

Research on Enterprise Comprehensive Budget Management Based on "Big Data and Cloud Accounting" Environment

-- Taking Company A as an Example

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Abstract: Comprehensive budget management as the value orientation and strategic leadership of the enterprise business strategy, related to the overall planning and dynamic control of internal resources in the enterprise, in the enterprise management activities play a vital role. However, with the continuous expansion of the scale of modern enterprises and the increasing complexity of various economic operations, the traditional comprehensive budget management lack of strategic orientation, poor information communication and other shortcomings are increasingly prominent, and it is difficult to adapt to the needs of modern enterprise development. The emergence of big data, cloud accounting for the modern enterprise comprehensive budget management change provides technical support, so that it can adapt to and meet the new needs and new challenges of the current budget management. This paper starts from the research status quo of comprehensive budget management and related theories, describes the impact of big data, cloud accounting for enterprise comprehensive budget management, and analyses the current implementation of comprehensive budget management of Company A as an actual case. It is found that there are problems such as unreasonable budget management organisational structure, imperfect budget analysis and evaluation mechanism, and unsound budget preparation and control mechanism in Company A. Based on the above findings, it is proposed to improve Company A's comprehensive budget management. Based on the above findings, countermeasures and suggestions are put forward to improve the organisational structure of the company's comprehensive budget management, establish the budget analysis and evaluation mechanism based on big data, and establish the budget preparation and control mechanism based on big data, with a view to providing certain reference for the application of the enterprise's comprehensive budget management.

Keywords: Big data, Cloud accounting, Total budget management.

1. Introduction

Now many enterprises in China have realised the necessity of carrying out comprehensive budget management, trying to strengthen the overall planning and dynamic control of resources through the implementation of comprehensive budget management, improve the efficiency of enterprise production and operation and management decision-making, so as to help enterprises to achieve their strategic goals. However, in the modern enterprise organisational level is increasing, distribution is becoming more and more complex, operation is becoming more and more diversified, the traditional budget management way exists budget instructions and feedback information cannot be up and down the effective transmission, "island effect" under the budget preparation, budget implementation and budget evaluation is difficult to play its real role, and will lead to the preparation of the budget, the level is generally low, or even deviate from the budget. The level is generally low, and even deviate from the direction of strategic development of enterprises, traditional budget management has been difficult to adapt to today's increasingly fierce market competition, the urgent need for new theories and methods to enhance the level of enterprise budget management. Since entering the 21st century, along with the rapid development of information technology means, big data and cloud computing and other applications are becoming more and more widespread, the integration of comprehensive budget management with these emerging technologies has become one of the main directions for the development of

enterprise comprehensive budget management. Through the real-time collection and update of massive data by big data and cloud accounting technology, it can monitor the budget implementation of enterprises in real time, analyse the budget situation in an all-round and in-depth manner, and provide real-time and accurate data support for budget evaluation.

2. Literature Review

2.1. Domestic and International Literature Review

The term budget originated in Britain, initially generally used for government budgets, the end of the 19th century, the budget system began to be gradually applied to the enterprise. 1911, the father of scientific management - Frederick Winslow Taylor (Frederick Winslow Taylor) through practical research put forward their own kind of scientific method, its theory mentioned in the standard cost, budget management control, variance analysis and so on, including some scientific methods have been developed for the company in the budget and management process commonly used techniques and methods. 1922, the United States famous scholars McShiggin (James AcKinsey) published the book "budgetary control", the first time to budgetary control for the first time to carry out systematic discussion and exposition of the budget related to the theory and method of the detailed description of the previous fragmented theoretical system systematic, for the enterprise budget management provides a good start. Subsequently, General Electric, DuPont Group and other

enterprises have implemented comprehensive budget management, which has pushed the comprehensive budget management to a brand-new stage. Verne B. Lewis (1970) proposed the zero-based budget method for the first time, which pointed out that the budget should be compiled from zero, and should not be deferred to the historical data. Kaplan and Norton (1992) established the Kaplan budget model, which integrates the balanced scorecard into the budget management. Kaplan and Norton (1992) established the Kaplan budget model, which integrates the balanced scorecard into budget management, and divides the strategic goals of the enterprise into four dimensions (finance, customer, internal operation, learning and growth) to measure and control, which helps the long-term survival of the enterprise. Jeremy Hope and Robin Fraser (2003) proposed the basic theory of transcendental budgeting, and argued that only by decentralising the power to each department, and running performance evaluation and budgeting separately, can a budget be prepared from scratch. In the 1980s, computerised accounting began to be integrated into the work and life of people in Western countries, and the combination of computer technology and accounting has led to an increase in the efficiency of enterprises. Davenport (1998), in his article 'Bringing Business into the Enterprise System', highlights the widespread adoption of ERP (Enterprise Resource Planning) by enterprises. Davenport (1998), in his article "Bringing the Enterprise into the Enterprise System", emphasised the importance of adopting ERP (Enterprise Resource Planning) systems in a wide range of enterprises and advocated that enterprises should vigorously pursue this strategy, pointing out that although ERP systems need to be used in enterprises at the initial stage to pay a huge investment cost, ERP into the enterprise to truly achieve the information technology of accounting in enterprises, and elaborated on the bright future of the application of ERP in the enterprise. According to Robin Poston and Severin Grabski (2001), the application of ERP in enterprises can save the time of enterprises to deal with a large amount of financial data and information, improve the efficiency of the financial staff, strengthen the internal control of the enterprise, and achieve the rational use of resources.

Drawing on the experience of Western countries, China began to embark on the exploration of comprehensive budget management in the 1980s. With the continuous development and improvement of China's socialist market economic system, large-scale enterprises started to implement budget management one after another, and the theoretical research in this regard also emerged. Wang Bin (1999) elaborated on the substantive theory of comprehensive budget, pointing out that the main role of the budget is to link corporate strategy with operation and performance, reflecting the "decentralisation of power under the sharing of rights", and discussing the differences in the preparation method due to the differences in the operating cycle. Tang Guliang and Du Fei (2004) explained the basic understanding of budget and budget objectives, believed that the core of enterprise control system is comprehensive budget management, put forward the defects of the current budget model, and reconstructed the comprehensive budget management system model based on strategic objectives. Yu Zengbiao (2004) argues that a budget management system with a comprehensive approach should contain four levels: technical, organisational, behavioural and environmental. He Ying (2005) points out that a comprehensive budget management system is oriented to the

implementation of the strategic development of the enterprise and includes ten major modules, such as the organisational structure, the reconciliation procedure, the assessment procedure, the management and technical support procedure module, etc. Moreover, if the comprehensive budget management system can be truly implemented, effectively executed and functioned in an enterprise, it is able to bring management benefits to the enterprise and maximise the value of the enterprise. value maximisation. Deng Chuanzhou (2008) used the structural equation to analyse the correlation between budget execution, budget environment and negative budget effect, and found that the better the budget environment, the less obvious the negative budget effect; while the more severe the budget execution is the more likely to have a negative impact, so the company should create an environment conducive to the execution of the budget. Cui (2018) pointed out that with the rapid development of information technology, the construction of enterprise informatisation under the cloud computing environment in the big data era has become a development need for comprehensive budget management in China's modern enterprises, which can not only improve the timeliness of enterprise information and data transmission, but also help the enterprise to control the management costs, while guaranteeing the quality of enterprise financial information. Wang Huacheng et al. (2020) analyse Group A and find that its budget management process lacks strategic leadership, proposing that the enterprise should take the multiple strategic objectives as the starting point of budget management, build a budget management system based on strategic orientation, and implement the strategic objectives into the whole process of budget management, which will help the implementation of the enterprise's multiple strategic objectives as well as the monitoring and controlling of the daily operation and management. Du Lili (2021) found that the implementation of comprehensive budget management in enterprises will face the disadvantages of enterprise strategy and budget cannot be effectively connected, and through the introduction of the balanced scorecard can be the integration of enterprise strategy management and comprehensive budget management, so as to ensure that the budget management can provide support for the completion of the enterprise's strategic objectives, and to achieve the development of the strategic objectives of the enterprise and the effective connection of comprehensive budget management.

2.2. Literature Review

By combing the above literature, the following points can be summarised: firstly, the theory of comprehensive budget management originated in foreign countries, and after a long period of exploration and research, a set of relatively perfect theoretical system has been formed, which is widely used in foreign enterprises. Secondly, China's comprehensive budget management research started late, but in recent years has begun to pay attention to large enterprises have begun to implement budget management, many scholars are also committed to the study of the construction and use of enterprise comprehensive budget management system. Again, comprehensive budget management is also gradually integrated with other theories and methods to form a new theoretical system, our scholars are actively exploring comprehensive budget management theory system suitable for the status quo of China's enterprises. Finally, with the rapid development of information technology, the

combination of comprehensive budget management and information technology has become a new trend, more and more experts and scholars will focus their research on the application and development of information technology in comprehensive budget management, the rise of big data and cloud computing and other information technology means has caused a hot debate in the theoretical community, most of our scholars take the cloud computing perspective in the era of big data as a starting point, combined with the budget management process, and A new framework for comprehensive budget management of enterprises in China is proposed, using cloud computing to change the traditional budget management method, introducing information technology to improve the level of budget management, so that enterprises can give full play to the function of comprehensive budget management and reasonably allocate resources to maximize the value of the enterprise. Therefore, this research is also based on the big data background to discuss and study the application of comprehensive budget management under cloud computing.

3. Relevant Concepts

3.1. Big Data

Different research organisations have given different definitions to the concept of "Big Data" based on its characteristics, and Gartner has defined "Big Data" as 3V - Value, Velocity and Variety. Gartner defines "Big Data" as 3V - Value, Velocity and Variety (Volume, Velocity and Variety), which regards "Big Data" as an information asset that can be used for decision-making only after professional processing. Ackinsey considers "Big Data" to be a collection of massive amounts of data, the scale of which exceeds the processing power of traditional databases, and adds the characteristic of Value to it. According to Wikipedia, "Big Data" refers to a kind of data management tool that filters, stores, analyses, and visualises and applies massive amounts of information (including relevant and non-relevant information) after acquiring it. Comprehensive research institutions on the definition of "big data" in-depth discussion, this study from the perspective of management, that "big data" is through the massive data information data mining and multi-dimensional analysis of the formation of the management to make effective decisions to provide support and help valuable information. This study, from the perspective of management science, considers "Big Data" as valuable information that supports and helps management make effective decisions through data mining and multi-dimensional analysis of massive data information.

3.2. Cloud Accounting

Cloud Accounting is derived from the concept of Cloud Computing (Cloud Computing), which provides accounting, management and decision-making services to enterprises through the connotations and functions of Cloud Computing. Cloud Computing is a mode of providing computing resources and services to customers through the Internet, which has the characteristics of dynamic scalability, virtualisation, high availability and flexibility. In the cloud computing environment, the enterprise's information resources are stored in the cloud, which avoids the problem of insufficient storage space for the enterprise, and can dynamically expand or shrink the computing resources according to the demand. Based on the technical means of

cloud computing, the cloud accounting platform arranges the virtual accounting information system in the cloud, which enables enterprises to carry out accounting operations through the Internet at any time and any place, without the need to install any software or purchase and maintain hardware equipment, which greatly improves the convenience and efficiency of accounting work. Meanwhile, cloud accounting service providers usually adopt strict security measures to safeguard users' financial data, such as data encryption and identity verification, so that enterprises' financial data can be effectively protected from the risk of data leakage or loss. For the concept of cloud accounting, different experts and scholars have made different explanations. One of the commonly agreed upon is the definition of cloud accounting by Professor Cheng Ping of Chongqing University of Technology, stating, "Cloud accounting is the application of cloud computing in accounting, which can also be understood as the extension of the function of accounting on the cloud, and is able to provide enterprises with accounting, management, and decision-making of the combination of cloud computing technology and accounting." This definition emphasises the three core functions of cloud accounting: accounting, accounting management and accounting decision-making, and points out its characteristics based on the connotations and functions of cloud computing.

3.3. The Concept of Full Budget Management

3.3.1. Connotation of Comprehensive Budget Management

Comprehensive budget management refers to a period of time in the future, based on the strategic objectives of the enterprise, combined with the actual internal and external conditions of the enterprise and environmental changes, the enterprise's future period of operating activities, investment activities, and financial status of a full and comprehensive prediction, so as to carry out the target setting and decomposition, preparation, implementation and control, analysis and adjustment, assessment and evaluation of a series of activities, so that the enterprise's production and operation activities It is a modern management tool to make the production and operation activities of the enterprise run efficiently and orderly, to make the internal resources of the enterprise be optimally allocated and reasonably used, and to make the strategic objectives of the enterprise be realised.

3.3.2. Characteristics of Full Budget Management

The characteristics of comprehensive budget management are closely linked to its concept, which is summarised in the following three aspects.

(1) Comprehensive. That is, the whole staff, the whole process, the whole situation. Because it not only includes financial workers, but also directly related to the enterprise's various major business institutions, various links, need all the post staff can work together to participate in the management of the work, mutual co-operation, full assistance, requires an enterprise not only focus on the financial budget and other business work of the budget, but also directly related to the capital budget and other aspects of the budget. The holistic nature of comprehensive budget management is mainly manifested in the entire economic organisation and activities of an enterprise.

(2) Strategic. It needs to be based on the overall development of the enterprise's economic strategic objectives, the two are complementary, but also inseparable, and the

overall development of the enterprise's economic strategic objectives of the separation of the budget management is simply useless, through the development of a comprehensive enterprise budget management, the development of the enterprise's strategic objectives of the overall plan, step by step decomposition, and then transformed into specific budgetary objectives, with the changes in the market to adjust the strategy.

(3) Systematic. Budget management in each department is not isolated, the work of each department is closely linked to the other departments need to work together to promote the completion of the task. If one of them did not implement the original plan, then it will directly affect the other departments to complete the budget targets, which is the budget management of the horizontal systematic. The entire budget preparation, implementation, control, adjustment, assessment and incentives and other aspects are linked into a whole, each link is interrelated and complementary, effectively improving the rigidity of the overall budget management, which fully reflects the budget management of a vertical systematisation.

3.3.3. Content of Full Budget Management

The enterprise's comprehensive budget management from the specific content of its budget, mainly contains the enterprise's operating budget, investment budget and enterprise financial budget.

(1) Operating budget. Also known as the so-called operational budget, generally refers to the period of the company's budget, and other business relationships exist between the budget. Business management budgeting starts from the product sales budgeting, as the basis for arranging the company's annual production tasks, and the costs incurred during the budget, to achieve the goal of improving economic efficiency and the rationality of resource allocation.

(2) Investment budget. That is, an enterprise's main capital project expenditure budget, broadly speaking, refers to the enterprise project construction and investment in the process of capital expenditure and business management activities of the budget, which runs through the enterprise's strategic planning, evaluation, investment and financing and other aspects. The main goal of the investment budget is to effectively promote the survival and development of the enterprise, and the scope of the budget covers the budget of investment projects such as long-term equity, the expected return on investment and the reasonable allocation of assets and other budgets. Its investment expenditure is mainly dependent on the operating income of the subsequent budget period, investment activities, although it cannot play an immediate effect, but its impact on the economy is irreversible.

(3) Financial budget. Mainly refers to the budget period, can accurately reveal the future of an enterprise's financial activities, management results, financial situation, cash flow and other value indicators of the various aspects of the budget, usually based on its operating budget and equity investment budget and other factors to prepare, mainly involving assets and liabilities, profits, cash flow and financial situation and other aspects. The financial budget shows the budget results made in the operation or investment during the budget period from the perspective of the value of resources, and its data and information are also derived from the operation and investment budgets, and occupies a dominant position in these three budgets.

4. The Impact of Big Data and Cloud Accounting on The Comprehensive Budget Management of Enterprises

4.1. Big Data and Cloud Accounting Can Effectively Improve the Comprehensive Budgeting Level of Enterprises

The traditional comprehensive budgeting process has inherent problems such as long preparation cycles, timeliness and inaccuracy, which limits the effectiveness of comprehensive budgeting in enterprise development. With the continuous development and improvement of big data and cloud accounting platforms, enterprises have more tools and means to improve and optimise the comprehensive budgeting process. Enterprises can take a combination of up and down the way to prepare a comprehensive budget, and use the cloud accounting platform to share and send the annual financial budget of the enterprise, while the budget subjects can visit the cloud accounting platform at any time to obtain the latest financial budget objectives and budgeting policies, and then combined with the actual characteristics of their own departments to formulate their own budget plans, and uploaded to the cloud accounting platform in real time. In addition, the arrival of the big data era has brought unprecedented opportunities for comprehensive budget management, and the composition of the data structure has undergone significant changes, and now the data consists of three types: structured data, semi-structured data, and unstructured data, which provides a richer and more comprehensive source of information for budgeting, improves the accuracy of the budget and the enrichment of the content, and makes the comprehensive budget management and preparation of modern enterprises level of modern enterprises has been greatly improved.

4.2. Big Data, Cloud Accounting Can Promote the Improvement and Optimization of The Enterprise Budgeting Process

In the traditional budget process, due to the lack of effective information sharing and communication channels between the main body of the budget and the headquarters, and the lack of uniform standards in the implementation and control of the budget, resulting in the main body of the budget in the preparation and implementation of the process of the approval process is cumbersome, the control and supervision of the timely enough, and in the implementation of the process of the discrepancy and the reasons for the analysis, resulting in the implementation of the budget process is more lagging behind the headquarters cannot make timely dynamic adjustments according to the actual situation of budget implementation, resulting in the failure of budget control. It is impossible to make timely dynamic adjustments according to the actual situation of budget implementation, which leads to the failure of budget control. The application of big data and cloud accounting platform provides a centralised and efficient information exchange and sharing centre between the headquarters and each budgeting and execution body, which can carry out real-time dynamic supervision of the budgeting, execution and control process, and compare the budget data with the actual execution data in real time during the supervision process in order to find out the differences, and form a good dynamic adjustment effect. At the same time, the implementation of big data and cloud accounting platform

is conducive to achieving standardised control in the process of budgeting and execution, promoting the optimisation of budgeting process, reducing the impact of human factors on budgeting through unified data standards and processing procedures, ensuring the accuracy and consistency of budgeting, and improving the efficiency and effectiveness of budgeting. In addition, the implementation of big data and cloud accounting platform makes the enterprise's comprehensive budget information more transparent, which is conducive to the main body of budgeting can understand the implementation of the budget in real time, and the adjustment part can be timely mastered, and at the same time, it strengthens the key control of the nodes in the process of budgeting and execution, so as to achieve the continuous optimisation and improvement of the budget process.

4.3. Big Data, Cloud Accounting Can Promote the Construction of Enterprise Budget Data Center

The data involved in traditional budget management is often limited to the internal data of the enterprise and is only used by the practitioners of the financial department, which leads to the relative lag of the analysis results, the disconnection between the budget data and the business data as well as the internal data structure is relatively single, which makes it difficult for the budget to play its role in the strategic level of the enterprise. The comprehensive budget management system based on big data and cloud accounting platform involves more external data, and the data structure is richer, including structured, semi-structured and unstructured data. At the same time, big data and cloud accounting platform have strong dynamic updating ability, which helps enterprises realise the whole process of monitoring and controlling the budget, including planning beforehand, adjusting in the middle of the process and evaluating after the process, so as to ensure that the enterprises can flexibly adjust the budget strategy according to the actual situation and improve the effectiveness of budget management. In addition, the database technology and data mining technology brought by big data reduces the cost of budgeting, and through automated and intelligent data processing and analysis, enterprises can generate budget reports faster and more accurately, reduce manual intervention and error rate, and transform information resources into assets, which facilitates the construction of budget data centres. Finally, the comprehensive budget management system based on big data and cloud accounting platform promotes the construction of a budget data centre, which can centrally store and manage the enterprise's budget data and achieve data sharing and collaborative work.

5. Status of Comprehensive Budget Management in Company A

5.1. Company A profile

Since its establishment in the 1950s, Company A has

developed into a large-scale integrated investment and construction group in China, with more than 30,000 employees and assets totalling over RMB 200 billion. The company's core business focuses on various fields such as infrastructure, housing construction, investment and operation, forming a diversified business pattern. Its construction products cover a wide range of fields including municipal roads and bridges, urban environmental protection, housing construction, hospitals, airports, hotels, stadiums, museums, railways, rail transit, and smart cities, which not only highlights the company's comprehensive strength, but also demonstrates its professional and innovative capabilities in different fields. The company's construction projects are all over the country, fully demonstrating its nationwide business expansion capability and market influence. Meanwhile, Company A has a special qualification for general contracting of construction projects and a first-class qualification for general contracting of installation, an engineering research centre, more than 2,000 professional and technical people, including many national registered first-class builders, registered architects and other construction talents, several scientific and technological progress awards and more than 300 patents invented, which reflects the company's strength in technological innovation and also establishes a good brand image in the construction field. Meanwhile, the transformation and application of these patents have also brought significant economic and social benefits to the company. With strong scientific and technological strength, rich project experience, professional technical team and excellent brand image, Company A has become a well-known modern construction enterprise in China.

5.2. Status of Company A's Comprehensive Budget Management

The budget management organisation of Company A consists of three bodies: decision-making body, management body and executive body. The Budget Management Committee is the decision-making body of Company A's budget management, which is composed of the company's senior leaders, with the chairman of the board of directors acting as the head of the committee; the Budget Management Office is the management body of the budget management, which is composed of the professional financial personnel, with the head of the finance department acting as the head of the office; the molecular companies and functional departments are the executive bodies of budget management, which are responsible for the budget matters of the company and departments respectively. The budget management office is the management body of budget management, which is composed of professional financial personnel, and the financial manager is the head of the office; the molecular companies and functional departments are the executive bodies of budget management, and are responsible for the budget matters of the company and the departments respectively. The organisational structure of budget management is shown in Figure 4-1 below:

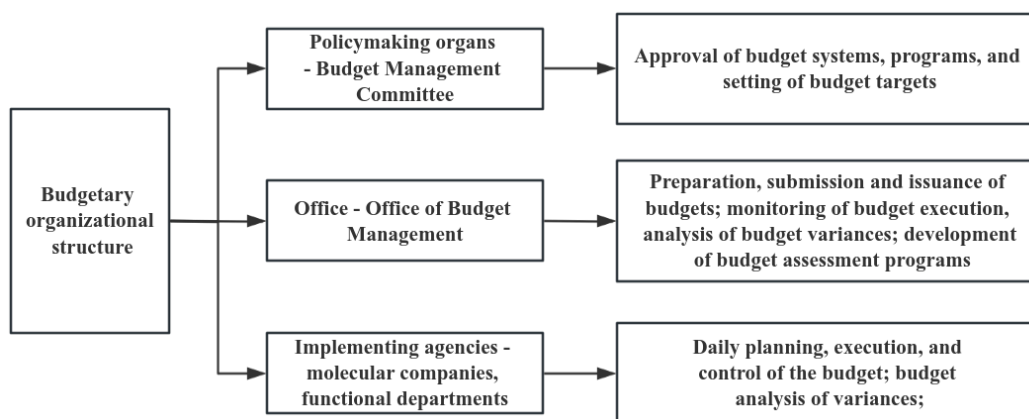


Figure 4-1. Company A's comprehensive budget management organization chart

5.2.1. Status of Full Budgeting

The content of Company A's comprehensive budget covers three aspects, namely, operational budget, financial budget and capital budget, etc. Company A takes the natural year as the budgeting period, adopts the preparation of fixed budget, incremental budget and regular budget, and adopts the top-down preparation process. First, the Budget Management Committee sets the budget target for the current year based on the company's annual strategic objectives and the budget execution status of the previous year. Then, the Finance

Department, as the organiser of the budget preparation, breaks down the budget targets into specific budget indicators and tasks based on the budget execution data and historical financial data submitted by each molecular company and functional department for the previous period. Finally, the Finance Department submits the prepared budget programme to the Budget Management Committee for approval, and if the budget programme is passed, the executive agencies will be responsible for the concrete implementation of the budget. The annual budgeting process is shown in Figure 4-2 below:

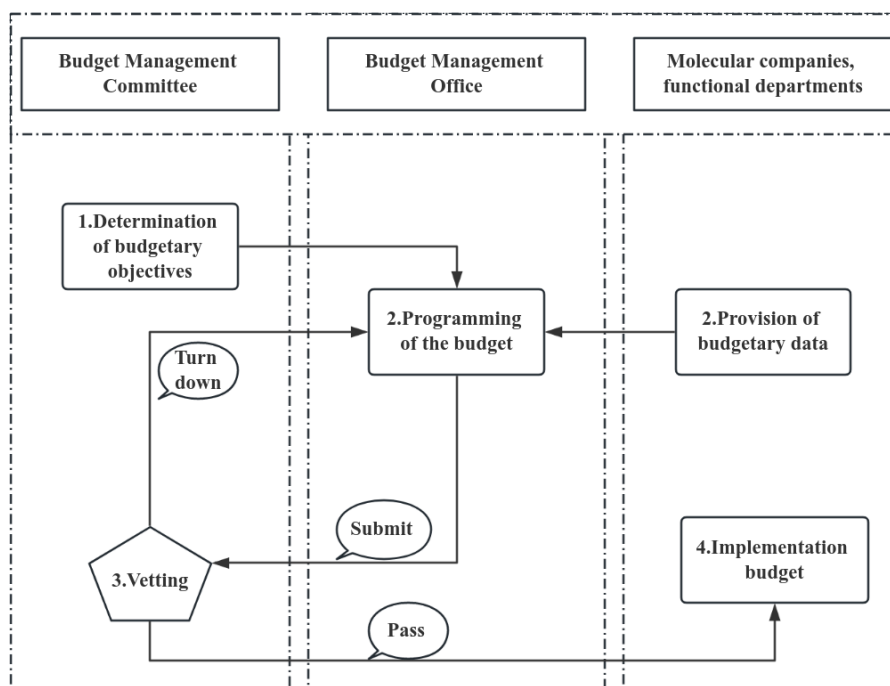


Figure 4-2. Flowchart for the preparation of comprehensive budget management in Company A

5.2.2. Status of Full Budget Implementation and Control

In order to be able to effectively control the expenditure items, Company A has established an authorisation and approval system that matches the budget management, whereby different amounts of expenditure need to be approved at different levels and the budget management system that it has implemented has an early warning function that allows it to monitor the budget situation in real time and provide early warnings for over-budgeted expenses. Specifically: one-time expenditures exceeding 20,000 RMB need to be approved by the general manager. This requirement ensures that larger expenditures receive the attention and approval of the company's senior leadership, thus avoiding

unnecessary waste and financial risk. One-time expenditures exceeding \$50,000 require the approval of the chairman of the board. This higher level of approval requirement further enhances the safety and standardisation of the company's use of funds and ensures the rationality of the company's use of funds. Although Company A has established a strict budget management authorisation and approval system and a budget management early warning system, the actual numbers of Company A's operating revenue, operating costs, administrative expenses and net profit differ greatly from the budgeted numbers, and the net profit completion rate is 78%, which on the one hand indicates that the budgeted value of the net profit set by Company A is too high and does not conform

to the company's business development trend. On the other hand, it shows that Company A's cost and expense budget implementation deviated and lacked strong control, resulting in a large deviation between the actual value of operating costs and the budget.

5.2.3. Status of Comprehensive Budget Assessment

Company A's budget management system stipulates that its budget assessment indicators include the completion rate of the operating cost and expense budget and the completion rate of operating income. The deviation rate of budget implementation is less than 5% is excellent and is given a score of 100; between 5% and 10% is qualified and is given a score of 90; more than 10% is unqualified and is given a score of 60; the final average score is the most final achievement, and 110% of the month's performance bonus is issued to those who have scored 95 points or more, 100% of the month's performance bonus is issued to those who have scored 80 points to 90 points and 90% of the month's actual performance bonus is issued to those who have scored less than 80 points. 90% of the actual performance bonus for the month for those with a score of 80 or less. Although Company A's budget management system has set up clear assessment indicators and reward and punishment mechanisms at the theoretical level, it has encountered problems in actual implementation, especially in the implementation of the accountability and punishment system. In actual implementation, Company A only rewards excellent budget implementation, while for unqualified cases, because the budget target is not decomposed to individuals, when the budget implementation deviation, it is difficult to accurately trace the responsibility to the specific responsible person, and there are no effective punitive measures, and the punishment system is virtually null and void.

5.3. Problems with the Overall Budget of Company A

5.3.1. Inadequate Budgetary Organizational System

Company A budget organizational structure of the budget management office is composed of all the financial personnel, the financial officer as the head of the budget management office, responsible for the budget management of the day-to-day matters of the organization and leadership, responsible for the decomposition of the budget target, the coordination of the work, responsible for the budget management of the uploading and downloading work, responsible for the approval of the budget plan in accordance with the preparation of a specific budget table, and finally a variety of The data of the budget table is summarised and organised after the end of the budget period to analyse and assess the budget differences. It can be seen that the financial sector has assumed most of the budget work, although the executive departments are also part of the budget system, but is only responsible for the implementation of the budget, budgeting only to provide the relevant basic data to the financial sector, was given less budgetary rights, in the preparation of the budget, the assessment of the link to play a small role in the budget is not very high degree of participation in the budget, so that the lack of standing in the budget of the overall perspective of the implementation of the budget This has led to a lack of systematic budget work and a lack of seriousness in budget implementation. This structure of organisational division of labour for budget management has led to greater pressure on the budget management of the financial department, and the business information available to the

financial staff is limited, so that the business data on which the budget is based is not in line with the reality, which reduces the efficiency and effectiveness of the budget. In addition, the evaluation of Company A's budget is carried out by the finance department for the approval of the budget management committee, and other departments are not authorised to participate in it, which will lead to the evaluation of their own department's budgets by the finance department, affecting the objectivity of the evaluation results, and because of the insufficient information about the business that the finance department understands, it will also lead to the overly subjective evaluation of the budgets of the business departments, which may deviate from the actual situation from time to time.

5.3.2. Inadequate Budgeting Methods

Company A currently adopts the budgeting methods of incremental budgeting and regular budgeting, in which the incremental budgeting method is used to adjust the budget value of the current period on the basis of the actual amount of the previous period's budget according to the increase or decrease of the current period's business, although it simplifies the process of budgeting, but this method of budgeting is easily affected by the implementation of the previous year, and the business situation of the current period has a great deal of uncertainty in the actual operation is seldom adjusted accordingly, basically symbolic adjustments are made as a reference basis for the data actually occurring in the previous period. In practice, adjustments are seldom made on this basis, and basically symbolic adjustments are made using the actual occurrence data of the previous period as a reference basis, which affects the accuracy of budgeting. The regular budget method is based on a year for the budgeting cycle, the end of the budget cycle and then the budget assessment, but Company A is a construction company, the project cycle is longer, the price of labour, materials, with the extension of time price changes, the longer the project cycle, the project's design changes are also prone to change, which affects the project's cost of the budget amount. In addition, the faster the project progress the higher the cost spent, if the budget period is longer, this effect is more obvious. Therefore, following the year as the budgeting cycle does not meet the needs of Company A and is not in line with the principle of the integration of business and finance in budget management. it is suitable for Company A to adopt quarterly or monthly as the budgeting cycle, allocating the budget target in each quarter or month, and then adjusting the budget target according to the business situation in the next quarter or month after the end of the budgeting cycle, so that the budget target of a year can be decomposed and dynamically adjusted on a quarterly or monthly basis, reducing the amount of budgeting, Monthly dynamic adjustment, to reduce the budget cycle is long, so that the budget is detached from the actual situation of the business.

5.3.3. Inadequate Budgeting Model

The current budgeting model adopted by Company A is a top-down approach. At the beginning of each year, the Budget Management Committee holds a meeting to discuss and decide on the budget targets for the following year based on the company's operating conditions and past operating experience, and then the finance department carries out the budgeting work based on the budget targets notified by the Budget Management Committee, with each molecule company and each functional department providing their respective historical data for the previous year to the finance

department. The finance department will analyse and summarise the data, carry out the decomposition of the budget targets, and determine the final budgeting plan to be submitted to the Budget Management Committee for approval, which will then be implemented by the implementing agencies in accordance with the targets received. This top-down budgeting model, can reduce the up and down game and internal conflict, improve decision-making efficiency, but also to avoid the lower departments in order to ease the budget pressure, the use of information asymmetry artificial misleading budget targets, resulting in budgetary slack. But the top-down budget model is easy to make the budgeting deviation from the actual business, the budget management committee will be the budget target issued to the financial sector, the financial sector and the lower departments in the consultation process of budgeting, taking into account the authority of the leadership, will seldom be issued on the budget target to put forward the views of the task to be carried out as a task to result in the surface of the departments are involved in the budget management process, but the subjective initiative of each department, but the budgetary management of the budget. The subjective initiative of each department has not been mobilised, while the superior leaders' understanding of each department's business is not very detailed, and it is easy to deviate from the business needs, which greatly reduces the expected effect of the budget.

5.3.4. Inefficient Budget Implementation

Company A for the contracted project of the non-main part of the construction team is mostly composed of professional subcontracted labourers, and by the project department of Company A management personnel for the supervision of the project, this type of project employment characteristics due to the construction personnel do not belong to the direct management of the Company A, so that the implementation of budgetary responsibility for the work of the specific management personnel to become possible, but the Company A's budgetary objectives are only allocated to the various projects of companies and functional departments and not further allocated to specific personnel; Company A for the main part of the contracted project by the Company's construction team to carry out construction, this part of the project has a large number of construction personnel, making it difficult to implement the budget to individual Company A for the main part of the project contracted by the company's construction team to carry out the construction of the main part of the project, this part of the project's construction personnel are numerous, so that the implementation of the budget implementation to the individual is difficult to operate, but can be a section, group as a unit to participate in the budget management, but Company A will only implement the budget implementation to the entire project company, not a specific breakdown to the Section, group, resulting in the implementation of the budget task employees only in accordance with the arrangements of the project manager to complete the task, and is not clear that its section, group will bear the corresponding responsibility, the completion of the budget target with their own little relationship, the implementation of the budget lack of motivation.

5.3.5. Budget Appraisals Do Not Act as Incentives

The budget assessment indexes of Company A are relatively single, all of them are financial indexes oriented to the results of budget implementation, and there are no assessment indexes for the process of budget management.

Therefore, the rationality of budgeting, the timeliness of budget analysis and other aspects of the problem have not been paid enough attention to promote the continuous optimisation of budget management. And the budget assessment only focuses on financial indicators, without considering the assessment of non-financial indicators such as project construction progress, project quality, etc., which makes the assessment indicators incomplete and unreasonable, and fails to supervise and improve the role of budget management. Secondly, the budget assessment system of Company A is just a formality, and only rewards the favourable difference of budget implementation, while for the unfavourable deviation of budget implementation, the executive department shirks its responsibility after making relevant explanations, and the assessment department has not pursued the responsibility, and has not carried out the corresponding punishment, which greatly reduces the warning and incentive effect of budget assessment and affects the enthusiasm of budget management.

6. Countermeasures and Suggestions for Improvement of Company A's Comprehensive Budget Management under Big Data and Cloud Accounting

6.1. Upgrading of Information Technology

Company A's existing comprehensive budget management system, the lack of professional cloud computing software, its budget management level has been unable to meet the requirements of the company's comprehensive budget, A company's comprehensive budget management system must be transformed to the cloud computing model, to build a new comprehensive budget management system. The cloud computing mode of comprehensive budget management, whether in terms of process or function, compared with the existing model has more advantages. In terms of process, the cloud computing mode of comprehensive budget management, more to promote the company's budget work can be full participation, and the budget process is relatively long compared to the conventional process of slow, the cloud computing mode through the cloud platform to achieve data sharing, so that the feedback is more rapid. In terms of functionality, compared to the existing mode of comprehensive budget management through the EAccl table in the relationship between the collation of data processing and transmission, cloud computing mode of comprehensive budget management based on the cloud platform to establish a comprehensive and perfect information technology application software, more secure, efficient, and fast data processing and data transmission. In addition, it is also necessary to departments, employees for the data, information to view, processing authority to separate, so as to further protect the data and information security.

6.2. Corporate Strategic Objectives Are Closely Aligned with Budget Management

Due to the deficiencies in budgeting, the budget objectives deviate from the strategic objectives and affect the implementation of the company's strategy. To a certain extent, budget objectives can reflect the short-term development direction and business philosophy of an enterprise, so it is very important for the development of the enterprise to be

closely integrated with the strategic objectives. Reasonable budget helps to effectively allocate enterprise resources, guide the work of each unit and assess performance, thus promoting the realization of strategic objectives. Therefore, the optimization of Company A's comprehensive budget management needs to improve the accuracy of budgeting, so that the budget target can be more closely integrated with the company's strategic objectives.

6.3. Realization of Authority and Responsibility to The Staff and Enhancement of Staff Motivation

Company A's comprehensive budget management is difficult to be subdivided into employees, clear and accurate implementation of rights and responsibilities to each employee, the data cannot be monitored in real time, so it is necessary to design a perfect budget monitoring function so that the comprehensive budget management budget monitoring and budget early warning mechanism can be improved. With the cloud computing platform to real-time monitoring of the number of each expense, flow direction, and accurate positioning to each employee, so that the comprehensive budget management for each employee's budgeting can be truly implemented, the rights and responsibilities can also be truly implemented to the staff, thus enhancing the participation of employees and enthusiasm. In addition, based on the cloud computing platform to establish a budget control mechanism, the mechanism can be separated from the various departments, personnel on the use of data rights to limit the budget early warning mechanism is when the system detects that the budget data to reach the warning line, the managers put forward early warning, to further ensure that the rights and responsibilities of the real implementation.

6.4. Optimizing the Comprehensive Budget Management Process and Simplifying the Review Process

Budgeting process is not perfect, the lack of early warning mechanism and other process problems need to use the cloud computing technology for the optimization of the overall budget management process, and through the cloud computing system to strictly control the overall budget management process operation, to ensure that the overall budget management process of the quality of each link, so as to protect the overall budget management work of the accurate operation and the final effect. In addition, for the audit link, through the use of cloud computing platform to optimize and simplify, will be complex calculations with the help of cloud computing platform for automatic operation, while the audit material is uploaded to the cloud computing platform in advance, so as to achieve further simplification of the audit link, in order to help the efficiency of the work of the overall budget can be further improved.

6.5. Optimizing Budget Analysis and Improving Incentive Mechanisms

Budget analysis is one of the key aspects of budget management. If the company lacks efficient and accurate analysis function, it is very important for budget work.

Therefore, it is necessary to realize the original manual budget assessment and analysis with the help of cloud computing platform, and even good templates and parameters in the cloud computing platform, so that it can automatically, accurately and efficiently perform the budget analysis function. For the incentive mechanism, A company only simple cash incentives is far from enough, need to set up the corresponding penalty mechanism and through the completion of the assessment to give employees the opportunity to participate in the corresponding training and promotion, as well as some of the spiritual dimension of the award, the incentive mechanism to improve, in order to further help the enterprise and the staff can be better development.

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