC is derived from western culture. However, there is not much BSC literature about China taking into account the national culture. Thus, it is necessary to summarize experiences of BSC implementation from previous studies, in order to provide an in-depth understanding of BSC implementation for Chinese companies who have adopted BSC or intend to.

1.2 Objective and Research Questions

This study provides a review of literature on BSC and performance management systems for the last two decades. The objective of this study is to investigate main issues of BSC implementation identified by previous studies, in order to provide insights into the use of BSC for Chinese companies taking into account the national culture. There are three research questions investigated in this study:

1. What are the issues related to BSC implementation identified by previous studies?
2. What are the issues related to the implementation of BSC in China?
3. What are the implications/suggestions for Chinese companies adopting BSC?

The first research question aims to identify key issues of BSC implementation around the world through a review of BSC literature. The second research question aims to identify issues of BSC implementation in China through literature review. The third research question focuses on providing suggestions for BSC implementation in Chinese companies on the basis of those issues identified in the first two research questions.

1.3 Structure of the study

This paper is organized as follows. Chapter Two reviews previous literature related to global BSC implementation in the last two decades. It also includes literature review on the relation between performance management systems implementation and national culture. Chapter Three introduces research methodology used in this study. Findings of this study are stated in Chapter Four. The last chapter provides a conclusion of this study, including suggestions for future research directions.

CHAPTER TWO: LITERATURE REVIEW

2.1 Prior Studies on BSC implementation

The BSC is designed as a performance management system to help organizations achieve strategic goals. It has received increasingly attention from both academic researchers and organizations since the BSC was introduced to the public. Researchers usually focus on three category empirical studies on BSC implementation: the first is to investigate the rate and level of BSC implementation in countries; the second is to explore the factors and issues associated with BSC implementation; and the third is to explore how BSC is actually implemented within different context.

A number of studies provide evidence to support that the BSC has been increasingly adopted by organizations around the world. Williams (2001) found about 50 percent of US and UK organizations were reported to use the BSC. In Canada, Soderberg et al. (2011) found 111 of the 149 organizations (74.5 percent) are BSC users. The BSC is found to be often applied by managers for decision-making and decision-rationalizing, coordination and self-monitoring (Wiersma, 2009). Davis and Albright (2004) provide evidence to support that the BSC is useful for improving financial performance.

Although the BSC has been proved by a number of studies to be a helpful technique for performance measurement and management, however, studies also suggest some issues related to BSC implementation. One issue that has often been discussed in studies is the low level of BSC application. Studies indicate there is a lack of fully developed BSC in organizations. Organizations need to have sufficient knowledge about the BSC before they intend to implement the BSC. To achieve a balance, organizations need to focus on all the four perspectives. In fact, organizations still place greater importance on financial measures than non-financial measures (Blundell, Sayers, & Shanahan, 2003). Speckbacher et al. (2003) found one third BSC users lack the “learning and growth” perspective and only about 7 percent of BSC users have employed a fully developed BSC. This is also supported by Sawalqa et al. (2011) that only 45.8 percent of BSC companies have used four perspectives. Soderberg et al. (2011) define a fully developed

BSC that organizations have used their performance management systems to improve learning, update strategy, and link employee's reward to their measurement systems. Their result shows 74.5 percent of respondent organizations are BSC users, but only about 25 percent have fully developed BSCs. A number of studies have indicated the importance of reward system for BSC implementation (e.g. Sharma & Gadenne, 2011; Agostino & Arnaboldi, 2012). An appropriate employee reward and incentive system can motivate employees to perform within the scorecard framework (Sharma & Gadenne, 2011). Harden and Upton (2016) point out it is a challenge to link the BSC to the employee's reward system. The reason is if employees are to believe that nonfinancial results and financial results have the same importance, however they cannot be paid bonus timely when financial results are worse than the expectation, but nonfinancial results are positive, they may think nonfinancial measures are less useful and pay less attention on nonfinancial results (Makhijani & Creelman, 2011). Therefore, it seems not to be easy for organizations to adopt a fully developed BSC.

The second problem is the effectiveness of BSC. The use of BSC should complement and link to corporate strategy, which is the key element for organizations to design a scorecard; otherwise it may not have positive influence on performance (Braam & Nijssen, 2004). Malina (2013) suggests communication and review in the scorecard process are important to ensure the BSC is effective for achieving goals. Communication includes both top-bottom and bottom-top, the aim is to make sure that each employee is clear with the goals and their tasks in the implementation process, as well as building trust between top management and employees. As Sharma and Gadenne (2011) suggest, the implementation of a new BSC system in a complex environment reflects challenges in both leadership and employee motivation. This requires both senior management and employees involved in developing and implementing BSC process (Soderberg, 2011). Clarity of every employee's role has a positive influence on the achievement of organization's goal (Greatbanks & Tapp, 2007). Periodically reviewing the effectiveness of BSC enables making changes in time according to the changes of situation. Chi and Hung (2011) also suggest BSC

implementation requires full support from top management, sufficient communication with employees, and feedback during the process. Thus, communication, feedback, as well as employee and top management involvement are factors that significantly influence the effectiveness and success of BSC implementation. The selection of appropriate measures for each perspective helps to enhance the BSC effectiveness. Hoque (2014) indicates organizations tend to use too many measures in a single scorecard. In fact, organizations still place greater importance on financial measures than non-financial measures (Blundell, Sayers, & Shanahan, 2003). This is also found to be true in non-profit organizations (Greiling, 2010). Blundell et al. (2003) suggest that some organizations did not use a balanced mix of performance measures for each perspective. They used many measures for financial perspective, but only one measure for each of the other perspectives. Agostino and Arnaboldi (2012) confirm that there is a prevalence of financial measures in BSC implementation process. They also suggest that absence of clear targets and no link with the reward system are two other BSC issues. A comprehensive set of measures for BSC can assist organizations in improving overall performance and competitiveness.

Lack of a fully developed BSC and low effectiveness are two major issues of BSC which have been often investigated and discussed by previous BSC studies. Each of these two issues consists of several more detailed problems. The BSC can be used for different purposes, no matter for which purpose managers choose to adopt the BSC, the design and implementation of the BSC should complement and link to corporate strategies; otherwise there will be a failure in BSC application. Moreover, from the country-level, the success of BSC implementation is also affected by national culture, for example, what financial indicators to select for a company may be influenced by whether the country this company located in tends to focus on long-term orientation or short-term orientation.

2.2 The Effects of Culture on Performance Management Systems

2.2.1 Performance Management Systems and National Culture

As a strategic and integrated process, performance management system delivers sustained success to organization by improving the performance of the people who works in them and by developing the capabilities of individual contributions and fears (McAdam, Hazlett, & Casey, 2005). With the increased competition between companies and the development of new management techniques, an increasing number of companies are adopting a performance management system to help them achieve their goals. It has been argued that performance management systems are important for companies to keep competitive advantage (Blundell, Sayers, & Shanahan, 2003). In fact, some organizations have difficulty in implementing a performance management system because they have paid little attention to the influences of cultural factors on performance management system implementation (de Waal, 2006). Rhodes et al. (2008) indicate management practices are significantly affected by cultural values, since social and cultural values affect the acceptance of performance management systems, such as the BSC. Previous studies have provided evidence to confirm the importance of cultural factors on implementing performance management systems. de Waal (2006) compared the cultural differences and the use of a performance management system in the UK and Netherlands, suggesting it is better to take into account Hofstede's culture dimensions to modify the performance management system in order to meet local needs. Macarthur (2006) discussed the cultural influences on management accounting practices in German and US. He points out uncertainty avoidance is a key cultural difference between two countries which has effects on management accounting practices. The US culture with weak uncertainty avoidance tends to be good at coming up with new ideas of management accounting, including proposed new models, such as activity-based costing and BSC. While Germany culture with strong uncertainty avoidance tends to be good at developing and implementing those management accounting practices. For balanced scorecard, Bourguignon et al. (2004) confirm that American cultural values are embedded in the balanced scorecard and suggest the design and application of management accounting systems need to consider the ideology of the local society.

Carmona et al. (2011) examined the impact of national culture on BSC implementation in Spain and the US. The US is a highly individualistic country with emphasis on short-term outcomes, while Spain tends to be collectivistic and prefers long-term focus. They found US participants prefer short-term financial goal project more than Spanish participants even that project reflected the lowest aggregate BSC score. This result confirms national culture has effects on management accounting and control systems. Mendonca and Kanungo (1996) suggest although the implementation of performance management techniques can bring benefits to organizations in developing countries, as they are derived from western countries with western cultural values, organizations in developing countries cannot simply transplant them due to different socio-cultural environment. Therefore, the factor of national culture need to be taken into account when consider BSC application in China.

2.2.2 Hofstede's Culture Theory

Culture can be understood and defined in different ways. In business studies, the most widely accepted definition of culture is provided by Hofstede (1980): culture is the collective programming of the mind that distinguishes members of one human group from another. To distinguish different national cultures, Hofstede (1980) has identified four dimensions of cultural value: Power Distance, Uncertainty Avoidance, Individualism versus Collectivism, and Masculinity versus Femininity. Later, the fifth dimension, long-term orientation versus short-term orientation, was added after the prior four dimensions. de Waal(2006) suggests when considering performance management system implementation, it is better to take into account Hofstede's cultural dimensions, in order to meet local needs and national cultural characteristics. Hofstede's cultural dimensions are widely applied by accounting researchers as the theoretical basis to investigate the influence of different cultural factors on accounting. These dimensions are showed as follow:

(1) Power Distance.

Power distance refers to the extent to which the people within a culture accept that

power in institutions and society is distributed unequally. In a high power distance culture, the society tends to be more centralized, and people accept power is distributed unequally. While in a society with a low power distance, the members tend to seek for an equal power.

(2) Individualism versus Collectivism.

This dimension measures the degree to which individuals are integrated into groups. In a high individualistic society, individualism is the core of the society. People prefer a loose social structure and tend to focus on individual performance and achievement, then the group goals. On the contrary, in a high collective society, there is a need for a stable relationship. People of the society prefer a tight social structure in which the group look after its members.

(3) Uncertainty Avoidance.

This dimension refers to the degree to which the members of a society feel uncomfortable and threatened with uncertainty and ambiguity. In a high uncertainty avoidance society, people always feel uncomfortable with ambiguity and want more control over the environment, so there are more rules and controls to avoid uncertainty. While in a low uncertainty avoidance society, people generally don't care much about uncertainty and ambiguity as they feel relatively less uncomfortable.

(4) Masculinity versus Femininity.

Masculinity and femininity are used to describe the dominant social values. In high masculinity cultures, people tend to focus on performance and achievement and lacking of concern for others. However, in femininity cultures, people prefer a harmonious relationship. They focus on cooperation and more concern for others.

(5) Long-term Orientation versus Short-term Orientation

Societies with long-term orientation have a sense of shame and encourage thrift, they focus on the values for the future therefore accept results may take time to achieve.

Societies with short-term orientation focus on values stressing on the past and present, so they prefer to set results can be achieved within timeframe.

2.3 BSC and Performance Management Systems in China

In spite of an increase of BSC users in Asian countries in recent years, the implementation of BSC and other performance management systems in Asian companies is still relative low. In Singapore, it is found that BSC is more likely to be adopted by large companies (Liu, Ratnatunga, & Yao, 2014). In India, BSC is used by organizations as a performance measurement tool to create change and improve performance (Farooq & Hussain, 2011). But according to Sulaiman et al. (2004), Indian companies still prefer to use financial-based performance measures. This is also supported by Anand et al. (2005) that among four BSC perspectives, financial perspective is more important than others. They also found the key issue on the application of the BSC in India was how to balance different perspectives and establish cause and effect relation among these perspectives.

In China, although the BSC was introduced much later than in Western countries, recent years, it has received increasingly attention from organizations and scholars. Currently, Chinese BSC literature is more about introducing concepts and foreign experience, there is a lack of literature on empirical BSC application in Chinese enterprises. This is partly associated with China's national conditions. Due to the absence of standard, strict and scientific enterprise management system for a long time, as well as the absence of innovation on management theory, the implementation of BSC in Chinese companies is still relative low although BSC has been put forward more than twenty years. But along with the constant development of enterprises reformation and the changes in enterprise management system, management of enterprises has put more emphasis on performance measurement. Now there is an increasing number of Chinese specialists and scholars focus on BSC popularization and application in Chinese companies. According to a survey, in 2002, only 5 percent of firms had implemented the BSC at different levels ("HongKong," 2002). Sheng et al. (2008) found 53 percent of firms reported they had

adopted the BSC in 2008. Zeng and Luo (2013) indicate there is a significant increase on BSC implementation rate in China in recent years, as managers in Chinese companies need the BSC to achieve organizational goals and improve profits. BSC application improves both organizational and personal performance in Chinese companies, this influence is positively related to the level of BSC implementation (Lin, Yu, & Zhang, 2014). However, Xu (2011) found BSC companies did not show an obvious higher financial performance than non-BSC companies. Although the findings on BSC implementation in China remain mixed, there is no denying that the BSC has got an obvious development in China. At present, the modern enterprise management of Chinese companies is at a beginning stage, it is necessary to draw lessons from foreign advanced management theories and experience, while the BSC system provides a scientific tool to Chinese companies for performance management and decision-making.

Taiwan is the most representative area of China on the use of BSC. As Taiwan's economy is more developed, management theory is also more closely linked to Western developed countries. Therefore, the BSC has received much attention in Taiwan and taken the lead in the implementation of BSC in Asian region. Chang et al. (2008) have examined the BSC application in a Taiwan's healthcare organization and suggest two reasons for the successful implementation of BSC: senior management personnel involved in the implementation process and BSCs are linked to budget planning. Chi and Hung (2011) conducted a study between a BSC company and a non-BSC company on the software industry in Taiwan, they found the performance of the BSC company showed obvious progress and was better than the non-BSC company in all the four perspectives of the BSC. Although at present in Taiwan some enterprises have implemented the BSC and the majority of BSC enterprises have developed strategy, performance indicators and disciplinary measures, they have not well combined with information system, therefore the BSC is unable to provide complete and timely information for decision-makers. As a consequence, unlike Western countries, the BSC in Taiwan is mainly used as a performance evaluation system, rather than a performance management system. The lessons of success and failure from Taiwanese companies on

the use of BSC may bring some experience for those Chinese companies who are interested in BSC.

The implementation of BSC in China faces various issues. When designing BSC system, some Chinese companies do not have a comprehensive understanding of the BSC (Tai & Liu, 2005). Strategy is important for BSC implementation, but some companies do not have a clear strategy (Yao, 2007). Gao and Gurd (2015) found the BSC is considered by some Chinese industries to provide a fair system incentives. However, many companies do not develop an effective incentive system linked to the BSC (Gao, 2008). These issues have great impact on the success of BSC implementation. One of the reasons for the low successful rate of BSC application that has often been overlooked is the cultural barriers, which reflect in different cultural values according to Hofstede (1980). Western performance management techniques are worthwhile methods for firms in developing countries to adopt, but it is not easy to implement and cannot be underestimated (de Waal, 2007). The BSC is rooted in American culture, which is very different from Chinese culture. Zeng and Luo (2013) summarize some barriers that affect BSC spread and implementation in China, including:

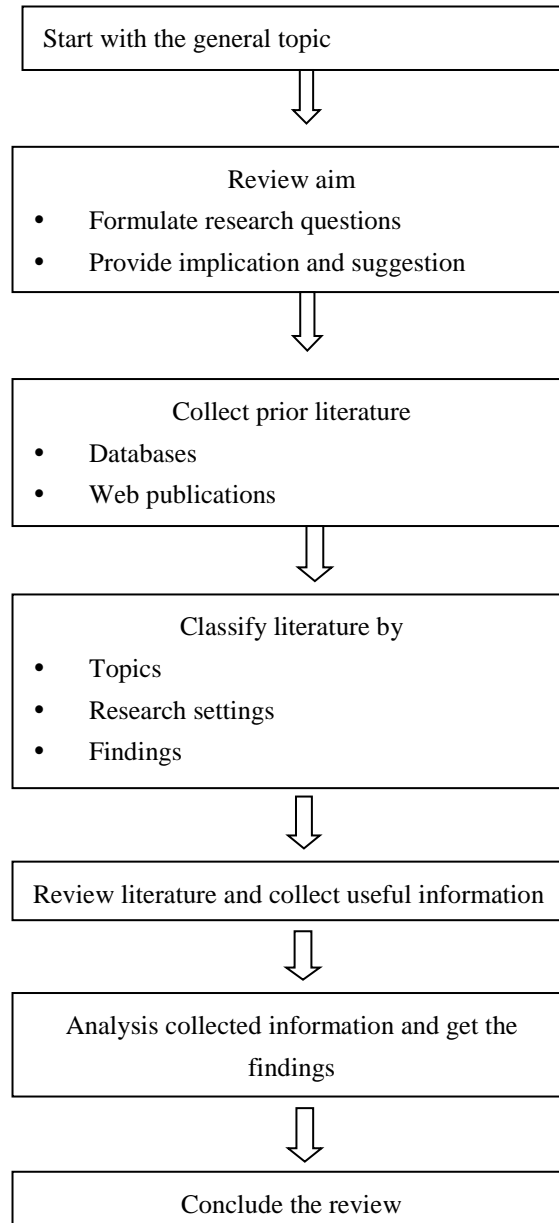
- Cultural barriers, such as the impact of Chinese Confucianism which stresses on conflict avoidance; the differences in power distance and individualism between China and America.
- Matching barriers, such as matching BSC system with organization's existing planning systems, performance measurement systems and information systems.

Thus, Chinese companies cannot simply copy the BSC model from Western countries without making changes to adapt to the organizational environment. As Sandhu et al. (2008) point out, BSC is not "ready made", how to localize BSC should be concerned by organizations.

CHAPTER THREE: RESEARCH METHDOLOGY

Since this is only a 45 point dissertation, the study will draw on secondary data, the available literature, and then provide insights into BSC application under Chinese context. The approach of literature review is showed in Fig.1, which is based on Hoque's (2014) approach.

Figure 1 Literature review approach



Source: Adapted from: [Hoque, Z. (2014).]

3.1 Research Methods

This research aims to summarize BSC issues identified by previous studies and provide suggestions for Chinese firms on BSC application to address these issues. This includes a review of literature on the balanced scorecard, mainly focusing on literatures on accounting journals and other business journals. Literature related to BSC application will be gathered from online databases to ensure a broad coverage of literature (Albertsen & Lueg, 2014). Google search engine will also be used to allow rich publications on the BSC and performance management systems to be acquired (Hoque, 2014). Issues of BSC implementation will be identified from the analysis of literature and categorized into some common themes. Then the research will review literature on performance management practices to identify issues of BSC adoption in China. On the basis of the issues identified from the first two research questions, this study will indicate essential issues that need to be considered in implementing BSC in China. With the consideration of Chinese context, this research is expected to provide an in-depth understand of BSC implementation in China.

3.2 Data collection & analysis

The information needed for this research will be collected from literature. To examine the first two research questions, qualitative data will be collected from literature about BSC implementation and performance management systems implementation. The data for the first research question includes world-wide common BSC implementation problems; factors that have effects on successful BSC implementation; companies with what characteristics are more likely to use BSC. The data for the second research question is about the implementation of BSC and other performance management system in China. The data includes the implementation degree of performance management system; factors and challenges; factors that affect the level and result of performance management system implementation.

The method used for analysis is thematic analysis. The data will be coded and categorized based on what theme it refers to. The coding process will be finished

manually by the use of an excel spreadsheet. First, themes will be identified from literature, such as success factors of BSC implementation, and listed on the excel spreadsheet. Then the information will be coded by the use of thematic coding method, the codes can be key words and phrase. After all the data has been coded, it will be put into predetermined themes if it is consistent with those themes. By data analysis, common themes that emerge from literature review can be found, it can be seen what are the issues of BSC implementation have received more attention from literature. For the third research question, I will discuss the cultural characteristics of China based on Hofstede's cultural dimensions. By identifying issues of BSC and Performance management system implementation from literature and analyzing Chinese cultural characteristics, primary considerations of BSC implementation for Chinese companies will be suggested.

CHAPTER FOUR: FINDINGS AND DISCUSSION

4.1 Key issues of BSC identified from studies

To investigate what the issues on BSC implementation identified by previous studies are, 41 articles that dealt with the BSC implementation were examined in this study. The result shows the issue on performance measures of the BSC is the most discussed by literature, followed by issues of reward system, top management involvement, communication and feedback, and employee involvement.

Table 1 Frequency of BSC issues indicated by literature (Generally)

Issues of BSC application indicated in literature	Number of articles indicated
Strategy	6
Senior management involvement	9
Employee involvement	7
Performance measures	13
Communication and feedback	8
Reward system	10
Organizational factors	5
The integration with other control tools	6
Information system	2

- *Performance measures:* Previous studies indicate companies still pay much attention on financial measures and lack attention to other BSC perspectives, which result in an unbalanced mixed of measures for the four perspectives, therefore the four perspectives of the BSC are not balanced. Studies also point out companies cannot overlook the link between performance measures and strategy, as well as the cause and effect relationship among the four perspectives.
- *Reward system:* The implementation of the BSC does not link to the reward and incentive system is an issue that is widely indentified by literature. Linking BSC performance to reward systems is an essential measure to motivate employees and ensure strategic goals can be successfully achieved.
- *Senior management involvement:* The introduction of the BSC system is challenging for leadership since the development and implementation of the BSC is a top-down process which cannot be realized without the support and involvement

of top management. Top management needs to design the strategy and BSC framework, if the BSC cannot get full support from top management, it will be difficult to successfully implement the BSC.

- *Communication and feedback:* Communication is important in the whole process of BSC development and implementation. Lack of communication with employees will result in a low strategy awareness and BSC recognition for employees. In the BSC implementation process, managers should often communicate to employees for the feedback on the BSC, in order to revise the system in time.
- *Employee involvement:* Literature confirms that the level of employee involvement affects the outcomes of BSC implementation. However, some companies have not recognized the importance of employee involvement for BSC implementation. As employees do not have sufficient strategy awareness and the understanding of the BSC, they cannot actively participate in BSC implementation.

In addition to the above issues, literature also indicates various other issues related to BSC implementation, including strategy formulation, the impact of organizational environment on BSC implementation, the integration of BSC with other control systems and the importance of information system. Among these examined articles, some of them provide a relative comprehensive exploration and analysis on those issues that may have impact on the success of BSC implementation. For example, Agostino and Arnaboldi (2012) suggest the development of BSC should consider performance measures, BSC cascading, target and reward systems, while BSC implementation should consider the involvement of top managers and operational managers, as well as face to face dialogue. Kopecka (2015) point out to effectively implement BSC, it is important for companies to have smooth communication, clear indicators, deep control and feedback. These issues identified by previous studies have significant impact on the level and effectiveness of BSC implementation, even lead to a failure in BSC adoption.

4.2 Issues of BSC implementation in China

The second research question is what the issues related to BSC implementation in China are. As there is limited English literature focused on BSC implementation in China, to investigate this research question, literature in Chinese language has also been collected. In total, 14 articles were reviewed, including 7 articles in English language and 7 articles in Chinese language. The finding shows literature has indicated various aspects of issues related to BSC implementation in Chinese organizations. Table 2 lists eight key issues that indicated by literature on BSC application in China, including strategy planning, senior management and employee involvement, communication, performance measures, reward system, information system and management level. These issues have important effects on the success of BSC implementation in Chinese organizations. Compared with the result of the first research question, issue of senior management involvement has received the most attention from literature, while management level is a particular issue for Chinese companies.

Table 2 Frequency of BSC issues indicated by literature (China)

Issues of BSC application in Chinese organizations	Number of literature indicated
Strategy	6
Senior management involvement	7
Employee involvement	5
Communication	2
Performance measures	4
Reward system	5
Information system	4
Management level	3

4.2.1 Lack of clear strategy

BSC is designed and implemented on the basis of the company's strategy and translates the strategy into four perspectives. As the scorecard consists of a set of measures derived from the company's strategy (Walker & Ainsworth, 2007), it is difficult to develop BSC for performance evaluation if a company does not have clear strategy. Due to the increasing market competition, it is extremely important for a company to have

clear strategy, especially a clear planning on long-term strategy. The clear strategy can effectively guide all the management activities of the company, to ensure that all employees act in unison. At present in China, since some companies do not have a sufficient understanding of their actual situation, the strategy may be impractical for implementing. Some companies even do not have specific long-term strategic planning or the strategy changes frequently, which result in a lack of a clear goal for employees. These will become the barriers for BSC implementation.

After the strategy is formulated, all the activities of the company should take the strategy as the start point and destination, so does the implementation of the BSC. In China, some organizations' performance management systems are separated with the strategy, the performance objectives cannot effectively support the organization's strategy, even appears the cases that employees' performance objectives are far from the organization's strategy. In addition, some companies run several programmes with different targets at the same time, therefore cannot better serve the unified strategic goal, and lead to be difficult for a company's operation to truly realize the strategy-oriented (Yang, Li, & Li, 2007).

4.2.2 Lack of senior management support

Lack of senior management support is not only an issue of BSC implementation in Chinese companies, but also a common issue that has been widely indicated by global BSC studies. The implementation of BSC is a great change throughout all levels of the company. Changing performance management system may affect the management's benefits, as the BSC will significantly increase the transparency of performance management systems. Since there is high power distance in Chinese companies, high power distance leads to a large gap of the distribution of power between top management and employees on decision making (Reddy, 2011), so senior management has more rights on making organizational decisions. The BSC prevents the behaviour of senior management from manipulating organization's performance, which may hinder the introduction and development of BSC in the organization (Zhang & Xu, 2014).

The construction of a BSC model is from top to bottom. Strategy formulation is dominated by senior management, and then the strategy is translated into a set of performance measurement index system, in order to ensure the organization's strategic goal will be achieved through all the employees' efforts. It is necessary to get support from the top management of the organization in all the steps of BSC implementation process, to ensure the construction of BSC will not become a mere formality (Gao, 2008). However, for some companies, only one or two departments involve in the actual implementation process, which lacks of support from senior management. If the BSC cannot obtain full support from senior management, it will be difficult for companies to successfully implement BSC.

4.2.3 Lack of employee involvement

The BSC is a performance evaluation system on the basis of the company's strategy. Since BSC is associated with all departments of the company, the implementation of BSC requires every employee's participation and cooperation, and each department should ensure its employees successfully complete their tasks, from personal perspective to support the realization of the company's strategic goal. Therefore each employee needs to be clear about the company's strategy. However, Zhang and Xu (2014) point out that in Chinese companies most employees do not understand much about the company's strategy, and some companies even set up a new position for one specific person, this lead to employees cannot meet the requirement of their jobs and reduce the positive effects of BSC on the company's performance.

In the process of building BSC model, most companies have neglected to provide sufficient BSC knowledge and training to their employees. Companies just provide a simple introduction on four perspectives of the BSC, to enable employees to understand the balanced scorecard is a performance evaluation system that consists of financial and non-financial indicators. However, the difficulties and complexity of BSC implementation are rarely mentioned, thereby the employees lack of interest and

attention, even have resistance on BSC implementation (Yao, 2011). Although senior management actively supports BSC implementation, employees cannot understand the importance of BSC on achieving the company's goals and do their work in a perfunctory manner. As a consequence, the BSC cannot be successfully and effectively applied.

4.2.4 Lack of communication

Communication is very important to ensure the BSC will be accepted by employees and successfully implemented. BSC requires the organization to have a great communication mechanism in order to enable information can be spread to employees timely. In China, many companies do not have a good communication mechanism on BSC. When companies have decided to adopt the BSC system, some of them did not provide a comprehensive introduction to the employees, to let the employees have a clear understanding on the BSC. In the stage of strategic planning, senior management do not have much communication with employees. They often close the door to strategize and do not get participation and support from employees, therefore employees know less about the company's strategy. In the process of BSC implementation, managers do not have timely communication with employees about new problems and the progress of the plan, to constantly modify and improve the BSC and promote employees to achieve personal goals, thus achieve organizational goals. Due to a lack of communication, managers only assign performance indicators to the employees without consideration of employees' attitude, employees just passively work under pressure, therefore cannot get support and cooperation from employees. Without an open and transparent communication mechanism as the foundation, is difficult to successfully implement BSC and get expected outcomes.

4.2.5 Put too much emphasis on financial performance

In China, as the profound influence of traditional performance measurement systems, many companies have put too much emphasis on short-term financial performance. In pursue of personal value, the management often takes the short-term financial performance as the central goal of the work. The pressure may result in companies have

to reduce the spending on market development, new customer development, new product and service development, database and information system update, and customer satisfaction. In a short period, the spending cuts are treated and reported as an increase in income. However, in the long run, this behaviour will erode the company's assets and the ability to create the future economic value. Focus too much on short-term financial results will increase managers' speculative behaviour and enable companies to be reluctant to use capital investment for achieving long-term strategic goals instead of short-term profit target, so that the company may invest too much on short-term performance and less on long-term value creation. It is this dangerous idea that hinders the BSC development in Chinese companies and creates problems for the sustainable development to the company.

In addition, as many Chinese companies tend to place great emphasis on financial performance measures, the other three perspectives of the BSC have often been overlooked. As a consequence, companies set up too many performance measures on financial perspective, but few measures on non-financial perspectives, which result in the BSC not "balanced". However, lack of emphasis on non-financial performance will significantly affect the company's long-term benefits.

4.2.6 Lack of effective reward systems linked to the BSC

Many studies point out it is important to link the BSC to reward system, but this can be challenging. Lack of connection between the strategy and reward system is one of the barriers for strategy implementation. In order to ensure the BSC can be effectively implemented, it is necessary to link the results of BSC to reward systems to motivate employees (Zhang, 2006). In China, some companies fail to effectively combine reward systems with its development strategy and integrate into the whole management mechanism. Chinese companies are facing challenges on the issue of how to introduce reward systems and link to the BSC system.

4.2.7 Obstacles on information systems

With the fast development of economy and information technology, organizations have become increasingly rely on information systems. In today's information age, the implementation of performance management systems requires the support from management information systems. When the organization has set up the BSC system and begun to use the BSC for tracking and review the performance, it is necessary to get support from appropriate information systems. The development and implementation of BSC involves acquisition and analysis of a large number of performance indicators. It is a relative complex process, which is usually realized through management software. The current situation is many companies just bought management software but have not considered whether the software is suitable for performance management systems implementation, and have not made changes on the program to adapt to the needs of the company.

Information systems play a crucial role in tracking performance indicators. When there is an unexpected BSC signal appears, the management can query information systems and find out the root of the problem. Compared with Western countries, the informationization process of Chinese enterprises is relative slow and the quality of information is relative low, this will largely affect the application of BSC. The low level of information quality may affect the truth and accuracy of performance indicators, therefore unable to effectively measure the company's real business performance.

4.2.8 The relative low level of management

This is a specific BSC issue for Chinese companies. The BSC is derived from Western countries. Due to the alternation and innovation of Western management theories, as well as rich experience on management practices, which lead to the BSC has appeared. Because of historical reasons, the management foundation of Chinese companies is relative low. It is in recent years that Chinese companies begin to realize the importance of performance management (Tai & Liu, 2005). Especially some domestic companies have not introduced strategic management yet, which lead to the implementation of the

BSC in China faces many difficulties. In addition, since some enterprises have loose management for a long time and there is a lack of new management theory system based on national conditions, most companies only passively accept the achievements of western management theory therefore overlook the impact of national economic and social environment on company management.

4.3 Implication/Suggestions

The third research question is what the implications/suggestions are for Chinese companies adopting BSC. To investigate this research question, the influences of Chinese culture on BSC implementation are discussed on the basis of Hofstede's cultural dimensions. Then the study provides some suggestions for BSC implementation in Chinese companies.

4.3.1 Impact of Chinese culture on BSC implementation

It can be seen that national culture has impact on management practices and performance management system implementation through a review of literature in chapter two. Therefore cultural factors have to be taken into account when designing and applying BSCs for performance evaluation. Table 3 shows the scores on Hofstede's cultural dimensions for the U.S. and China. According to Hofstede's dimensions, the cultural characteristics of China can be concluded as follows:

- Collectivism is the core value of the society which is the most striking feature of China. Collective interests are more important than individual interests. People attach importance to social order and harmonious interpersonal relationships.
- China has a large power distance. The legal system remains to be perfected. There is much economic intervention from government and people have little freedom of choice. The pyramidal power structure results in power play a crucial role in the society and economy.
- China has a lower degree of uncertainty avoidance for the future which reflects people tend to accept ambiguity and do not feel threatened of uncertainty.
- The society tends to be masculine that people are more likely driven by successful, competition and achievement. Chinese people tend to put their job before family.

- Chinese people tend to emphasize on persistence and perseverance, so they will try to achieve the goals even if much time is required.

Table 3 Scores on Hofstede's cultural dimensions for America and China

Cultural dimensions	America	China
Power Distance	40	80
Individualism	91	20
Masculinity	62	66
Uncertainty Avoidance	46	30
Long-term Orientation	26	87

It is easy to see America and China have significant differences on power distance, individualism (collectivism) and long-term (short-term) orientation. The BSC is derived from American culture which has low power distance and high individualism, while this is opposite with Chinese culture. In Chinese companies, most top managers do not like to share goals and strategies with employees but think that employees know the strategy plan will lose the authority of the leaders. Top management often owns the power to make decisions and give less employee empowerment. Employees only accept tasks from managers and do not express their thoughts directly even they have different opinions since they accept the rights distribution in the organization. Moreover, saving face is a characteristic of Chinese people, for some leaders, they may not like to listen and live with employees' different opinions because they think they will lose face. This significantly affects the vertical communication and the involvement of the employees in the BSC implementation process.

In addition to power distance, low employee involvement also caused by the high collectivism of the Chinese society. As China is deeply influenced by collectivism, Chinese companies stress more on collective interests and team work rather than individual achievement, which is different from Western cultures. This will have influences on individual motivation of the employees to actively participant in the completion of individual tasks although the BSC cannot be successfully implemented without cooperation. In addition, Confucianism, traditional Chinese culture, represents

harmony and relationship, therefore individual activities and competition are not received as much emphasis as Western countries in Chinese companies. High power distance, low individualism and Confucianism lead to be challenging for Chinese companies to implement the BSC.

4.3.2 Factors to help achieve success in BSC implementation in China

Although there are many barriers on the implementation of the BSC system in China, only if companies identify barriers and find a way to clear the barriers, constantly explore in practice and take feasible measures, they may achieve success on BSC implementation.

1. Take the strategy as the orientation

BSC requires organizations to set up goals based on the strategy in order to make the strategy specific. To apply the BSC, companies must take strategy as the guide, it is particularly important to Chinese companies. Although in the process of BSC development, the BSC enables companies to re-recognize and make changes to the strategy, but if there is no clear strategic planning and only rely on the BSC to formulate strategy, it is impractical. Companies should set up appropriate long-term strategic goals with the consideration of its actual situation and carry out all activities around the strategy, to ensure the company will develop along the correct direction. Moreover, strategy must be adapted to the company's external environment, thus, the formulation and implementation of the strategy needs to be corrected according to the changes of the environment. Kim and Kang (2016) suggest when adopting BSC system, companies may develop a conceptual framework to identify the overall strategic goals, expected outcomes and responsibilities of participants. Companies will be equipped with the prerequisite of implementing the BSC only after they have formulated clear long-term strategy and implement to details.

2. Pay attention to top management involvement and employee involvement

In the process of BSC implementation, get strong support from top management is

necessary. Since the company's strategy is developed by top management, the strategic awareness of middle management is not as high as the top management. Thus the BSC should not be developed by middle management, but by top management, because the BSC needs to reflect the strategy of the top management. Moreover, due to top management owns the rights of control and resource allocation, and there is a large power distance in Chinese organizations, employees have little power on making decisions and accept that power is distributed unequally. Therefore top management support is especially important for Chinese companies to implement the BSC. To win the support of the top management on the BSC, the first is to find senior managers who trust and need a comprehensive set of performance management methods. Top manager who once involved in strategic planning and understand the specific goals is usually easier to accept the BSC. The second is to attach top management's attention through the introduction of successful cases of those BSC companies. In addition, top management needs to change management style, from traditional hierarchical management gradually transforms into cooperation management and share information with employees in time (Zhao, 2012).

As the BSC is rooted in American culture with low power distance, it works with the conditions of active involvement and smooth vertical communication in an organization (Zeng and Luo, 2013). Therefore implementation of BSC requires not only top management support, but also employee involvement. The most ideal state of BSC implementation in a company is to make the strategy to be understood by each employee that is each employee can contribute to successfully achieve the strategy under the guidance of top management (Tai & Liu, 2005). However, top management usually pays less attention on the communication of strategy than the creation of strategy (Carmona, Iyer, & Reckers, 2011). Top management must fully involve in the formulation of the strategy and promote the implementation of the strategy within the company. If top management wants to increase employees' strategy awareness and receive more support in the entire company, they need to attach great importance to employee communication and let employees involve in the strategy formulation and

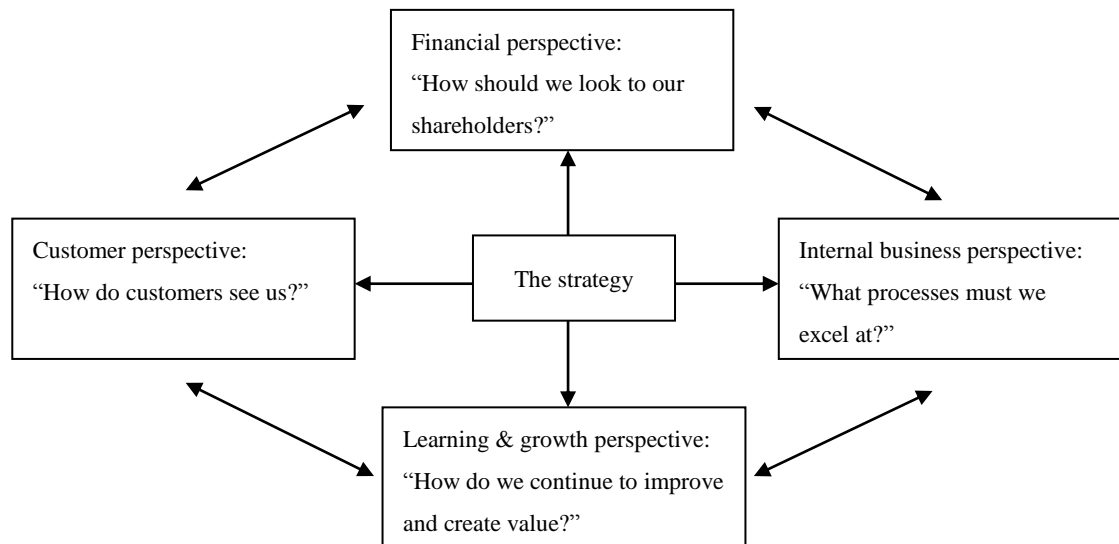
implementation. Therefore, managers can make employees to participate in the management's discussion through forming groups, to design the BSC together and put forward suggestions for the company's development. Only employees accept the BSC and actively complete personal goals, at the same time also help the company to achieve strategic objectives, a complete and sustainable strategic management system can be established, to ensure the development of the BSC. In short, implementation of the balanced scorecard in Chinese companies requires the company has a sound communication mechanism to ensure fluent vertical communication and employees actively participate in each work. The management needs to have enlightened thought and reforming consciousness that is able to accept the opinions from employees at different levels.

3. Balance performance indicators and focus on long-term benefits

Studies point out Chinese companies often put too much emphasis on short-term financial performance and neglect non-financial aspects. Since the four perspectives of the BSC are interconnected, it is necessary to improve the performance of the other three aspects if the company wants to increase its financial performance. The BSC evaluates company performance through a series of interrelated key performance indicators, which can reflect the company's strategy, so the establishment of the key performance indicators is the essence of the BSC. Figure 2 illustrates the relationship between BSC four perspectives and the strategy. There are some problems need to be considered when establish performance indicators. First, to establish performance indicators for each perspective of the BSC, it is necessary to regard the strategy as the centre and guidance, decompose the strategy into each indicator, and therefore make the strategy become operational behaviour. Second is to consider the link between each indicator. When setting up short-term performance indicators, companies have to fully consider whether the indicators are adapted to the long-term strategy. Third, the number of indicators for each perspective should not be too many and should be objective and quantifiable.

Both financial indicator and non-financial indicator have advantages and disadvantages. Each of them is an indispensable part for corporate performance evaluation. But non-financial indicator is only an auxiliary tool that helps the achievement of financial indicator, while financial indicator directly reflects a company's profitability. Therefore, companies should maintain the dominant position of the financial indicator. Only organic combination of financial indicators and non-financial indicators can a company realize long-term sustainable development. It is necessary for companies to develop a strategy map since a strategy map is useful to ensure the performance indicators link to the strategy and the integration of the indicators.

Figure 2 Relationship between BSC and strategy



Source: Adapted from: [Kaplan & Norton 1992]

4. Link BSC to incentive system

Since the BSC is derived from high individualistic culture which is opposite to Chinese culture, the implementation of BSC prefers the environment that emphasizes on competition among individuals. While in China, companies prefer to stress on collectivism, employees are accustomed to rely on the group and prefer group-based activities, which may affect individual initiative on the completion of personal goals (Zeng and Luo, 2013). Thus, when implementing BSC, except bonuses, companies

should also develop different incentive systems linked to the individual performance, such as adequate employee empowerment, personnel promotion and non-financial reward. The design of performance evaluation system should make employee feel fair and the assessment program should be reasonable. It is helpful to link the BSC to the variable compensation system for strategy implementation since it will motivate every member to actively participate in their work. The design of variable pay must consider the cooperative relationship between different departments and the four perspectives of the BSC. BSC application in Chinese companies requires companies to focus on both individual performance and department performance, only each employee and department complete their targets, the company goals therefore can be possibly achieved.

5. Improve enterprise information system

Information system has played a great role in assisting managers in the analysis of performance evaluation results. When unexpected signal appears to the evaluation results, managers can use information system to find out the root of the problem in time. But if the organization has chosen improper information system that is not sensitive enough, the information system cannot meet the organization's information needs for fair evaluation of performance indicators. Therefore, in the process of BSC implementation, organizations should choose information system based on their own needs. The design of information system should consider whether it can satisfy the organization's information requirements, including the sensitivity of the information system. Organizations also need to constantly improve the information system according to internal and external environment change, so that the information system can not only provide ongoing effective information for managers, but also help managers combine information system with decision-making.

6. Strengthen corporate culture construction

Corporate culture affects every member in a company and guides the corporate behaviour. Because of Chinese culture and Western culture are different, it is necessary

to strengthen the construction of corporate culture to improve the influences of Chinese culture on company management. The learning and growth perspective of the BSC makes a claim on employee's working efficiency, while corporate culture is just the booster for the improvement of employee's working efficiency. In China, very few companies have corporate culture that has been accepted by all the employees. Therefore, companies should grasp the core spirit of the BSC and learn competitive working attitude from the Western, to promote employee learning and growth. Furthermore, senior management should try to build unique cultural atmosphere, for the purpose of attracting employees to work for the company, so that the BSC will be recognized by more employees.

4.4 Summary of findings

The findings of this study were discussed in this chapter. It is found performance measures, reward system, top management involvement, communication and feedback, and employee involvement are the five most widely discussed issues in literature that relates to BSC implementation. Within the Chinese context, eight issues on BSC implementation were identified, including: (1) lack of clear strategy; (2) lack of senior management support; (3) lack of employee involvement; (4) lack of communication; (5) put too much emphasis on financial performance; (6) lack of effective reward system linked to the BSC; (7) obstacles on information system; and (8) the relative low level of management. On the basis of these issues, the study provided some suggestions taking into consideration the Chinese cultural characteristics: (1) take the strategy as the orientation; (2) pay attention to top management; (3) balance performance indicators; (4) link BSC to incentive system; (5) improve enterprise information system; and (6) strengthen corporate culture construction.

CHAPTER FIVE: CONCLUSIONS

5.1 Conclusions of the research

Although there are some successful cases in Chinese companies after the BSC has been introduced in China, most companies have not obvious effects. The aim of this study is to investigate the most indicated issues on the use of BSC by literature and provide suggestions for BSC implementation in Chinese companies. This study reviews 41 articles to find out important issues and factors that have impact on BSC implementation generally. The finding shows issues on performance measures, reward system, top management involvement, communication and feedback, and employee involvement are the five most widely discussed issues by literature that related to BSC implementation. This study also reviews 14 articles dealing with BSC implementation in China, issues on senior management and employee involvement, communication, strategy, reward system, performance measures, information system and the level of management have been indicated and explained. Through the findings of the two research questions can be seen, issues of BSC implementation in China and in the world are similar, however, compared with Western countries, Chinese companies have a lower management level, which against the implementation of the BSC in China. This study also discusses the influence of Chinese culture on BSC implementation, and provides suggestions for Chinese companies to better apply the BSC on the basis of the issues indentified from literature. The suggestions include: take the strategy as the orientation; pay attention to top management involvement and employee involvement; balance performance indicators and focus on long-term benefits; link the BSC to incentive system; perfect enterprise information systems; and strengthen corporate culture construction.

The BSC can be used to guide an enterprise's management behaviour and the allocation of resources, a complete BSC system links the performance evaluation system and the incentive system together and it should not just be a performance evaluation system but a performance management system. As the BSC is derived from Western culture, Chinese companies cannot blindly copy the BSC model from Western countries. They

should first have a comprehensive understanding on the BSC concept and then adopt the BSC with the consideration of its own actual conditions. Through a study of the Sichuan Ertan Industrial Corporation (SEICO), a Chinese company, Li et al. (2012) suggest three key steps from this case to design performance management systems: (1) link strategy and performance measures at company-level; (2) distribution of them to everybody's day-to-day jobs; (3) link them to an incentive plan to motivate employees. The case of SEICO can be used as a good reference by Chinese companies to apply the BSC as it reveals the process of designing and implementing an integrated performance measurement system. However, different companies face different competitive environment and have different strategic goals. Therefore when applying the BSC, every company needs to establish indicator system with the consideration of its actual conditions, to develop BSC system on the basis of its own characteristics. Actively explore the creative application of BSC concept in Chinese companies will make the BSC to play a larger role in the enterprise management.

5.2 Contributions, limitations and suggestions for future research

This study contributes to practice by identifying the challenges for Chinese companies to implement the BSC through a review on previous literature. Those companies that have already adopted the BSC may perfect the BSC system through improving the indicated aspects. For those companies that are considering to adopt the BSC, they should pay more attention on those issues when implement the BSC, to avoid those issues have negative effects on BSC implementation.

Like most research studies, this study also has some limitations. First, the number of articles on BSC in China is not sufficient enough. At present, there are very few empirical studies focusing on the implementation of BSC in China, it is relative difficult to collect needed literature for the second research question. Future research may collect more articles from broader approaches to examine this topic, to see whether the key issues of BSC implementation are same as the findings in this paper.

Second, the method used in this study for data collection and analysis is another limitation. As the data used for this study is secondary data that collected from literature, it is possible that not all the useful data in the reviewed articles has been picked out and collected. This may have influence on the result of this study although best effort has been made to improve the accuracy of the result. Moreover, the coding process is finished manually, it may be less accurate than coding through the use of software.

Currently, not many studies focus on BSC implementation in Chinese companies. As the BSC has some development in China recent years, future research may pay more attention on the actual application of the BSC in Chinese companies to fill the gap, moreover, to provide more ideas for BSC implementation in Chinese companies.

References

- Agostino, D., & Arnaboldi, M. (2012). Design issues in Balanced Scorecards: The “what” and “how” of control. *European Management Journal*, 30(4), 327-339.
- Albertsen, O. A., & Lueg, R. (2014). The balanced scorecard’s missing link to compensation: A literature review and an agenda for future research. *Journal of Accounting & Organizational Change*, 10(4), 431-465.
- Anand, M., Sahay, B. S., & Saha, S. (2005). Balanced Scorecard in Indian Companies. *Vikalpa: The journal for Decision Makers*, 30(2), 11-25.
- Blundell, B., Sayers, H., & Shanahan, Y. (2003). The Adoption and Use of the Balanced Scorecard in New Zealand: A Survey of the Top 40 Companies. *Pacific Accounting Review*, 15(1), 49-74.
- Bourguignon, A., Malleret, V., & Nørreklit, H. (2004). The American balanced scorecard versus the French tableau de bord: the ideological dimension. *Management Accounting Research*, 15(2), 107-134.
- Braam, G. J. M., & Nijssen, E. J. (2004). Performance effects of using the Balanced Scorecard: a note on the Dutch experience. *Long Range Planning*, 37(4), 335-349.
- Carmona, S., Iyer, G., & Reckers, P. M. J. (2011). The impact of strategy communications, incentives and national culture on balanced scorecard implementation. *Advances in Accounting*, 27 (1), 62-74.
- Chang, W. C., Tung, Y. C., Huang, C. H., & Yang, M. C. (2008). Performance improvement after implementing the Balanced Scorecard: A large hospital’s experience in Taiwan. *Total Quality Management*, 19(11), 1143-1154.
- Chi, D. J., & Hung, H. F. (2011). Is the balanced scorecard really helpful for improving performance? Evidence from software companies in China and Taiwan. *African Journal of Business Management*, 5(1), 224-239.
- Davis, S., & Albright, Tom. (2004). An investigation of the effect of Balanced Scorecard implementation on financial performance. *Management Accounting Research*, 15(2), 135-153.
- De Waal, A. A. (2006). The Role of Behavioral Factors and National Cultures in Creating Effective Performance Management Systems. *Systemic Practice and Action Research*, 19(1), 61-79.

- De Waal, A. A. (2007). Is performance management applicable in developing countries? The case of a Tanzanian college. *International Journal of Emerging Markets*, 2(1), 69-83.
- Farooq, A. & Hussain, Z. (2011). Balanced scorecard perspective on change and performance: a study of selected Indian companies. *Procedia Social and Behavioral Sciences*, 24, 754-768.
- Figge, F., Hahn, T., Schaltegger, S., & Wagner, M. (2002). The Sustainability Balanced Scorecard-linking sustainability management to business strategy. *Business Strategy and the Environment*, 11(5), 269-284.
- Gao, F. Y. (2008). To search about Chinese enterprise implementing Balanced Scorecard's question. *Value Engineering*, 2, 110-112. (In Chinese)
- Gao, T. & Gurd, B. (2015). Meeting the challenge in performance management: the diffusion and implementation of the balanced scorecard in Chinese hospitals. *Health Policy and Planning*, 30(2), 234-24.
- Greatbanks, R., & Tapp, D. (2007). The impact of balanced scorecards in a public sector environment: Empirical evidence from Dunedin City Council, New Zealand. *International Journal of Operations & Production Management*, 27(8), 846-873.
- Harden, J. W., & Upton, D. R. (2016). An Introduction to the Use of the Balanced Scorecard for Performance Evaluation by Financial Professionals. *Journal of Financial Service Professionals*, 70(2), 81-88.
- Hofstede, G. (1980). *Cultures consequences: international differences in work related values*. Beverly Hills: Sage.
- Hong Kong strikes a perfect balance. (2002). *Australian CPA*, 72(10), 62-64.
- Hoque, Z. (2014). 20 years of studies on the balanced scorecard: Trends, accomplishments, gaps and opportunities for future research. *The British Accounting Review*, 46(1), 33-59.
- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard: measures that drive performance. *Harvard Business Review*, 70(1), 71-79.
- Kim, Y., & Kang, M. A. (2016). The performance management system of the Korean healthcare sector: development, challenges, and future tasks. *Public Performance & Management Review*, 39(2), 297-315.

- Kopecka, N. (2015). The Balanced Scorecard Implementation, Integrated Approach and the Quality of Its Measurement. *Procedia Economics and Finance*, 25, 59-69.
- Lewy, C. Free University of Amsterdam, cited in McCunn, P. (1998). The Balanced Scorecard: The Eleventh Commandment. *Management Accounting*, December, 34-37.
- Li, Y. L., Chen, Y. H., & Yu, Z. B. (2012). The Performance Evaluation System Transformation Based on Balanced Scorecard—A Case Study of SEICO Company. *Journal of Modern Accounting and Auditing*, 8(4), 578-586.
- Lin, Z. J., Yu, Z. B., & Zhang, L. Q. (2014). Performance outcomes of balanced scorecard application in hospital administration in China. *China Economic Review*, 30(9), 1-15.
- Liu, L., Ratnatunga, J., & Yao, L. J. (2014). Firm characteristics and balanced scorecard usage in Singaporean manufacturing firms. *International Journal of Accounting & Information Management*, 22(3), 209-222.
- Lord, B. R., Shanahan, Y. P., & Gage, M. J. (2005). The Balanced Scorecard: A New Zealand Perspective. *Pacific Accounting Review*, 17(1), 49-78.
- Macarthur, J. B. (2006). Cultural Influences on German versus U.S. Management Accounting Practices. *Management Accounting Quarterly*, 7(2), 10-16.
- Makhijani, N., & Creelman, J. (2011). *Creating a Balanced Scorecard for a Financial Services Organization*. Asia: John Wiley & Sons.
- Malina, M. A. (2013). The evolution of a balanced scorecard. *The Journal of Applied Business research*, 29(3), 901-912.
- McAdam, R., Hazlett, S. & Casey, C. (2005). Performance management in the UK public sector: Addressing multistakeholder complexity. *International Journal of Public Sector Management*, 18(3), 256-273.
- Mendonca, M., & Kanungo, R. N. (1996). Impact of culture on performance management in developing countries. *International Journal of Manpower*, 17 (4/5), 65-75.
- Nørreklit, H. (2000). The Balance on the Balanced Scorecard - A Critical Analysis of Some of Its Assumptions. *Management Accounting Research*, 11, 65-88.
- Reddy, A. (2011). Cultural dimensions & impact on performance management. *International Journal of Multidisciplinary Research*, 1(6), 300-311.

- Rhodes, J., Walsh, P., & Lok, P. (2008). Convergence and divergence issues in strategic management – Indonesia's experience with the Balanced Scorecard in HR management. *The International Journal of Human Resource Management*, 19(6), 1170-1185.
- Sandhu, R., Baxter, J., & Emsley, D. (2008). Initiating the Localisation of a Balanced Scorecard in a Singaporean Firm. *Singapore Management Review*, 30(1), 25-41.
- Sawalqa, F. A., Holloway, D., & Alam, M. (2001). Balanced scorecard implementation in Jordan: An initial analysis. *International Journal of Electronic Business Management*, 9(3), 196-210.
- Sharma, B., & Gadenne, D. (2011). Balanced Scorecard Implementation in a Local Government Authority: Issues and Challenges. *The Australian Journal of Public Administration*, 70(2), 167-184.
- Sheng, C., Xiong, Y., & Su, W. (2008). Survey on the balanced scorecard: From performance evaluation to strategic management. *Journal of Shanghai Lixin University of Commerce*, 22(1), 37-45.
- Soderberg, M., Kalagnanam, S., Sheehan, N. T., & Vaidyanathan, G. (2011). When is a balanced scorecard a balanced scorecard? *International Journal of Productivity and Performance Management*, 60(7), 688-708.
- Speckbacher, G., Bischof, J., & Pfeiffer, T. (2003). A descriptive analysis on the implementation of Balanced Scorecards in German-speaking countries. *Management Accounting Research*, 14(4), 361-387.
- Sulaiman, M., Ahmad, N. N. N., & Alwi, N. (2004). Management accounting practices in selected Asian countries: A review of the literature. *Managerial Auditing Journal*, 19(4), 493-508.
- Tai, X. H., & Liu, Y. H. (2005). Analysis of Balanced Scorecard application in China. *China Science and Technology Information*, 23B, 112. (In Chinese)
- Trotta, A., Cardamone, E., Cavallaro, G., & Mauro, M. (2013). Applying the Balanced Scorecard approach in teaching hospitals: a literature review and conceptual framework. *The International Journal of Health Planning and Management*, 28(2), 181-201.
- Walker, K. B., & Ainsworth, P. L. (2007). Achieving competitive advantage in departments of accounting: management principles and the balanced scorecard. *Academy of Accounting and Financial Studies Journal*, 11(1), 65-82.

- Wiersma, E. (2009). For which purposes do managers use Balanced Scorecards? An empirical study. *Management Accounting Research*, 20(4), 239-251.
- Williams, S. (2001). Drive Your Business Forward with the Balanced Scorecard. *Management Services*, 6, 28-30.
- Xu, Y. (2011). An investigation of the effect of using Balanced Scorecard on financial performance in Chinese Companies. *Foreign Investment in China*, 14, 171-172.
- Yang, C. Y., Li, X. H., & Li, D. P. (2007). Problems and countermeasures of China's enterprises to implement the balanced scorecard. *Commercial Accounting*, 37(15), 50-51. (In Chinese)
- Yao, R. (2007). Problems and countermeasures analysis in the application of Balanced Scorecard. *Communication of Finance and Accounting*, 9, 56-57. (In Chinese)
- Zeng, K. S., & Luo, X. H. (2013). The balanced scorecard in China: Does it work? *Business Horizons*, 56(5), 611-620.
- Zhang, D. D. (2006). Introduction to Balanced Scorecard application in Chinese enterprises. *Charming China*, 8, 82-83.
- Zhang, J. D., & Xu, X. C. (2014). The present situation, problems and countermeasures of balanced scorecard in our country. *Friends of Accounting*, 23, 123-126. (In Chinese)
- Zhao, M. (2012). Balanced scorecard application in Chinese organizations. *Theoretical Exploration*, 33(1), 86-88. (In Chinese)

Chinese literature cited in this article:

- 高凤岩. (2008). 中国企业实施平衡计分卡问题探析. *价值工程*, 2, 110-112.
- 邵晓红, 刘艳华. (2005). 平衡计分卡在我国的应用浅析. *中国科技信息*, 23B, 112.
- 杨成炎, 李新花, 李道坪. (2007). 我国企业实施平衡计分卡的问题和对策. *商业会计*, 37(15), 50-51.
- 么晓. (2007). 平衡计分卡应用中存在的问题及对策分析. *财会通讯: 综合(中)*, 9, 56-57.
- 张冬冬. (2006). 浅析平衡计分卡在我国企业的应用. *魅力中国*, 8, 82-83.
- 张继德, 许小崇. (2014). 平衡计分卡在我国应用的现状、问题和对策. *会计之友*, 23, 123-126.
- 赵敏. (2012). 平衡计分卡在我国企业的运用. *理论探索*, 33(1), 86-88.

Appendix

Appendix 1 List of articles reviewed in this study

	Author(year)	Title
1	Hoque (2014)	20 years of studies on the balanced scorecard: Trends, accomplishments, gaps and opportunities for future research
2	Harden and Upton (2016)	An Introduction to the Use of the Balanced Scorecard for Performance Evaluation by Financial Professionals
3	Li et al. (2012)	The Performance Evaluation System Transformation Based on Balanced Scorecard-A Case Study of SEICO Company
4	Soderberg et al. (2011)	When is a balanced scorecard a balanced scorecard?
5	Lonbani et al. (2016)	Balanced Scorecard Implementation in SMEs: Addressing the Moderating Role of Environmental Uncertainty
6	Blundell et al. (2003)	The Adoption and Use of the Balanced Scorecard in New Zealand: A Survey of the Top 40 Companies
7	Greatbanks and Tapp (2007)	The impact of balanced scorecards in a public sector environment
8	Lord et al. (2005)	The Balanced Scorecard: A New Zealand Perspective
9	Sawalqa et al. (2011)	Balanced scorecard implementation in Jordan: An initial analysis
10	Greiling (2010)	Balanced scorecard implementation in German non-profit organisations
11	Farneti (2009)	Balanced scorecard implementation in an Italian local government organization
12	Liu et al. (2014)	Firm characteristics and balanced scorecard usage in Singaporean manufacturing firms
13	Chi and Hung (2011)	Is the balanced scorecard really helpful for improving performance? Evidence from software companies in China and Taiwan
14	Gao and Gurd (2015)	Meeting the challenge in performance management: the diffusion and implementation of the balanced scorecard in Chinese hospitals
15	Walker and Ainsworth (2007)	Achieving competitive advantage in departments of accounting: management principles and the balanced scorecard
16	Agostino and Arnaboldi (2012)	Design issues in Balanced Scorecards: The “what” and “how” of control

17	Braam and Nijssen (2004)	Performance effects of using the Balanced Scorecard: a note on the Dutch experience
18	Busco and Quattrone (2015)	Exploring How the Balanced Scorecard Engages and Unfolds: Articulating the Visual Power of Accounting Inscriptions
19	Wiersma (2009)	For which purposes do managers use Balanced Scorecards? An empirical study
20	Speckbacher et al. (2003)	A descriptive analysis on the implementation of Balanced Scorecards in German-speaking countries
21	Lin et al. (2014)	Performance outcomes of balanced scorecard application in hospital administration in China
22	Chang et al. (2008)	Performance improvement after implementing the Balanced Scorecard: A large hospital's experience in Taiwan
23	Souissi and Itoh (2006)	Implementing the Balanced Scorecard
24	Anand et al. (2005)	Balanced Scorecard in Indian Companies
25	Farooq and Hussain (2011)	Balanced scorecard perspective on change and performance: a study of selected Indian companies
26	Albertsen and Lueg (2014)	The balanced scorecard's missing link to compensation - A literature review and an agenda for future research
27	Sharma and Gadenne (2011)	Balanced Scorecard Implementation in a Local Government Authority: Issues and Challenges
28	Sandhu et al. (2008)	Initiating the Localisation of a Balanced Scorecard in a Singaporean Firm
29	Carmona et al. (2011)	The impact of strategy communications, incentives and national culture on balanced scorecard implementation
30	Pollanen et al. (2015)	Organizational characteristics and use of balanced scorecard measures in executive compensation
31	Othman (2008)	Enhancing the effectiveness of the balanced scorecard with scenario planning
32	Chia and Hoon (2000)	Adopting and creating Balanced Scorecards in Singapore-based companies
33	Lueg and Vu (2015)	Success factors in Balanced Scorecard implementations - A literature review
34	Figge et al. (2002)	The sustainability balanced scorecard – linking sustainability management to business strategy
35	Kopecka (2015)	The Balanced Scorecard Implementation, Integrated Approach and the Quality of Its Measurement

36	Zeng and Luo (2013)	The balanced scorecard in China: Does it work?
37	Antonsen (2014)	The downside of the Balanced Scorecard: A case study from Norway
38	Davis and Albright (2004)	An investigation of the effect of Balanced Scorecard implementation on financial performance
39	Malina (2013)	The Evaluation of a Balanced Scorecard
40	Modell (2012)	The politics of the balanced scorecard
41	Islam et al. (2014)	Factors affecting balanced scorecard usage
42	张冬冬 (2006)	浅析平衡计分卡在我国企业的应用
43	高凤岩 (2008)	中国企业实施平衡计分卡问题探析
44	邵晓红, 刘艳华 (2005)	平衡计分卡在我国的应用浅析
45	赵敏 (2012)	平衡计分卡在我国企业的运用
46	李景春 (2010)	浅谈平衡计分卡在我国的应用及对我国的启示
47	张继德, 许小崇 (2014)	平衡计分卡在我国应用的现状、问题和对策
48	么尧 (2007)	平衡计分卡应用中存在的问题及对策分析