# Innovation and Development of Management Accounting under the Background of Great Intelligence Moving Cloud

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Abstract: In today's era, with the rapid development of information technology like big data, intelligence, mobile Internet and cloud computing, management accounting must innovate and develop to cope with the challenges brought by the new technological revolution. Based on plenty of literature research and correlation analysis between "Great Intelligence Moving Cloud" and management accounting, this paper analyzes the impact of "Great Intelligence Moving Cloud" on the development of management accounting, especially the new challenges it faces. To promote the construction of management accounting, we put forward innovative ideas from the aspect of attaching importance to and giving full play to the guiding role of government financial departments, strengthening the awareness of management accounting informatization, and establishing management accounting with Chinese characteristics.

**Keywords:** Great Intelligence Moving Cloud, Management accounting, Chinese characteristics

#### 1. Introduction

"Great Intelligence Moving Cloud" is a general term for big data, intelligence, mobile Internet and cloud computing technologies .Among then ,big data is a data set that is collected, processed and analyzed in various software tools; intelligence refers to the property able to meet people's needs with the support of big data and artificial intelligence; mobile Internet is Internet with mobile network data interface taking network users as the center and making it possible to generate and collect data; cloud computing is a model in which customers access configurable pools of computer resources through a fast and convenient network ,enabling services such as fast delivery and on-demand charging<sup>[1]</sup>.

# 2. The impact of Great Intelligence Moving Cloud on industrial and management accounting activities

# 2.1 Promoting the upgrading of industrial structure

"Great Intelligence Moving Cloud" has brought us into an era of data, where data has become a symbol of enterprise competitiveness. Big data can improve the accuracy and efficiency of work. It allows us to understand the casual relationships between things, thus enhancing predictive power. It helps enterprises to grasp the whole process, not just through sampling survey to obtain scattered data. Industrial manufacturing is customized for customers to become more personalized, e-commerce is more intelligent, making financial and trade payment more secure, shortening the payment cycle, goods turnover cost is greatly reduced.

#### 2.2 Enterprise management activities will be more scientific

With the prevalence of high and new technology and the continuous upgrading of industrial structure, the traditional management accounting tools and methods can no longer meet the needs of modern enterprise management. For example, in terms of evaluation indicators, traditional methods focus on accounting and evaluation of tangible assets, but intangible assets, such as data resources and human resources, are playing an increasingly important role in enterprise assets under the background of "Great Intelligence Mobile Cloud". However, traditional management accounting lacks indicators and methods for the evaluation and analysis of these intangible assets.

#### 2.3 Enrich the content of management accounting

Environmental data is more easily available, data analysis technology is more advanced, China has begun to pay more attention to environmental management. Environmental management aims to improve the efficiency of resource utilization and optimize production and business processes through green production and other methods. In addition, the popularity of the strategic management concept has also brought a certain impact on the innovation and development of management accounting, requiring the new management accounting work concept to penetrate into the content of management accounting, with a new vision to work, to achieve the purpose of enterprise sustainable operation. The existing management accounting content has been unable to meet the needs of sustainable development and improvement of core competitiveness of enterprises, so it is necessary to adapt to the requirements of the "Great Intelligence Mobile Cloud" era to expand the work content.

# 2.4 Management accounting is required to strengthen information construction

The construction of management accounting informatization in China started relatively late. At the beginning of the 21st century, Chinese enterprises gradually began to build management accounting informatization, mainly involving cost accounting and budget management and other fields. Up to now, China's management accounting information system mainly includes activity-based cost system, budget management system and so on. However, the internal information platform of the enterprise is isolated from each other, management accounting can not timely and effectively integrate the relevant information, decision-making function is difficult to get effective play. With the rapid development of the new technology of "Great Intelligence Mobile Cloud", the sharing of information resources can be realized, which provides more possibilities for the application of management accounting. At the same time, this means that if management accounting wants to play a real role, it must explore the valuable information in the massive data and analyze and integrate it, which must be realized with the help of information platform.

#### 2.5 Needs for improvement of the theoretical system of management accounting

China's management accounting has about 40 years of development history. It formed a certain scale of management accounting tools and methods, including cost and profit analysis, activity-based costing, balanced scorecard and so on, but has not yet formed a set of more systematic management accounting theory system, management accounting theory system still has loopholes. In addition, China's social and economic environment has its own characteristics, so when introducing management accounting theories and methods from western countries, it is necessary to consider China's national conditions and apply them flexibly, and gradually find the theories and methods suitable for their own development in the exploration, so as to build a management accounting theory system with Chinese characteristics. In the era of Great Intelligence Mobile Cloud, the management accounting theory system should keep pace with The Times, reform and innovate.

### 3. Current situation of management accounting in China

## 3.1 The basic functions of traditional management accounting

Management enterprise accounting information technology system is a kind of accounting information technology system using accounting information network technology, according to certain accounting rules and technical standards, the daily business, personnel, performance and other accounting data and financial information of enterprises at all levels of the effective comprehensive utilization of the system applied to each module of accounting information technology system. Accounting personnel of management enterprises at all levels can use accounting information technology system to collect, sort out and calculate the financial data of enterprises and non-enterprises provided by using special calculation methods. Analyze the daily operation financial data of enterprises at all levels, assist the management personnel of enterprises at all levels to effectively complete the enterprise cost budget management and risk control, budget income management, risk assessment and control, performance evaluation, business strategy decision-making, and help the enterprise to realize the continuous appreciation of financial value [2].

#### 3.2 The existing opportunities of management accounting in China

In the information age, cloud computing is developing rapidly in China. Many traditional accounting software vendors have launched their own cloud accounting products, including cloud accounting system and cloud accounting service. The company has successfully applied XBRL to management accounting fields such as budget management, risk management and internal statements. At the same time, financial data has become a valuable resource, so many enterprises have to strengthen the construction of enterprise accounting, accelerate the transformation of accounting, so that accounting can be transformed into management accounting, to help enterprises grasp the market dynamics, accurately analyze of market consumption demand, strengthen the connection with the surrounding enterprises, do a good job in the integration and sharing of data information. At the same time, do a good job in report consolidation and resource evaluation, promote the integration of business and finance construction of enterprises, and create good economic value for the development of enterprises. The business information system and financial sharing service platform are combined, and the intelligent financial information system is built through the budget control, capital management and risk control platform, so as to provide guarantee for the creation of enterprise value.

Enterprise management decision-making needs basis support. Under the background of informatization, management accounting takes accounting quantification as the main line, and the enterprise management system integrated with modern information technology is the spatial system of enterprise management accounting service. Great Intelligence Mobile Cloud technology can improve the level of intelligence of enterprises, help enterprises to mine the hidden information behind the data, so as to improve the scientific and effective decision-making. For example, enterprise management accounting can not only calculate the cost of enterprises through ABC, but also model and analyze the cost data to provide effective information for enterprise product pricing and function positioning, so as to enhance the core competitiveness of enterprises.

The cost of information needs to be reduced. In traditional management, enterprises need to set up internal information storage space in the early stage, and develop software management system, and spend a lot of maintenance costs in the later stage. Compared with the previous cloud, Great Intelligence Moving Cloud can not only effectively save the management related technology expenditure of Chinese enterprises, but also effectively save the subsequent system maintenance and management expenditure, which helps to improve the efficiency of daily operation and management. Big data can help enterprises predict the development trend, deepen the customer comprehensive income assessment, quickly establish financial analysis tools, achieve more refined enterprise management, reduce the letter Interest cost [3].

### 4. The challenges of China's management accounting in the era of Great Intelligence Mobile Cloud

## 4.1 Lack of high-quality management personnel

In the era of Great Intelligence Mobile Cloud, with the rapid development and globalization of the current real economy in China, the process of financial development technology innovation and business of international enterprises is accelerating Management technology innovator. However, there is a large gap in the education and training of management accounting talents in China, especially the lack of professionals who not only master financial accounting technology but also can use new management accounting technology.

# 4.2 Enterprises have insufficient awareness of the application of new technology in management accounting

Enterprises do not have enough accurate and detailed understanding and grasp of the application of cloud computing, Internet of Things, big data and other new technologies in management accounting. In the face of such massive accounting data, many enterprises often feel helpless, and can't make full use of various tools and methods of management accounting. Some small and medium-sized enterprises actually do not have the conditions to master these latest technologies, and are not willing to spend high technical costs to constantly update accounting equipment, but are not willing to focus on big data, cloud computing and other aspects of management accounting related professional knowledge of the system training.

#### 4.3 Security risks in management accounting information

The massive information saved by enterprises involves a large number of private information and trade secrets of customers and enterprises. The background program algorithm of cloud computing is complex, which provides an illegal umbrella for hackers and other illegal intruders. The data is subject to the risk of being illegally tampered with and stolen in the process of transmission, which will bring irreparable losses to enterprises. It is very important to take measures to ensure the security of core data [4].

# 4.4 Information systems cannot adapt to the expansion of business scale and diversification of business types

Information systems are designed and developed based on the existing business model, business scale and business process. Under the impact of the epidemic, the economy continues to decline. In order to survive, enterprises can only adapt to the market competition by constantly innovating and improving the original service process according to the needs of customers. The existing information system can't adapt to the diversification of new business types, the complexity of service processes, the flexibility of business processing links and other requirements, which may become the burden of enterprises' digital transformation and hinder the development of enterprises [2].

#### 5. Countermeasure and innovation of management accounting

#### 5.1 Pay attention to and play the guiding role of government departments

To strengthen the awareness of enterprise informatization innovation and cultivate a group of accounting talents with innovation ability, it is necessary for the central government and local financial departments to actively provide strong support of national policy, economy and information technology, so that management accounting technology practitioners can learn cutting-edge professional knowledge and accounting technology application methods through a variety of learning channels. The state encourages all kinds of enterprises to carry out technological research and development cooperation with enterprises in finance and economics colleges and universities. For example, enterprises can jointly develop and build intelligent enterprise management financial accounting application laboratory with accounting software development companies and manufacturers. In the process of enterprise teaching and research, courses such as enterprise management accounting professional information application laboratory can be set up to cultivate more complex management accounting graduates. In order to better adapt to the development needs of Chinese enterprises in the current information economy era.

#### 5.2 Strengthen the awareness of management accounting information

Establish management accounting case database and summarize practical experience in time. In the professional skills training and examination of accounting personnel, on the basis of ensuring the mastery of financial accounting knowledge, the proportion of management accounting knowledge should be increased, and the training of high-end management accounting talents should be strengthened. Enterprises should actively publicize the awareness of management accounting informatization, and the management personnel and business personnel should have the awareness of integrated data information. In a complex competitive environment, the business decisions of enterprises depend on the detailed data of each link. The system data of all departments are collected in accordance with perfect and unified standards, which can strengthen the effectiveness of data transmission and help to formulate accurate marketing strategies, business decisions and financial decisions.

## 5.3 Establish comprehensive and unified standards for data and module development

With the support of information systems, data users are not only financial personnel, but also management and sales personnel. Therefore, enterprises should establish a unified standard to ensure that the data input accurately reflects the economic essence; Ensure that the data of each system is interconnected; Data readers get accurate information to make correct business decisions. However, because management accounting is based on the past business data to estimate the future trend, it is impossible to be totally accurate; The complexity of business and product, customer relationship management, human resources management and other data description is much higher than that of

financial data, therefore, data and module development standards should also set flexible data variable standards, in order to meet the requirements of management accounting work.

#### 5.4 Strengthen the security protection of confidential information

Enterprises must reduce the security risk of malicious leakage of data identity information, and can adopt a variety of technologies, including network data backup, to effectively solve the security risks in the process of data transmission and information resource sharing. Enterprise programs can also be authorized for enterprise user identities to effectively prevent user data from being illegally accessed by other network security intruders. It can also upload the enterprise core application database and other information to the enterprise cloud. Only through strict application authorization program authentication, can it enter the data resource library and read the relevant information. Or can use a variety of artificial intelligence recognition technology, including voice, fingerprint, face recognition, iris recognition and so on, to improve the security factor of enterprise data.

#### 5.5 Promote the "cloud application" of management accounting tools and methods

In the era of "great intelligence mobile cloud", using cloud computing technology, enterprises can establish internal cloud platforms to realize the co-construction and sharing of data and information, and achieve accurate analysis and decision-making. The information system is modular in design and can realize the linkage of various modules, but there are some problems such as incomplete system functions and low safety factor. Therefore, enterprises should comprehensively coordinate the business attributes and functional requirements of each department, carry out open source and modular design, small-scale pilot, gradually expand the scope of use, and carry out construction in a way that is easy to enter and difficult to enter [4].

### 5.6 The design and development should be based on business intelligence

At present, management accounting software is mostly developed and designed based on business intelligence system, which can use artificial intelligence and other information technology to realize data mining and analysis, visual display and other functions, which can effectively improve the effectiveness of management accounting work and provide convenience for the efficient use of data by management and business departments. Business intelligence technology has the characteristics of powerful modeling ability, diversified structure system, professional data processing technology and so on. The use of business intelligence technology can realize the two-way interaction and support between management accounting and information system [3].

#### 6. The significance of management accounting innovation

#### 6.1 It helps to improve the quality of management accounting work

Great Intelligence Moving Cloud represents modern information technology. The combination of management accounting and Great Intelligence Moving Cloud reflects the development trend of management accounting in the future. These information technologies help to improve the efficiency and quality of management accounting.

## 6.2 These information technologies help improve the quality of enterprise management

Management accounting is an important force in enterprise management. Enterprises need to seek methods to evaluate enterprise performance, enterprise risk and investment risk by using big data, and also need to seek methods to evaluate the intrinsic value of big data as an enterprise asset. Great Intelligence Moving Cloud helps the management to find loopholes in enterprise management in order to correct them in time. It can also provide decision-making basis for management accounting for enterprise management, improve the scientific and effective decision-making, and ultimately improve the quality of enterprise management.

#### 7. Construction of management accounting with Chinese characteristics

#### 7.1 The transformation of China's accounting function in the era of big intelligence and cloud

It is necessary to abandon the original extensive development mode and turn to a new way of promoting the integration of science and technology and professional talents. It is necessary to pay more attention to the internal management of enterprises, cultivate the core competitiveness of enterprises, and pay more attention to social benefits and sustainable development mode. It is necessary to regard the sound and rapid development of enterprises rather than the speedas the main basis for the evaluation of economic benefits. In this environment, we must change the past financial accounting model as the leading to the management accounting model as the leading situation, actively explore the right way of accounting function in the new situation to serve the scientific enterprise decision-making, formulate the development strategy of accounting work in line with China's national conditions, so that the accounting continue to deepen the reform, to adapt to the economic transformation, and to the international accounting practice closer. Therefore, the development of management accounting in China is the inevitable result of the transformation of accounting function forced by the new normal of economic development. The development of enterprises with Chinese characteristics requires management accounting with Chinese characteristics.

Management accounting has unique applications in governance system, control system, internal measurement system, big data and Internet thinking, which will effectively promote the deepening reform of enterprise management, so as to improve the performance and governance level of the company. For example, more and more enterprises attach importance to planning and analysis, and attach importance to the development of scientific and effective cost management tools and models, rather than just focusing on the traditional cost management and control.

In terms of measurement and disclosure, management accounting subverts the traditional financial accounting model. The measurement of management accounting is no longer confined to monetary measurement, but introduces non-monetary measurement factors such as quantity and weight, such as indicators that are difficult to be measured by traditional methods such as human resources, and the measurement factors will be more diverse. The format of disclosure is designed and selected according to the requirements of users of internal reports, which has great freedom, rather than widely adopting a fixed reporting system.

Under the development goal of building a "credit ecological environment", enterprises increasingly focus on data (including customers' credit data, business data and other data) as the core of strategic decision-making. Relying on data platforms, enterprises can timely grasp the personalized needs of customers, and choose the optimal capital structure for enterprises by strengthening the connection with financial institutions. In order to effectively reduce the cost of financing, improve the efficiency of resource allocation, and maximize the value of enterprises, only in this way can we create good economic and social benefits for enterprises.

# 7.2 Construction of enterprise strategy-oriented management accounting system with Chinese characteristics

Establishing a theoretical research system of management accounting with Chinese characteristics is the primary task for the development of management accounting in the era of big data. Relying on universities as research units is a very scientific choice, combined with China's national conditions and actual situation, combined with big data technology, take the development route of management accounting with Chinese characteristics. The theoretical system includes five basic elements: goal, basis, content, tool and report. Centering on the general goal of maximizing enterprise value, it covers five basic contents of strategic management, performance appraisal management, operation budget management, operation decision management and cost planning management based on management, data and technology. With the help of cost and profit analysis method, activity-based costing method, strategic map and comprehensive budget management method, performance prism evaluation index system and other tools, finally integrated and issued a complete and comprehensive management accounting report, presented to managers a panoramic picture of the company [5].

China's economy has walked out of a characteristic economic path different from that of other big countries, and the different national conditions determine that the formulation of policy should not copyother countries. In the context of China's economic transition, the core competitive strategy of Chinese enterprises has changed from low cost strategy to differentiation strategy, from quantity to

quality. We should provide more practical information and better management system framework for the implementation of management accounting to help enterprises implement the new strategy. The senior executives of enterprises should apply the thinking of management accounting more to analyze the financial data, not only theoretically analyze the financial data, take the management accounting work as the basis of the implementation of the company's new strategy, and use it to communicate information and allocate resources, so as to ensure the cooperative operation of each business unit of the enterprise. Therefore, it is necessary to construct and practice the strategy oriented management accounting with Chinese characteristics.

In the Internet era, we must learn to apply the increasingly extensive and vast information system and information data. At present, China's more advanced enterprises, such as Haier, Huawei and so on, have implemented financial sharing, accounting factory and other plans, which greatly reduces the proportion of traditional accounting personnel. Under the old normal, it may be feasible for Chinese enterprises to rely on historical financial data to make decision analysis, but under the "new normal", this backward management method has been unable to cope with more and more complex business challenges <sup>[6]</sup>.

## 7.3 The construction of management accounting with Chinese characteristics is of great significance

Accelerating the development of management accounting with Chinese characteristics is very necessary for both public departments and enterprises. It is not only conducive to enhancing the vitality and innovation ability of market players, promoting economic transformation and industrial upgrading, helping supply-side structural reform, but also conducive to maximizing the efficiency of funds under the premise of ensuring economic and social benefits. It also provides basic guarantee for deepening the reform of fiscal and taxation system and establishing a modern financial system [7].

#### 8. Conclusion

The era of "Great Intelligence Moving Cloud" brings not only opportunities but also challenges to the development of management accounting. The high integration of new technology and traditional accounting requires enterprises to keep pace with The Times, establish the innovation and development thinking of traditional accounting business with big data, constantly strengthen the construction of enterprise accounting informatization, and make use of cloud computing, business intelligence, artificial intelligence, mobile Internet and other technologies to make management accounting play its due role more fully and serve the internal management of enterprises more efficiently. To create more production and management value. At the same time, we should also pay attention to vocational education, pay attention to the training of compound, innovative and international high-end management accounting talents, absorb many successful experiences, combine theory and practice, so that enterprises can achieve sustainable development under the background of the new era. Under the tide of globalization, China should not only keep up with the world and make innovations in management accounting, but also walk out of a road of innovation suitable for China, showing the form of a big country with confidence that China has accumulated and gained ground.

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