

## Chinese Managerial Accounting Techniques Vs. Western Techniques - A Comparative Study

تقنيات المحاسبة الإدارية الصينية مقابل. التقنيات  
الغربية - دراسة مقارنة

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### Abstract

This study focuses on Chinese managerial accounting practices, China being the world's largest emerging market. This research specifically sheds light on Chinese firms in order to cope with the recent challenges of the larger firms, as well as the challenges of the dynamic economic environment. The research adopts two main approaches; the first approach is identifying the growing adoption of newly developed techniques in China such as balanced score card, risk management analysis, cost management tools, decision analysis, management performance, budgeting, artificial intelligence, and pricing. The second approach is comparing the Chinese managerial accounting techniques with the Western techniques. Overall, this research finds that in spite of the dissimilarity of China from market economies, it has used the same management accounting tools, except in the areas of decision-making and pricing, where it does not focus on value generation from a market perspective.

*Key words: China, balanced scorecard, risk management, cost management tools, decision analysis, management performance, budgeting, artificial intelligence, pricing.*

### الخلاصة

تركز هذه الدراسة على ممارسات المحاسبة الإدارية الصينية، حيث تُعتبر الصين أكبر سوق ناشئة في العالم. تسلط هذه البحث بشكل خاص الضوء على الشركات الصينية بهدف التعامل مع التحديات الأخيرة التي تواجهها الشركات الكبيرة، بالإضافة إلى تحديات البيئة الاقتصادية الديناميكية. تعتمد الدراسة نهجين رئيسيين؛ النهج الأول يتمثل في تحديد الاعتماد المتزايد على التقنيات المحدثة في الصين مثل بطاقة التوازن المتوازن، وتحليل إدارة المخاطر، وأدوات إدارة التكاليف، وتحليل القرارات، وأداء الإدارة، والميزانية، والذكاء الاصطناعي، والتسعير. النهج الثاني يتمثل في مقارنة تقنيات المحاسبة الإدارية الصينية مع التقنيات الغربية. بشكل عام، توصلت هذه الدراسة إلى أنه على الرغم من اختلاف الصين عن اقتصاديات السوق، فقد استخدمت نفس أدوات المحاسبة الإدارية، باستثناء مجالات اتخاذ القرار والتسعير، حيث لا تركز على توليد القيمة من منظور السوق.

**كلمات مفتاحية:** الصين، بطاقة التوازن المتوازن، إدارة المخاطر، أدوات إدارة التكاليف، تحليل القرارات، أداء الإدارة، الميزانية، الذكاء الاصطناعي، التسعير.

## Introduction

Another managerial term for Management accounting is analysis report accounting. It is considered a branch of accounting which means that accounting personnel use the financial accounting information, and then process, collate, and report other information in order to plan and control the daily economic activities of the enterprise's management personnel at all levels, all of which helps policymakers make specific decisions using a series of specialized methods so that they can improve the enterprise's economic benefits (B. X. Du et al., 2018).

During the recent past decades, new management accounting practices have emerged in order to meet the new needs of the larger firms, as well as the challenges of the dynamic economic environment. In order to make strategic decisions, traditional management accounting techniques are considered inadequate to meet these needs, and to provide and process data and information (non-financial, future, and external) (Ma & Tayles, 2009). Among these new techniques are activity-based costing (ABC), balanced scorecard, benchmarking, target costing, quality cost management, customer profitability analysis, and value chain analysis (Simon, 2006).

It has been argued that these techniques have influenced the role of management accounting and have created value through improved utilization of resources (Ittner & Larcker, 2001). For this reason, many previous studies attempted to assess the benefits of specific management accounting techniques in different countries (such as ABC) (Brierley, Cowton, & Drury, 2001; Lukka & Granlund, 1996). Due to the advantages of these techniques in decision making, controlling, and planning, research over the past few decades has focused on the application of these management accounting practices across different industries and countries.

## **Objectives of Management Accounting:**

The following objectives belong to the capitalist entities that adopt market economies:

### **1. Uses of Information**

The main function of management is the use of information. It presents accounting information in a form that allows management, investors, and creditors to analyze financial statements.

### **2. Planning and Policy Formulation**

Planning means deciding in advance what one needs to be done. It helps in managing ineffective planning and provides cost and statistical data that can be used to set goals and develop future policies.

### **3. Decision Making**

All management work is accomplished by decision-making. Decision-making can be referred to as the selection of a certain course of action from various alternatives. It helps the management in making decisions and utilizes accounting data to solve various managerial problems.

Management accounting techniques like cost-volume-profit analysis, standard costing, budgetary control, capital budgeting, funds flow analysis, etc. help management make the right decisions.

### **4. Motivating**

Motivation refers to the individuals' needs, desires, and concepts, which leads them to behave in a particular way. Delegation acts as a motivator to increase employee job satisfaction and encourages them to look forward.

By setting goals, planning the best economic courses of action, and measuring employees' performance, it aims to increase their efficiency, and ultimately motivates the entire organization.

## **5. Controlling**

Management accounting helps management control organizational performance. Actual performance is compared to operational plans, standards, and budgets, and then deviations are reported to the management to decide on the need of taking corrective measures.

## **6. Coordinating Operations**

Management accounting helps the management in co-ordinating the activities of the concern by getting previously prepared functional budgets in the first instance and then co-ordinating all activities of the concern by integrating all functional budgets into what is known as a master budget. Thus, management accounting is a useful tool in co-ordinating the various operations and departments of the business.

## **7. Reporting**

One of the major objectives of management accounting is to keep management fully informed about the latest fields of concern. This helps management to take accurate and timely decisions. Another objective of management accounting is to provide data. It presents the different alternative plans for the management in a comparative manner. The performance of various departments is also regularly communicated to the top management.

## **8. Help in Organizing**

Organizing is the process of allocating and arranging human and nonhuman resources so that plans can successfully be achieved. And the main question is, have business entities in China adopted revised goals that are consistent with the state system?

- **Global Historical Background**

In a less recent study, Chenhall and Langfield-Smith (1998) investigated the prevalence of various management accounting practices (MAP) in the Australian manufacturing industry. They found that there is increasing adoption of newly developed techniques, such as activity-based costing. Additionally, they reported that budgeting techniques were highly adopted by the firms under study. And as much as financial performance measures and traditional accounting techniques continued to be an important aspect of management accounting, these were being supplemented with a variety of non-financial measures (Chenhall & Langfield-Smith, 1998). It can be observed that more recent studies have reported similar results. For example, evidence from eighty-three large-sized manufacturing organizations in Greece assumes that these organizations use various traditional, as well as newly developed MAPs. While high implementation rates are reported for many newly developed practices, overall traditional management accounting practices were observed to be implemented a little bit more. However, one of the most important aspects of this work is the evidence that these currently developed practices are becoming more important in the future (Angelakis et al., 2010).

The adoption rates of management accounting practices (planning and budgeting, costing systems, decision support, performance evaluation, and strategic analysis practices) were analyzed by an inter-country comparison in Turkey with those in six other studies. Traditional budgeting and costing practices are claimed to be more commonly used than the recently developed MAPs (Yalcin, 2012).

Moreover, Hyvonen (2005) discusses the relative adoption rates, received benefits, and future emphasis of management accounting practices in Finland. Budgeting for controlling costs is the most generally used practice in Finland, while strategic planning techniques, such as formal strategic planning, strategic plans developed together with budgets, and long-range forecasting are also widely extensively used. According to the respondents in this study, it was concluded that while financial measures are considered to be widely utilized and will continue to be important in the future, newer practices are receiving more attention. Furthermore, by comparing these findings with those reported by Chenhall and Langfield-Smith (1998), it is argued that Finnish enterprises place greater emphasis on recently developed non-financial measures than the Australian enterprises (Hyvonen, 2005).

Although it is concluded from prior research that organizations across Europe are still widely using traditional cost accounting techniques, performed research indicates that there is an increasing adoption of newly developed MAPs. Abo-Alazm Mohamed (2013) recently investigated how changes in the business environment (i.e., developments in information and communication technology and computer-based production systems, short product life cycles, the integration of local and international companies, competition etc.) affected the level of management accounting practices in a group of companies in Egypt. He discovered that the technological developments and increased competition positively affect the level of MAPs, which in turn has a positive impact on a company's ability to acquire competitive advantages. These results conform to the findings of earlier studies (Garg, Ghosh, & Halper, 2004; Mat et al., 2010), which argue that when business environment changes, the role of management accounting also change.

In general, it appears that changes in the business and economic environment require companies to develop new strategies to gain competitive advantages, which will be accomplished through the development and application of new management accounting practices that primarily use non-financial data.

According to a number of western academics, SOEs in China's centrally planned economy is only carried out in fund accounting rather than business accounting (Chan & Rotenberg, 1999; Chow, Chau, & Gray, 1995; Xiang, 1998). This is due to the fact that government strictly controls organizations under the socialist philosophy, especially in respect to product planning, material supplies, cost targets, and product distribution. However, Chinese accounting academics such as Yang (1999) argue that prior to the 1980 economic reforms; management accounting practices and cost accounting were significant methodologies for measuring SOEs' performances under the centrally planned economy.

### • **Historical Background of China**

The establishment of cost accounting systems for various industries and the deployment of cost management techniques were two noteworthy breakthroughs in management accounting practices during the first 15 years of the founding of the People's Republic of China (1950–1965).

Despite the fact that the concept of management accounting has been introduced in China, management accounting reports have received little attention. Furthermore, academics and practitioners have opposing perspectives on management accounting methods, as academic theories have been criticized for failing to respond adequately to management accounting practices. It is worth mentioning that before China



(there were no global basic guidelines for management accounting practices to depend on. At the same time, following the management accounting guidelines, provided by the Chinese Ministry of Finance is entirely optional. In this case, due to the voluntary nature of reporting daily operation and the impracticability of the guidelines, businesses may ignore management accounting in this situation. This is in direct opposition to the state's advocacy policies and has a negative impact on the ability of businesses to achieve the goal of management accounting (Hou Luyang et al., 2019).

Management accounting approaches, such as responsibility accounting, were widely used in SOEs and recorded in the accounting literature, according to Yang (1999). Xiang (1998), who stated that management accounting played a significant role in aiding the economic planning and implementation of state economic policies, agrees with this viewpoint.

In short, between the 1950s and 1970s, management accounting practices relating to planning and budgeting that were suited for a centrally planned economy were widely adopted in SOEs. However, because the socialist system did not allow for decentralized investment decisions, accounting practices linked to decision making that were followed by Western management were difficult to apply. For example, an academic paper describing cost–volume–profit (CVP) analysis, published in the early 1950s in the Chinese magazine *New Accounting*, but CVP and other Western management accounting practices were not formally implemented in China until 30 years later.

The distribution and adoption of Western management accounting in China began in 1978 with the country's economic reform policies. This procedure was divided into four stages.

The first stage which is between the late 1970s and the early 1980s included the introduction of Western management accounting theories and practices in textbooks, magazines, and academic papers (Yang, 1999). The second stage, which lasted for nearly ten years, consisted of learning and enthusiastically seeking to integrate Western management accounting practices. These practices were summarized by Scapens and Yan (1993) as follows: CVP analysis, operational budgeting, responsibility accounting, standard costing/variance analysis, contribution analysis, variable costing, transfer pricing, and investment appraisal techniques. Among these methods, CVP analysis, contribution analysis, and operational budgeting were of particular interest to Chinese enterprises because of the ability to combine target profit with planning operations.

When compared to financial accounting reforms and the adoption of international accounting standards, the spread of management accounting practices was significantly faster and at the forefront of accounting reforms at that time. The third stage marks a waning of interest in Western management accounting approaches, as well as their subsequent disregard. Between mid-1980s and mid-1990s, Chinese academics and practitioners began to question the suitability of importing Western management accounting practices without considering the fact that the diffusion of management accounting techniques may be highly dependent on Chinese national culture. According to Yang (1999), the benefits of using Western management accounting methods did not live up to the expectations.

The fourth stage began in the late 1990s, when the Chinese accounting profession realized that the transition from a centrally controlled market economy to a fully controlled one would be a lengthy and difficult process. Market maturity, enterprise reform progress, legal, bureaucratic, and administrative

systems, management team and accounting personnel quality in SOEs, as well as the inertia of traditional systems, are all environmental factors that restricted the spread and implementation of management accounting practices in China. Academics and practitioners in China are currently reevaluating and attempting to discover practices that are the Chinese context in order to develop a Chinese version of management accounting. In recent years, Chinese academics, and practitioners in several large-sized SOEs have paid close attention to the adoption of management accounting practices (Yang, 1999).

### **China Organized Regulators**

Unlike most studies that primarily look at how strictly securities are enforced; this research argues that the way regulatory agencies are organized, and their goals have a big impact on capital markets. So, when we try to understand how securities regulators affect the development of capital markets in different places, we need to consider how the law and these two factors come together. This is particularly important when we are comparing China with western.

So, when applying on China; China Securities Regulatory Commission (CSRC) It is the regulatory body responsible for overseeing and regulating the securities and futures markets in China. The CSRC plays a crucial role in supervising and ensuring the integrity and stability of China's capital markets. In the context of this research, it is being referred to as an example of a regulator with a hierarchical organizational structure (Zeng, 2022).

	<b>Hierarchical Ideal</b>	<b>Horizontal Ideal</b>
<b>Attributes of officials</b>	Lifetime government officials	Outsiders
<b>Term of office</b>	Not fixed, removed at will	Usually fixed, removed for cause
<b>Distribution of authority</b>	Review by upper level officials	Multiple officials share power

### Differences Between Hierarchically and Horizontally Structured Regulators

From the above China Securities Regulatory Commission is like a standard example of a regulator with a hierarchical structure. They hire their officials through a national civil servant exam, and many of these officials work their way up the bureaucratic system in their careers. Some may switch to related areas like stock exchanges or banking, and others might come from different government branches, but they are all considered government "insiders." (Zeng, 2022)

Since CSRC officials are closely connected to the government, they can be removed more easily and are subject to tight government control. In this hierarchical model, these officials typically do not make independent decisions but tend to follow the directives of those in higher positions.

### Development of Management Accounting in China

The two or three decades since the formation of the People's Republic of China, China's management accounting has remained stagnant. Management accounting was gradually incorporated following the reform and opening up. In China, management accounting has progressed through the three stages outlined below.

Introduction Stage (1978-1992): China's planned economic system hampered domestic and international exchanges prior to the reform and opening up. Since the reform and opening up, China has followed the "opening-out, going out" opening-up pattern, gradually reforming its economic system and making ongoing efforts to support the building of a socialist market economic system. At this stage, China developed a market economy gradually. It created a prototype of a contemporary enterprise system based on a market economy, with separate government and enterprise and clear powers and responsibilities. China began to encounter Western management accounting ideas and processes around this time, though it was still dominated by the government-led planned economy and lacked evident market characteristics. Only the government-led management system can be integrated with the management accounting practices and theories developed in the West for preliminary study. To summarize this, China began to contact and introduce Western management accounting theories and methods during this period, after experiencing the household contract responsibility system, corporate shareholding system reform, and the modern enterprise system pilot, etc. Nevertheless, localization research in this area is insufficient.

Adaptation stage (1993-Early 21st century): China has had a socialist market economy and a modern enterprise system since the 1990s. Chinese researchers began to perform management accounting research based on the actual national conditions of socialism with Chinese characteristics, with the increase of the emphasis on enterprise production efficiency. Yu Xuying, a scholar, proposed the notion of "broad management accounting" in 1992. He argued that management accounting can be sorted into three important research fields: Micromanagement accounting, macro management accounting, and international management accounting [4]. In 2002, China's Ministry of Finance

issued the "Guiding Opinions on the Implementation of Budget Management by Enterprises", which governed enterprise budget management policy. At this stage, the development policy was "Foreign for China," which meant absorbing the best management accounting theories and methods developed in the West and combining them with the actual development of Chinese enterprises to create a management accounting model suitable for modern Chinese enterprises. Consequently, China began to accept and implement Western management accounting theories and procedures, as well as developing its own theories.

The innovating stage (from the beginning of the 21st century to the present); As a result of the rapid development of artificial intelligence, the Internet, big data, and other technologies, enterprises began to combine these technologies with enterprise practice for refined management to improve enterprise production efficiency, reduce enterprise production costs, promote enterprise investment decisions, and optimize enterprise resource allocation (Beyk, 2011). As a result of the evolution of the time, various new criteria for management accounting have arisen. Currently, the development direction of contemporary management accounting is to combine management accounting theory and corporate accounting information with the Internet, big data, artificial intelligence, and other new tools of the era to realize the transformation and development of management accounting and to investigate the formation of a management accounting system with Chinese characteristics (Lanfang He, 2020).

The specific stages are shown in Table 1.

Table 1.

The development stage of management accounting in China

Year	Progression stage
1978-1992	Introduction
1993-2002	Adaptation
2003-Present	Innovation

Recently, officials from China's Finance Ministry have discussed management accounting at several meetings. They stated that, in the coming era of global competition, enterprises will be required to apply management accounting in a more efficient manner in order to improve their management skills and innovation capability, in addition to the transformation in economic development and changes in international and national economic conditions. Nonetheless, there are still numerous barriers to implementing management accounting in Chinese enterprises, preventing the establishment of such management process. As a result, this research aims to clarify the concept of management accounting in China so that these obstacles can be improved and eliminated.

China has taken many steps towards the development process. An example of such steps is defining the percentage of firms with specialized managerial accounting departments. They found that firms had established specialized managerial accounting departments in comparison with the outcomes of the last year. This number has increased from 26.5% to 39.4%. In terms of company type, this percentage of listed companies is substantially larger than the percentage of unlisted companies, and also the percentage of foreign-invested enterprises is higher than the percentage of state-owned and private corporations.

The second step is clarifying the job description of managerial accountants in order to enhance their significant role and assert the understanding of their goals. The percentage of organizations capable of doing so has increased from 42.0 per cent to 63.3 per cent, indicating that as managerial accounting continues to improve, more and more firms are beginning to appreciate its importance and significance.

The third step is listing the most representative managerial accounting tools as follows; operational budget, capital budget, cost-volume-profit analysis, standard costing, activity-based costing, and target costing. The first four management tools are rather traditional, reflecting the fact that Chinese companies are more concerned with budget and cost management. Besides a number of additional current managerial tools such as responsibility accounting, quality cost, continuous improvement cost, and environmental accounting.

In other words, the three top managerial tools, which are mostly used, are operational budget, compensation plan and capital budget. As an example, operational budget, the widely used tool, has a score of 2.0, which implies that this tool is only applied domestically in some business departments. As a result, the tools that received a score of less than one is those that have yet to be implemented, such as responsibility accounting, quality cost, value chain analysis, and life cycle cost, in addition to environmental accounting.

Furthermore, Chinese regulators stated that better understanding of managerial accounting techniques and their implementation has its positive impact, which would consequently promote and improve each other. In addition, they put steps in order to achieve such processes such as making managerial tools more applicable to the firm's position,



identifying potential users, improving its supported information system, active organizing job rotation beside the-job training, etc.

A number of the changes in Chinese managerial accounting will be addressed by the researcher, as follows:

### **1. Artificial Intelligence:**

The study of artificial intelligence in China began with a scholar who used artificial intelligence technology to design his own intelligent decision supporting system (Feng Jing, 1999). He argued that the intelligent decision supporting system is a combination of the traditional financial decisions supporting system along with the artificial intelligence one. In addition to being considered a decision-making tool, it helped decision makers in decision analysis, especially in complex context in order to determine the best solution for their problems.

Furthermore, (Ronghua and Shi Jijian, 2001) shed light on both managerial knowledge representation and managerial reasoning intelligence mechanism which are used in the implementation of the knowledge-based system of the intelligence managerial decision supporting system, in addition to expounding the structural framework and the implementation of the managerial decision supporting system.

Moreover, (Xu Yingjie et. al, 2005) investigated the idea of identifying the false managerial information in an intelligent way, besides establishing a module system for the intelligence process. Furthermore, (Huang Liaolong, 2009) stated that artificial intelligence can be applied in a variety of applications such as expert system, pattern recognition, resource planning beside configuration, intelligent management information sharing system, and finally artificial neural network models.

In July 2016, the “Kidney Bean Accounting” developed by China was officially put into the online trial. This trial officially started the application of managerial artificial intelligence in accounting networks. According to the view of various studies, the current application of China’s managerial artificial intelligence in the accounting industry can be roughly divided in the future into three categories: accounting, auditing and financial.

Hence, Wang and Su (2017) documented that many large Chinese enterprises attempted to use both "managerial artificial intelligence + accounting big data" model for asserted decision-making accounting. In 2018, Chen Hong found that managerial artificial intelligence would widely be used in many fields such as economic forecasting, participation in management decision-making and planning in addition to asset valuation and forecasting. Moreover, Sun (2018) believed that managerial artificial intelligence promoted the further upgrading of Chinese firms which eventually shifted them from the traditional transactional processes to higher-value processes.

Furthermore, the EU Commission prohibited the unacceptable artificial intelligence practices such as the practices which cause managerial executives to exploit or potentially harm the manipulated third person. Actions promoting general social and scoring purposes by public authorities were also prohibited. In addition, practices which were used to execute the real time remote in publicly accessible spaces for regulators enforcement purposes.

In addition, European regulators stated that National Competent Authorities are obliged to appoint both the application and implementation of the Artificial Intelligence Act. Besides, this application, the regulation has to be guaranteed by the European Artificial Intelligence Board, chaired by the

Commission, and consisting of the European Data Protection Supervisor in addition to representatives from the national managerial authorities.

For the implementation and enforcement of such regulations, the management board must collect and share their best practices, as well as take positions on developing challenges. Furthermore, there is a penalty regime for non-compliance that can be very severe, which could reach EUR 30,000.000 or maybe up to 6% of the offender's entire worldwide annual turnover for the previous financial year if the offender is a company.

## **2. Budgeting:**

Comprehensive budgeting, which is considered a major part of managerial accounting, requires strategic planning and in-depth staff participation. The actual goal of management accounting is to integrate and use comprehensive budgeting and other managerial accounting tools in order to enhance the implementation of Chinese corporate strategic objectives as well as the improvement of value generation.

This objective can be achieved by the following: preparing a cash budget, understanding the purpose of financial statements and the relationship between these statements and all other budgets, identifying the role of budgeting in setting short-term goals in addition to planning and supervising operations in order to achieve those preceding managerial goals.

Unfortunately, the importance of these skills exceeds the skill level of the managerial staff, especially the core understanding. Thus, only trained staff can truly recognize the value of such comprehensive budgeting and consequently help in asserting Chinese firm success.

Furthermore, in Europe, the budget has specific objectives and competences in order to understand how the community budget is going on. The first one is to know the main items of the budget expenditure and their evolution over time. The second one is to identify the objectives that will guide the enhancement of the budget. Therefore, the EU budget covers a period of a total of 7 years, which is known as the multi-annual financial framework.

This budget was debated over and passed by both the European Council and the European Parliament, under the supervision of the European Commission. The distribution of the budget was the principal objective and priority of the EU commission. Hence, it is possible to perceive how more and more resources were allocated to innovation and how the main EU funds financing the general projects are gained.

On one side, the EU budget depends mainly on three income sources; the first one is the traditional own resource which is derived from the customs duties and the tax, the second is the value added tax that they collect and the third is the gross national income.

On the other side, there are main expenditure items. The first one is sustainable growth. The second one is the competitiveness for growth and employment, which is related to the research and development programs such as education and training, networks, market, and its associated policies. The third one is conservation of natural resources. The fourth one is the administration costs that are associated with the workings of the EU institutions. The final one is the compensation costs that are considered part of the budget and are used to compensate some member countries relating to specific situations that do not arise every financial year.

In BusinessWeek's annual assessment of global brands, McDonald's Case is constantly placed among the world's best-known brands. In more than 115 countries, you can get a Big Mac under the Golden Arches.

With over \$65 billion sales, the task is to ensure that every Big Mac tastes the same in each of the company's more than 33,000 company-owned, franchised, or affiliated restaurants. How does McDonald's keep costs and quality in control? How does it guarantee that every one of the almost sixty-eight million consumers it serves on a daily basis receives the same high-quality service? Standards, budgeting, and variance analysis are all used. For example, everywhere hamburgers are offered, the ingredients are the same: one bun, one hamburger patty, one pickle slice, 1/8 tablespoon dehydrated onion, 1/4 tablespoon mustard, and 1/2 ounce ketchup. Management determines variances—differences between the amounts actually used and what should have been used given the quantity and types of sandwiches produced—for each of these ingredients.

McDonald's executives plan sales for each hour of the day. They create a budget for each of the materials that make up their menu based on the budgeted sales. They use the budget for planning (to ensure materials will be available when needed) and control (to evaluate the use of materials). These planning and control techniques are applied not only to material costs, but also to labor and overhead expenditures at McDonald's. McDonald's also employs budgets for revenue planning and control, as well as cost control. Managers could plan and manage more effectively in the future if they knew what went wrong and what went well.

McDonald's also adheres to non-financial standards in order to achieve the objectives of its quality and service. The following are three examples: (1) The drive-through customer's average time from pulling up to the menu board to driving away is 310 seconds; (2) cooked meat that isn't used in a sandwich must be destroyed within 30 minutes; and (3) once a sandwich is made and placed in the transfer bin, it must be sold within 10 minutes or thrown away.

### **3. Performance Management:**

Performance management plays the role of breaking down the objectives of all firm departments, which consequently lead the firm toward its strategic objectives through various performance management tools such as performance evaluation and salary incentives. Identifying both benefits and limitations of how to measure performance by comparing the actual results to the main budget, is an example of performance management skills. The second example is calculating both sales-volume and sales-price variances. The third example is analyzing a segment margin report to evaluate firm performance.

However, in the United States and Europe, performance management is considered a systematic process by which the managerial department considers its employees an individual and a member of a group, by enhancing the firm's effectiveness in accomplishing the mission and goals of the firm. The performance management process is used to communicate the firm's goals and objectives, in addition to reinforcing every individual accountability to meet such goals as well as tracking and evaluating the performance results of both the individual and the firm.

Accordingly, five steps are addressed by regulators in the performance management process (Xin et. al, 2019); The first one is performance planning which provides necessary information for establishing the expectations and goals of managerial executives in order to channel their efforts towards achieving the firm's objectives. The second one is monitoring the employees' performance which provides sufficient information required to conduct at least one formal written review for all other employees. The third is employees' development, which provides information important for both evaluating and addressing the employees' development in order to increase the firm's effectiveness. The fourth is evaluating employees' performance which provides information on evaluating employees' performance in comparison with both the elements and standards in each employee performance plan along with assigning a summary rating of record in order to provide detailed information. The fifth is recognition, which provides information of a wide variety of both informal and formal programs that can be used in both recognizing and rewarding employee excellence.

#### **4. Cost Management and Decision Analysis:**

Chinese firms are currently facing many new opportunities, obstacles, and challenges within the context of globalization and gradual maturity of Chinese social market-oriented economy system. To survive and develop, firms must meet the fulfillments of the market-oriented economy besides avoiding market risks. Studies such as (Zhao & Li, 2022; Vlachokostas et, al., 2021; Donais et, al., 2019). A review of cost-benefit analysis and multicriteria decision analysis from the perspective of sustainable transport in project evaluation. EURO Journal on Decision Processes, 7(3-4), 327-358 revealed that Chinese firms gave higher priority to the three-decision process analysis skill.

To obtain the target income, the first step is to calculate the breakeven point in both units and dollar sales. The second one is using cost-volume-profit analysis to evaluate total revenues, total costs, and profits behavior. The third one is calculating the multiple-product breakeven points based on a given sales mix, thereby contributing to the targeted income achievement.

To support managers' decisions, accountants develop cost management systems (CMS) which can be defined as collections of tools and techniques that identify how costs are affected by decisions. A cost management system provides:

1. Strategic management decisions cost information.
2. Operational control cost information; and
3. Measures of inventory value and cost of goods sold for financial reporting to investors, creditors, and other external stakeholders.

Managers need accurate and timely cost data to make strategic decisions, like determining the best product and customer mix or investment decisions. Managers want to know the costs of individual products, services, customers, and processes, in order to make these decisions. For instance, Dell's strategy has shifted its product mix away from consumer sales and towards services and enterprise solutions which have higher expected margins. Michael Dell describes this strategy in a recent interview, saying: "Today, roughly 80 percent of our business is with businesses and public-sector organizations (Li,2022). Ninety-five percent of all Fortune 500 companies and 100 percent of G20 governments are Dell customers. While we have a strong consumer presence and will continue to compete in that space, it is important to focus, and commerce is where we expect most of our growth will come from. Ours is a \$3 trillion industry and only about \$250 billion of it is consumer. We are laser-focused on the \$2.75 trillion opportunity that is commercial." This strategic



decision relied on cost information about both production costs and distribution costs.

Managers also seek efficiency by controlling costs. For instance, CFO Brian Gladden recently listed a number of cost improvements at Dell (Kruse,2021) including:

- A Reduction in the number of configurations resulting in materials savings and shorter time to market.
- Higher quality products with lower warranty costs and fewer obsolete inventory
- Reduced production and shipping costs
- Reduced overheads
- Bulk building and shipping based on better forecasts and enabling ocean shipment.

To implement sustainable cost control programs, managers must have accurate and timely costs feedback.

### **5. Risk Management:**

Chinese scholars, (Araz et, al., 2020; Wang et.al, 2020) in previous research, have set three-risk managerial high skill; the first is identifying and explaining firm's risks such as financial, operational, and strategic risks. The second skill is identifying strategies for the risk response, including the actions to avoid, eliminate, retain, reduce, transfer, and exploit those risks. The third one is defining the managerial enterprise risk in addition to describing its key objectives and components. Moreover, Chinese scholars have found that improving the elimination of managerial risk and the rapid ability to respond have become a priority for managerial team, in order to respond rapidly or the changes in the market environment besides achieving the firm's growth.

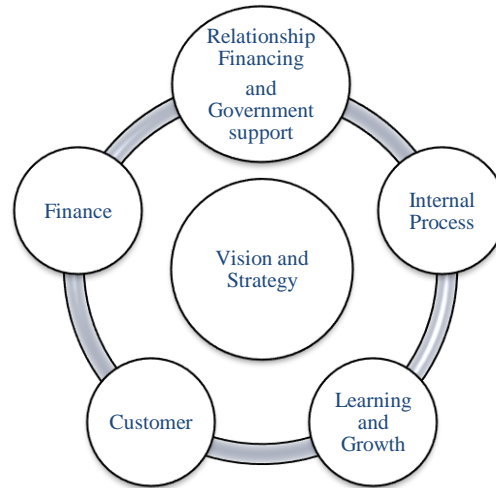
Furthermore, in the global world, decision analysis is deemed a systematic, visual, and quantitative approach in order to address and evaluate the important choices that the firm goes through when making various decision types, such as managerial, operations, marketing, investments, and strategic decisions. Decision analysis process usually employs a number of different tools in order to evaluate all information that partakes in the decision-making process and includes aspects of the psychology, management strategies, in addition to training and economics disciplines.

It is also used to evaluate decisions that are made in the context of several variables and have a variety of alternative outcomes or objectives. This technique can be used by people and groups to try to make the best decision possible regarding management risk, capital investments, and strategic firm decisions.

## **6. Balanced Scorecard:**

The Balanced Scorecard, formally presented by both Kaplan and Norton in the year 1992, is not only considered a performance evaluation method but also a performance managerial system that combines both measures of firm performance and strategy. It transforms the firm visions and strategies into measures, which belong to four perspectives namely, finance, customers, internal process as well as learning and growth.

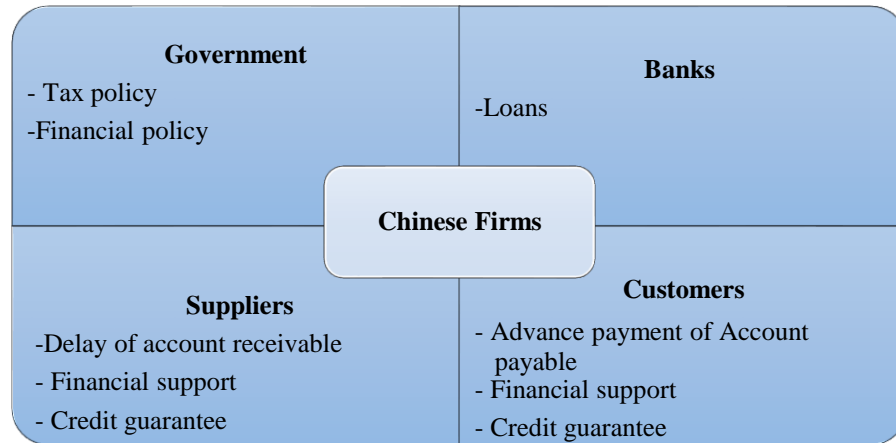
Both Kaplan and Norton stated that long-term organizational excellence could be achieved not only by focusing on financial aspects but also by taking broad and holistic measures that are considered a balanced approach. The following figure (1) shows the framework for applying Balanced Scorecard to Chinese firms:



**Figure.1 suggested framework for applying Balanced Scorecard to Chinese firms.**

The first approach is the relationship between financing and government support perspective. The objective of this approach is to address the investigation of “Can the firm get enough support of all involved suppliers such as bank and customers when the firm is short of its capital? Are the stakeholders willing to share the firm’s risk? And also, can the firm get special governance support?”

According to the scholar’s investigation, more and more Chinese firms resolved their capital problems by taking advantage of the financing relationship approach with their own suppliers and customers, such as investing in new projects from suppliers or customers, increasing the flow of accounts receivable and accounts payable, besides the lower level of the logistic cost. The following figure (2) shows the financial supports firms get from the financing relationship and government support:



**Figure. 2 The financial supports firms get from the financing relationship and government support.**

The second approach is the financial perspective. The objective is to address the investigation of “How do the stakeholders consider the firm.” Different financial measures should take part during the different firms’ lifecycles. Therefore, the financing, operating and governmental local industry policy has a significant correlation with the high-speed enhancement of the Chinese firms. Consequently, the financial measures of both cash flow and repaying ability should be added to the financial approach.

The third approach is the customer perspective: the objective is to address the investigation of how the Chinese firm’s customers evaluate the firm performance. From the customer’s point of view, the firm should analyze the market to understand their customers’ needs and find the best managerial solutions to meet its customers’ satisfaction. Besides, there should be a concern for the quality aspects such as cost, the ratio of on time delivery, the ratio of returns, and the amount of canceled deals.

The fourth approach is the internal business process perspective. The objective of this approach is to address the investigation of “What are we good at?” In this perspective, the managerial regulators are responsible for evaluating how well their firm is running, and if their products and services conform to the customer satisfaction and the firm’s mission.

In other words, outside consultants cannot achieve each firm’s unique mission which is only realized by the internal business process perspective such as the innovation process, operations process, in addition to the post sales service. This approach helps in exploiting the new market and increasing the profit ratio. Therefore, Chinese government carries out certain policies to encourage firm research and development to encourage the employees’ creativity.

The fifth approach is learning and growth perspective. The objective is to eliminate the question problem of “Is our firm making progress?” It enables the managerial executive to pay attention to the steps which will lead the firms to future success.

Furthermore, in the global world, the Balanced Scorecard is a framework for implementing and managing the firm’s strategy. Balanced scorecard links the firm’s vision with its strategic objectives, measurements, targets, and initiatives. In addition, it balances the financial measures with the performance measures besides the objectives, which are related to all other aspects of the firm. It is regarded as a firm performance management tool.

The BSC is more than simply a scorecard; it is also an overall methodology. BSC begins with selecting a modest number of financial measures in addition to non-financial objectives related to the firm’s strategic priorities. The next step is analyzing these measures, and then setting targets for them and

lastly developing strategic projects, often known as initiatives. BSC forces the company to consider how its objectives can be measured and to achieve its objectives besides eliminating the creation of costly projects that have no impact on its priority strategy.

BSC has four perspectives. The first one is the financial perspective which initiates the question of “How does the firm see their shareholders.” The second one is the customer perspective which initiates the question of “How do our customers see the firm?” The third one is the internal processes perspective, which initiates the question of “What should the firm be best at? The fourth one is the organizational capacity perspective, which initiates the question of “How can the firm improve and create value? The strategy map is in figure (3) as follows:



**Figure 3: Strategy map**

### **Practical Case illustrating Balanced-scorecard in the United States:**

One of the largest managed health-care firms in the United States is Health Net. With around 7,500 employees and approximately \$12 billion in revenue in 2011, this firm has the capacity to cover 5.6 million health plan customers with insurance. Health-care companies, like any other business, must compete by providing high-quality health care at an affordable price. Health Net organisation undertook a massive information systems development program known as "fourth generation medical management" to maintain its previous competitive advantage.

According to former Chairman and CEO, Dr. Malik Hasan, Health Net developed this new management control system "for achieving an increased overall quality and decreasing the cost of health care which lies in managing patient care by seamlessly linking the entire health care delivery system electronically." This system "gives physicians and health care providers instant, user-friendly electronic access to comprehensive information about a patient's medical history and the best clinical treatments recommended."

The findings suggest that the optimal clinical resource, whether it is a specialist, an emergency hospital or an urgent care centre, the regular physician, or safe self-care, should be referred quickly and pre-approved. To put it another way, a happy customer! And as a bonus, costs are reduced. "Paper charting and duplicative lab and radiology tests are removed," says Medical Director John Danaher, MD.

**Summary:**

The results of comparing Chinese management accounting techniques and Western countries techniques are as follows:

<b>Management Accounting Practices</b>	<b>China</b>	<b>Western Countries</b>
<b>Artificial Intelligence</b>	<p>Many large Chinese enterprises are currently trying to use both "managerial artificial intelligence + accounting big data" model for asserted decision making accounting. Also, it is predicted that managerial artificial intelligence would widely be used in many fields such as economic forecasting, participation in management decision-making and planning, besides asset valuation and forecasting. The future application of managerial artificial intelligence promoting the further upgrading of Chinese firms which will shift them from the traditional transactional processes to higher-value processes.</p>	<p>The EU Commission prohibit unacceptable artificial intelligence practices.</p> <p>European regulators stated that National Competent Authorities have to appoint both application and implementation of the Artificial Intelligence Act. Furthermore, the European Artificial Intelligence Board, led by the Commission and comprised of the European Data Protection Supervisor as well as representatives from national managerial authorities, are responsible for ensuring the implementation of regulations.</p> <p>For the implementation and enforcement of such regulations, the management board must collect and share their best practices, as well as take positions on developing challenges. Furthermore, a rather severe penalty system is in place for non-compliance.</p>



<p><b>Budgeting</b></p>	<p><b><u>Objective</u></b></p> <p>Comprehensive budgeting, which is considered a major part of managerial accounting, requires strategic planning, and in-depth staff participation. Both integrating and using comprehensive budgeting and other managerial accounting tools in order to promote the realization of Chinese firm strategic objectives and to improve the value creation, is the exact main goal of managerial accounting.</p> <p>The procedures needed to achieve these objectives require skills that exceed the skill level of managerial staff and thus, only trained staff truly recognize the value of such comprehensive budgeting and can consequently help in asserting the success of Chinese firms.</p>	<p><b><u>Objective</u></b></p> <p>In Europe, the budget has specific objectives and competences in compliance with the community budget. The first one is to know the main items of the budget expenditure and their evolution over time. The second one is to identify the objectives that will guide the enhancement of the budget. Therefore, the EU budget covers a period of 7 years, which is known as the multi-annual financial framework.</p>
<p><b>Performance Management</b></p>	<p>Performance management plays the role of breaking down the objectives of all firm departments, which consequently lead the firm towards its strategic objectives through various performance management tools such as performance evaluation and salary incentives. An example of performance management skills is to identify the benefits and limitations of</p>	<p>In the United States and Europe, performance management is considered a systematic process by which the managerial department involves its employees, as an individual and as a member of a group, by enhancing the firm's effectiveness in the accomplishment of the firm's mission and goals. The performance management process is used to communicate the firm's goals and objectives, in addition to</p>

	<p>how to measure performance by comparing the actual results to its main budget. The second example is calculating both sales-volume variance and the sales-price variance. The third example is analyzing a segment margin report to evaluate firm performance.</p>	<p>reinforcing each individual's accountability, in order to meet such goals, besides tracking and evaluating the performance results of the individual and the firm.</p> <p>Therefore, regulators address these five steps in the performance management process.</p> <ul style="list-style-type: none"> <li>• Performance planning</li> <li>• Monitoring the employees' performance</li> <li>• Employees' development.</li> <li>• Evaluating employees' performance.</li> <li>• Recognition.</li> </ul>
<p><b>Cost Management and Decision Analysis</b></p>	<p>The scholars found that Chinese firms give higher priority to the three-decision process analysis skill.</p> <p>The first one is calculating the breakeven point in both units and dollar sales so that the target income could be reached. The second one is using cost-volume-profit analysis to evaluate the behavior of total revenues, total costs, and profits. The third one is calculating the multiple-product breakeven points based on a given sales mix, which consequently contributes to the targeted income achievement.</p>	<p><b>Nothing here</b></p>

<p><b>Risk Management</b></p>	<p>Chinese scholars have set the three-risk managerial high skill; the first one is identifying and explaining the firm's risks. The second skill is determining risk response strategies, such as actions to avoid, eliminate, retain, decrease, transfer, and exploit those risks. The third one is defining the managerial enterprise risk in addition to describing its key objectives and components.</p> <p>Moreover, Chinese scholars found that improving managerial risk elimination and the rapid ability to respond have become a priority for the managerial team, in order to respond to rapid changes in the market environment besides achieving the firm's growth.</p>	<p>In the global world, decision analysis is considered a systematic, visual, and quantitative approach that addresses and evaluates the important choices that the firm goes through when making the various decision types, such as managerial, operations, marketing, investments, and strategic choices.</p> <p>Decision analysis process usually use a range of tools to evaluate all of the information that is involved in the decision-making process and incorporates the psychological aspects besides the management techniques, and the training, and economics fields.</p>
<p><b>Balance Scorecard</b></p>	<p>The framework of applying balance scorecard includes five approaches:</p> <ul style="list-style-type: none"> <li>• The first approach is the relationship financing and government support perspective.</li> <li>• The second approach is the financial perspective.</li> <li>• The third approach is the customer perspective.</li> <li>• The fourth approach is the internal business process perspective.</li> <li>• The fifth approach is learning and growth perspective.</li> </ul>	<p>BSC has four perspectives:</p> <ul style="list-style-type: none"> <li>• The first one is the financial perspective.</li> <li>• The second one is the customer perspective.</li> <li>• The third one is the internal processes perspective.</li> <li>• The fourth one is the organizational capacity perspective.</li> </ul>

In spite of China's difference with market economies, it used the same management accounting tools with the exception of the areas of decision-making and pricing, where it did not focus on value generation from a market perspective.

Therefore, China, often hailed as the world's manufacturing powerhouse, operates on a unique business model that diverges significantly from the Western concept of "just-in-time" (JIT) production. Unlike many Western economies, where JIT has become a standard approach to minimize inventory and production costs, China's manufacturing landscape adopts a different philosophy.

In China, the prevailing approach can be described as "just-in-case" rather than "just-in-time." This distinction underscores the fundamental differences in production strategies between China and the West. Chinese manufacturers typically maintain larger inventories to buffer against potential supply chain disruptions, ensuring a steady and reliable flow of goods. This strategy stems from historical experiences, such as the disruptions during the Cultural Revolution and other periods of instability, which have shaped China's cautious approach to inventory management.

China follows a unique accounting style that differs from International Financial Reporting Standards (IFRS) or Generally Accepted Accounting Principles (GAAP) used in many Western countries. The Chinese accounting system, commonly referred to as Chinese Accounting Standards (CAS), is primarily based on the principles of "prudence" and "stability."

Prudence emphasizes the cautious approach to financial reporting, focusing on risk mitigation and maintaining a conservative stance when assessing asset values. This approach

often leads to the understatement of asset values and overstatement of liabilities to provide a more realistic view of a company's financial health. Stability, on the other hand, promotes consistency in financial reporting and discourages frequent changes in accounting policies.

One notable feature of the Chinese accounting system is its emphasis on government control and supervision. The government plays a significant role in setting accounting standards and overseeing compliance, reflecting China's central governance control system.

Moreover, China's central governance control system is characterized by the dominance of the Chinese Communist Party (CCP) in both political and economic spheres. The CCP exercises control through various mechanisms, including state-owned enterprises (SOEs), regulatory bodies, and government policies. This system allows the government to exert influence over key industries and maintain stability.

State-owned enterprises (SOEs) are a cornerstone of China's economic landscape, with significant control exerted by the government. These entities are often subject to the CCP's directives, serving as instruments of state policy. Additionally, regulatory bodies, such as the China Securities Regulatory Commission (CSRC) and the People's Bank of China (PBOC), play pivotal roles in supervising financial markets and maintaining economic stability.

China's unique combination of a mixed economy, where both private and state-owned enterprises coexist, allows the government to exercise control through various channels. This centralized governance control system reflects China's commitment to maintaining political stability and economic growth.

In conclusion, China's approach to production, accounting standards, and central governance control system are distinctive and deeply rooted in its historical, political, and economic context. Understanding these unique aspects is crucial for anyone looking to engage in business or navigate the intricacies of China's economy and governance structures.

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