

Research on Cost Management of Logistics Enterprises Under the Between Big Data, Intelligence, Mobile Internet and Cloud Computing

-- A Case Study of SF Holdings

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Abstract: In 2013, the concept of "Great wisdom moving Cloud" was first proposed at the China Internet Conference. Under the national technology innovation strategy, Dazhiyun has gradually become a powerful technology engine for economic development and enterprise transformation and upgrading. With the advent of the era of "big wisdom moving cloud", the traditional enterprise cost management has been unable to meet the current financial management requirements, how to form a cost leading advantage has become the core task of cost management. Big data, artificial intelligence, cloud computing, Internet of Things and other related technologies provide technical support for enterprise cost management innovation. However, under the background of "big wisdom moving to cloud", there are still many shortcomings in enterprise cost control, such as backward cost management concept, backward related supporting system, lack of professional talent quality, data collection distortion, etc. Enterprises should take the initiative to introduce information technology. To develop in the direction of technological innovation and management innovation, reduce costs and increase efficiency.

Keywords: Great Wisdom Moving Cloud, Cost Management, Big Data, Intelligence.

1. The Concept and Development of Great Wisdom Moving Cloud

"Great Wisdom moving Cloud" respectively represents information technology with big data analysis, artificial intelligence, mobile Internet and cloud computing as the core. Big data analysis mainly refers to the collection of data and the use of the network to build relevant databases for processing [1]. Mobile Internet technology is responsible for receiving and transmitting information, forming information coordination, and improving transmission efficiency. Cloud computing technology refers to the classification and calculation of data and information after receiving it. The calculation results of relevant information and data are handed over to artificial intelligence for execution, and the feedback data generated by the execution of specific instructions is returned to the cloud database for analysis again, forming a virtuous cycle [2].

In recent years, the development of intelligent cloud has brought technological innovation to all walks of life, and has brought new ways to the financial management and operation management of enterprises. With big data management as software and intelligent equipment as hardware, on the basis of hardware and software, the upgrade route of cloud computing is determined, and finally under the support of the mobile Internet connection, the four parts of Great wisdom moving Cloud form an organic unified and complementary whole [3]. The coordination and complementarity of big data and cloud computing, as well as macro-planning, can integrate and refine data and information, obtain in-depth analysis, and timely feedback to management to assist decision-making [4]. Artificial intelligence can liberate manpower, freeing the labor force from tedious, complex and

repetitive work, and investing in higher-level work such as management decision-making. The mobile Internet can interconnect various departments of the enterprise, improve the efficiency of information transmission, and improve the operation efficiency of the enterprise.

At the same time, with the continuous increase of labor costs, the degree of technology introduction determines the rate of industry upgrading. Enterprises adopt advanced technologies such as intelligent cloud, improve the level of automation, reduce the dependence on labor, and reduce labor costs. Although the early technology research and development and equipment investment and later maintenance are huge costs, but in the long run, it does reduce the cost.

With the acceleration of the process of international economic globalization and the rapid development of economy and technology, Chinese enterprises are growing stronger in the aspects of management level, operation mode, efficiency improvement and so on. At the same time, economic globalization has also brought a huge impact on domestic enterprises, and some enterprises with rich foreign management and market experience have seriously eroded the domestic market. Developed countries use advanced information technology to carry out cost management earlier, more mature and achieved good results; Therefore, the development of enterprises in China also needs to introduce information technology for cost control, improve profit margins, reduce costs and increase efficiency, and better development. If an enterprise wants to gain a foothold in the industry and obtain long-term development and improve earnings, it cannot but pay attention to the importance of cost control, and the degree of cost control affects the development of an enterprise [5].

Nowadays, the competition in various industries is

basically the competition of products and late services. Today's market, more value is cost-effective, with a lower price to buy higher quality and service [2]. Therefore, if you can reduce the cost to a certain range, you can gain a certain advantage in price, and you can better expand the market. Therefore, the use of modern intelligent cloud technology to develop cost control strategies and effective cost management is of great significance for enterprises to consolidate their position in the industry and achieve long-term development.

2. The Influence of Intelligent Cloud on Enterprise Cost Control

With the development of economy and society in recent years, the financial field is increasingly perfect, the information is constantly increasing, and the scope of work is constantly expanding, which makes the financial work more and more important to enterprises [6]. Among them, the financial cost management is closely related to the efficiency of the enterprise, and how to reasonably control the cost has become the core of the enterprise. The emergence of "intelligent cloud" technology provides an opportunity for enterprises to reasonably control costs. At present, with the continuous progress of technology, the trend of standardization and process of financial data is becoming increasingly obvious, and a large number of data are stored and calculated by computers, which greatly improves work efficiency. The emergence of Dazhi Cloud has brought the following changes to enterprise cost management:

Big data helps cost control

In the era of information explosion, the ability to process massive data is particularly important for enterprises [7]. In the process of production and operation, enterprises will produce a lot of data, which is helpful to analyze the cost structure. On the one hand, from the internal perspective of the enterprise, the use of big data can analyze the cost information of the production and operation of the enterprise. The big data system monitors the production system in real time and collects information such as the use of raw materials, the consumption of materials, the quantity of finished products, the use of water and electricity in the workshop, and the work progress of employees, which can improve production efficiency and reduce procurement costs and management costs [8]. On the other hand, from the external perspective of the enterprise, the big data system can collect sales, customer information, logistics progress, sales regions, etc., so as to more accurately analyze the composition of the customer's origin and product preferences, analyze the impact of various factors on the customer's purchasing power, and better schedule production and inventory to minimize the cost of stockpiling and warehousing freight.

Based on the analysis of the data, the enterprise can make advance forecast and arrangement for the future purchase, production and sales. According to the change trend of the cost, income and profit of the enterprise, formulate reasonable business objectives and strategies, and big data also improves the decision-making power in the process. When making a decision, we need to consider all aspects of the conditions, all kinds of data. Data input and operation by computer not only reduce the error rate of manual calculation, but also facilitate the timely retrieval of data. At the same time, some models can be used to analyze the data, point out the obvious shortcomings, and assist decision makers to make decisions.

(2) Artificial intelligence helps cost control

Earlier, some of the repetitive mechanical work of the Big Four accounting firms was transferred to financial robots developed based on artificial intelligence. Financial artificial intelligence robots can upload financial data in real time to generate statements, and compared with traditional human beings, the error rate of financial robots is low. In addition, financial robots can work day and night when they are busy in accounting, which has great advantages over humans [9]. And in recent years, the degree of artificial intelligence continues to improve, robots can automatically learn, and even have some logical thinking of the ability to predict. The work process tends to be intelligent, and the development of full automation makes enterprises less and less dependent on labor. Although enterprises also need a lot of financial resources for machinery purchase, software development, including post-production services, compared with traditional labor-intensive enterprises, labor costs and risks are greatly reduced, and production and operation efficiency is improved.

For example, the logistics industry is now introducing intelligent technology. The first is intelligent front-end services. The traditional express delivery methods are basically handwritten express bills, which have the characteristics of indistinct handwriting, difficult to identify, easy to lose and wear. Nowadays, every Courier has a handheld terminal device, which is matched with two-dimensional code, APP and mini program. Users place orders in the APP and mini program, and the receiver uses a handheld terminal to scan the two-dimensional code and match the express items, and the entire mailing process becomes more stable and efficient. There are also logistics companies to carry out drone projects to solve the "last mile problem" and better deliver express to customers in remote areas with far complicated roads. In this outbreak, the drone project has also shown great advantages, contactless receipt and delivery, reducing the impact of the epidemic on logistics operations, and ensuring safety. The second is intelligent back-end services. The traditional manual sorting method not only has high labor cost, but also has the error rate which is difficult to reduce. Intelligent automatic sorting system, robot arm and other intelligent equipment are introduced to carry out cargo sorting work, which greatly improves the efficiency.

(3) Mobile Internet helps cost control

The mobile Internet makes it possible to work away from home. The development of mobile Internet enables enterprise managers to monitor the production situation of enterprises in real time and place at any time, and real-time office is efficient and convenient. Compared with the traditional enterprise management mode, the introduction of mobile Internet technology can not only reduce the traditional human supervision and reduce costs, but also significantly improve the efficiency of information transmission. For example: supply chain logistics management, real-time monitoring of production lines and so on. It can not only monitor the work flow on the platform, but also rely on the platform to implement assessment, approval, etc.

The development of mobile Internet technology not only brings real-time office to enterprises, but also plays the role of real-time monitoring and personnel assessment. In terms of transportation and distribution, real-time monitoring can be carried out for each mobile device, which not only allows real-time monitoring of the information of the object, but also enables the vehicle to be equipped with a series of detection functions such as speed, driving time, whether it deviates from the preset track, etc., to score different operators, collect

behavioral data, and establish a KPI indicator system. Improve safety and efficiency with timely access to each employee's work data. Enterprises can also use human networking technology to integrate and classify customer data management [10]. Human networking technology can also analyze and classify customer groups, classify customers according to different standards, improve customer service, provide customized services to different customer groups to enhance brand image, and identify the industry and related potential customers to expand market share and competitiveness. It can also detect the loss of customers in time and remedy it in time.

(4) Cloud computing helps cost control

In the "big wisdom cloud" environment, all data is stored in the cloud, which is not only data security, but also meets the characteristics of on-demand use. With only a network connection, things can be handled in a timely manner, and the cost and risk of communicating information are reduced. Cloud service technology stores the data of each link in the cloud network database. The cloud supports multiple access points, requiring data members to access the data in real time on the basis of access rights, avoiding the traditional interconnection process between departments, but also improve data security. The combination of cloud computing and finance can improve the operating efficiency of the financial department, reduce labor costs, and improve the efficiency of business processing. The combination of cloud computing and business integrates the operation mode of front-end procurement, midcourse transportation, and terminal distribution, and bulk transportation, simplifying the process and maximizing the cost efficiency. Using cloud computing, you only need to invest less management and interaction work, you can get virtualized resources, and can easily save massive databases, use intelligent technology for accounting analysis, improve the efficiency and quality of data processing, and get useful data to assist decision-making and business insight.

To sum up, big data analysis and smart devices as the basis, and then determine the cloud computing processing technology upgrade route, and finally with the support of the mobile Internet environment, the three complement each other, forming a network surrounded by the whole. Artificial intelligence can reduce labor costs and improve work efficiency; The combination of big data and cloud computing can efficiently process and reflect cost information to decision makers, so that cost information can be reasonably mastered. Mobile Internet can effectively transmit information, improve communication efficiency and reduce communication costs. Therefore, great wisdom cloud technology through continuous data collection, continuous analysis of information, timely feedback, reasonable adjustment, control of the overall business cost, reduce high cost links, and always improve corporate profits.

3. The Main Problems of Enterprise Cost Control Under the Background of Intelligent Cloud Migration

(1) Traditional cost management ideas are backward

At present, many enterprises have begun to gradually form the concept of cost management, and continue to pay attention to it, but on the practical level, there are still many deficiencies [11]. The most basic problem is that the concept is outdated, and the cost control method of traditional

enterprises tends to reduce investment and extreme cost compression. The core of the enterprise is to obtain profits, but the traditional cost management method is too limited: blind reduction of investment, if the overall situation is not accurate, not comprehensive grasp, will directly affect the normal operation of the enterprise, and even damage the brand image and market size. If the cost is extremely compressed, it is easy to choose poor quality materials, but also damage the brand image. Nowadays, the concept of enterprise cost should be a systematic concept: it runs through all aspects of enterprise design, research and development, production and operation. The process of product from scratch is regarded as a system, and the concept of cost control exists in every link.

(2) The cost management supporting system lags behind

For some enterprises with a certain sense of cost control, a corresponding cost control supporting system will be established. However, it is found in the investigation that the system established by most enterprises around cost control is either empty on the surface, or the binding force is not enough, and the division of functions, powers and responsibilities is not clear[12]. Not only that, the sketchy cost control process also creates serious problems. In all aspects of the product, the implementation of cost control is not in place, and the lack of refinement often leads to the difficulty of accountability after the fact, and even the transfer of interests between departments, which damages the interests of the company.

The existing cost control system in the enterprise also has considerable lag and limitations. According to the time order, cost control can be divided into: pre-control, in-process control, and post-control. Influenced by the traditional concept, most enterprises are relatively strict in the pre-control and in-process control management. A product's preliminary research and development investment planning and the actual production process of manpower, water and electricity and other costs of the budget is quite detailed and accurate. However, after the control plate is extremely lacking, such as the existence of some enterprises in the phenomenon of improper reimbursement, as well as the cost control of enterprise product sales plate, are quite weak links. The fundamental reason is that these are hidden costs, difficult to quantify and study, and therefore difficult to control.

(3) Data collection distortion, decision-making divorced from reality

Data is the foundation of intelligent cloud technology, and the quality of data is undoubtedly the core. However, in real life, the data of some enterprises is disorganized, and even if it is obtained, it is difficult to guarantee its authenticity. For example, the current service evaluation system, a large number of software will require customers to evaluate the service score, and even put forward opinions, but the effective data can be recovered is quite small; There are also some data falsification, which has to make people doubt that the data has lost its basic ability to quantify, and has stayed at the numerical level[13]. In the data of cost control, how to judge whether some information is valuable, how to collect, organize, screen and store the cost budget information and expense information of the enterprise in time is also relatively difficult. After the collection of cost information, how to carry out effective analysis to draw valuable conclusions and how to make full use of it is a new challenge. Blindly reduce the cost until the cost is the lowest, but it can not bring the maximum value of the enterprise, which deviates from the original intention of cost management. How to fully link the

cost management system with the overall financial accounting of the enterprise requires not only professional software, but also professional financial and accounting personnel to identify effective information and improve the level of data utilization [14].

4. Enterprise Response Strategies and Suggestions Under the Background of Intelligent Cloud Migration

(1) Adapt to development and optimize cost concepts

The development of the information age cannot be separated from information technology. Enterprises should combine their own reality, actively introduce professional talents of information technology, attach importance to the training of information technology, as well as the deep integration with business, and explore refined cost control methods: Enterprises can not only learn from the experience and methods of relevant domestic and foreign enterprises in cost control, but also communicate with academic experts, ask experts to evaluate and give certain opinions. At the same time, enterprises should strengthen the management of each link of cost control. Enterprise production management involves product design, procurement, production, storage and marketing, etc. Strengthening cost control in each link will have an impact on the overall result, so a macro cost control system should be built and the whole process cost control should be strengthened.

In addition to actively adapt to the development of The Times, it is necessary to cultivate the correct concept of cost control. Today's cost control is not a single link, but through the entire business process of the enterprise. Enterprises should abandon the traditional concept of cost control: cost control is not equal to financial cost accounting work. The way of cost control is not the traditional static, single control way.

Enterprises should rely on intelligent cloud technology to establish a dynamic monitoring system. The cost of every link of the enterprise business is detected and updated in real time, rather than waiting for the fixed settlement date of the enterprise, so that problems can be found in time, controlled and solved. At the same time, it is also necessary to establish a composite monitoring mechanism, abandon the concept of purely reducing costs, and should be combined with the overall situation of the enterprise and development strategy for cost control, so as to maximize the value of the enterprise

(2) The overall concept, improve the supporting system

Enterprise cost control must have a certain overall concept, that is, not limited to a single link of cost control, to expand to the entire business scope. From the perspective of products, it should be extended to design, research and development, production and other links. From the perspective of enterprise business, it should cover procurement, sales, after-sales and other links. Carry out cost control from three angles: before, during and after. Prior cost control, that is, planning the entire process and estimating the possible costs, but also to predict a variety of possible results and corresponding cost expenditures, in order to adjust in time. The focus of cost control is to control the ongoing plan implementation process, which is the basis of control work and the core of cost control. It is mainly divided into material purchase cost control, material inventory cost control, and production process control. Ex post cost control mainly consists of comparing the total cost expenditure with the plan, analyzing the reasons and

improving the cost expenditure review.

We should improve the supporting system of cost control. The supporting system of cost control should include rationalized target cost and related operation guarantee system. The cost of rationalization should be estimated by professionals in combination with the market and other aspects, and a certain elasticity interval should be confirmed after many practices. The relevant operation guarantee system includes punishment system, index system and so on. The core is to clarify the responsibilities of each department, and clarify the processes and standards of each link. Through a certain system, it can not only ensure the better implementation of cost control, but also reflect the problem and constantly improve.

(3) Dig deep data and establish a dynamic mechanism

Data is the basis of the application of information technology, data is the quantitative performance of each link of work, reflecting the work of each link. However, in the real life cost control work, too much data stays on the surface and is not fully utilized. Relying on Dazhi cloud technology, enterprises can better improve scientific and reasonable KPI indicators and stimulate the enthusiasm of employees. Through the cloud technology, the quantitative indicators of each link can be implemented to the specific staff. On the one hand, the labor cost of employee assessment is reduced, and there is no need for special assessment and supervision, which reduces the manpower expenditure. On the other hand, the efficiency of each employee is more intuitive and accurate, which is convenient for enterprises to select outstanding talents and conducive to the development of talents of enterprises.

In order to make full use of the timeliness of cloud technology, enterprises should establish a dynamic assessment system that can respond to enterprise cost control in a timely manner, get rid of the traditional monthly settlement method, and reflect the problem in a timely manner, and the responsibility is clear, can be implemented to specific links, and get a better treatment. At the same time, relying on the data storage and processing functions of the cloud, time nodes can also be selected to observe the cost control situation and improve the quality of cost control.

5. Conclusion

Cloud technology provides a broad space for cost management innovation. At present, in order to consolidate market position and improve core competitiveness, enterprises should conform to the trend of The Times, think about how to use these new technologies to achieve change and innovation, take measures to improve enterprise cost management activities, and solve the problems existing in enterprise cost control. Gradually achieve the goal of reducing costs and increasing efficiency, and create higher economic and social benefits for enterprises.

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