Application Analysis of Power Budget in Energy Companies Based on ERP Environment

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Abstract. There are many shortcomings in budget management under the ERP environment of power energy companies. Due to the large number of branches, the power energy company has experienced insufficient connection with some branches. Power energy companies must do a good job in the construction and application of the budget management system under the ERP environment, and need to optimize the existing problems. Therefore, the comprehensive budget of the power energy company is a subject to be further studied. It plays an important role in deepening the reform of the power energy company, accelerating its health transformation, reducing operating costs, optimizing resource allocation, and achieving strategic goals.

1. Introduction
In the 21st century, the rapid economic development and increasingly fierce market competition have led to the exploration of new management models to meet the needs of survival and development. [1] With the further deepening of the reform of state-owned enterprises, state-owned enterprises are eager to reform old concepts and backward management models. Comprehensive budget management has the basic function of budget, that is, it represents the resource demand of all aspects of production and operation in a quantitative relationship, but it makes up for the shortcomings of traditional budget. [2] It is a comprehensive management tool with strategic concept orientation, which is scientific and systematic. Specialty.

2. Basic situation of electric energy companies
The Power Energy Company is one of the major listed companies of the State Power Investment Corporation and one of the most important power energy companies in its location. [3] On the basis of maintaining the sustainable development of the main business of electric energy, electric energy companies are involved in the development of clean energy, new energy, modern electric service industry and circular economy. The company has become a modern energy enterprise integrating high-parameter, large-capacity coal-fired thermal power generation, gas-fired power generation and wind power, solar power generation and distributed functions. The industrial layout is spread throughout the East China region and is gradually expanding overseas.

Power Energy Company is one of the earliest large enterprises in China to set foot on ERP construction, and has established a strategic positioning of modernization and internationalization. In the years of construction, the power energy company has always maintained a high level of informationization and built a “smart” enterprise. The power energy company has formed a relatively good domestic coverage in the construction of ERP system, and has contributed to standardization
construction and standardized management. In the corporate culture, the electric energy company has trained the employees in the ERP system and established a good ERP promotion and use atmosphere. At present, the power energy company continues to build an operation and control information platform based on the ERP system to further enhance the ERP application level and provide information platform support and management support for the company's “going out” strategic planning.

3. Budget management method of electric energy company in ERP environment

Based on the ERP environment, the budget management of the electric energy company is mainly operated by the subordinate institutions of the budget committee, and the corresponding budget management index system is established for evaluation and analysis.

a) Budget

The power energy company has more branches, which is a unified calibre, which is convenient for the budget management of the head office, and the power energy company has set up a budget centralized management system. [4] In order to ensure the uniformity of the budget, the budget efficiency is guaranteed. The electric energy company has appointed various departments or groups. Under the unified budget, the power energy company requires all departments or organizations to formulate budget forecasts or compile content according to the unified budget standards, which speeds up work efficiency and budget management intensity for the organizational departments.

b) Multiple indicator evaluation

The electric energy company refines the indicators and requires the branches to optimize the budget evaluation indicators from the detailed classification. For the implementation and completion of the budget, not only the analysis of the completion amount, but also comprehensive consideration of its completion quality, customer resource maintenance, R & D investment and strategic preparation and other aspects of the assessment and evaluation. Under the multi-indicator assessment, the power energy company is still mainly based on the decomposition of financial projects, but taking into account the completion of development quality.

c) Timely evaluation and feedback

Power energy companies have established a process of timely evaluation and feedback in budget management. In the budget management, each department is required to set a budget forecast, and based on the feedback of the implementation of the practice, based on the feedback situation, optimize the budget results again. The re-adjustment of the budget has been practiced again after optimization, which has improved the role of budget execution in business management. In many feedbacks and adjustments, power energy companies continue to optimize the budget management system, and budget management tends to be close to reality and refined. This approach shortens the budget adjustment cycle, helps companies accelerate the optimization and adjustment process, and raises the level of corporate budget management.

4. The impact of ERP environment on budget management system

a) Contribute to the rational use of budget funds

The ERP environment of budget management emphasizes the division of budgetary responsibilities, strengthens the review and management of budget funds, helps the company, especially the branch structure, optimizes the use of budget funds, and enhances the scientific and rational use of funds. [5] ERP is set based on responsibility management traceability and funding restrictions. When the department or organization uses funds that do not meet the budget requirements, it can promptly feedback to the budget management center to stop it in time to prevent the institutional and departmental funds from being unsustainable in the follow-up. At the same time, decentralization of the approval funds according to the approved forecasts in the budget management is conducive to the decentralization of funds to the original use of the budget, to prevent funds from being misappropriated in advance, to prevent corruption or fraud. Strict management and control of budgetary decentralization is a necessary condition for the sound development of the company. ERP
has a good facilitating role in promoting the rational use of budget funds with timely supervision and feedback.

b) Helping corporate goals achieve budget goals
The ERP system can link the business of each department and branches, obtain reasonable past annual data, and help to establish reasonable budget management. Based on past data analysis, budget management can better predict future data, help enterprises plan comprehensive development funds, set reasonable strategic goals, and compare business data feedback of ERP system with past budget management data to identify problems in time. And deal with problems, remove obstacles in the realization of corporate goals. Linking data between ERP system and budget management system helps enterprises to achieve target management and achieve corporate strategic goals.

c) Improve internal control and optimize budget management
The link between the ERP system and budget management stipulates the role of each responsible person in the budget. Branches and departments must use budget funds and must enter the budget system to handle the corresponding regulations. Applicants, approvers, and reviewers all need to assume corresponding responsibilities and increase the prudence of each link. Based on the implementation of responsibility to the people, the application rights, approval rights, and review rights are separated, and separated from the financial part responsible for fund issuance and account management, and the internal control of the enterprise is improved. The separation of budget management in terms of positions and responsibilities reduces opportunities for corruption and fraud, increases the transparency of funds and accounts, and facilitates the smooth and open budget management system.

5. Strategic planning and overall budget docking model
All management activities of state-owned enterprises must be carried out around the strategic goals of the enterprise, and comprehensive budget management is no exception. One of the problems in the current comprehensive budget is that it is out of line with the strategic planning of the enterprise, which leads to budget management that is time-consuming and labor-intensive and less effective. According to the survey, more than 60% of state-owned enterprises have not really incorporated strategic objectives into the system at the starting point of budget management, and accordingly they are more focused on short-term management objectives. Therefore, state-owned enterprises must have a basic point in building a comprehensive budget management framework, that is, to build a comprehensive budget management framework based on strategy orientation, which is also an important concept of the text.

One of the major drawbacks of the traditional budget is that the budget is independent of the strategic operation of the enterprise, which leads to its poor performance and its long-term goal. It cannot truly become a supportive management model for corporate strategy. Therefore, comprehensive budget management must overcome this shortcoming, use strategic objectives as the starting point for the preparation of the overall budget of the enterprise, and always implement the strategic objectives and comprehensive budget planning, implementation, control and assessment. To this end, it is necessary to study the specific strategy and budget docking model.

6. Strategic planning and comprehensive budget connectivity tools
The Balanced Scorecard was created in the 1990s and was originally derived from the “Future Organizational Performance Measurement Methodology” research program, presented by two Western professors Kaplan and Norton. As a research result of the plan, the “balanced scorecard” has formed a strong response and attention from all walks of life. It has been widely recognized in the application of many successful enterprises, and has been widely used in the management of enterprises until now. A more advanced management tool.

The Balanced Scorecard is a comprehensive evaluation system that includes finance, customers, internal business processes, learning and growth. Therefore, the main significance of this performance evaluation model is to break the traditional model of past performance evaluation focusing only on
financial indicators, emphasizing the combination of financial indicators and non-financial indicators. Enterprises should consider financial indicators in performance evaluation and performance appraisal. Consider non-financial indicators. The main role of the Balanced Scorecard is to turn the strategy into action. In the specific implementation, the strategic objectives of the enterprise are refined into some important indicators, and the key indicator system is regarded as the main basis for formulating the overall budget. The balanced scorecard is in the later assessment. Based on these criteria, the overall budget implementation effect is evaluated to achieve the goal of linking the strategy to the budget. Figure 1 shows the relationship between the four dimensions of the BSC:

**Figure 1.** Schematic diagram of the relationship between the four dimensions of the BSC

As shown in Figure 1, the Balanced Scorecard achieves five pairs of balances: the BSC includes financial indicators and non-financial indicators, thus achieving a balance between financial and non-financial; the BSC includes both output indicators such as sales indicators and Driving indicators such as company reputation, thus achieving a balance between output and drive; BSC includes both long-term indicators such as employee loyalty and enthusiasm, as well as short-term indicators such as cost, thus achieving a long-term and short-term balance; BSC Including external environmental assessment indicators such as market recognition, including internal self-evaluation indicators such as employee participation and contribution, thus achieving an external and internal balance; BSC includes both subjective evaluation indicators such as human attitudes, including Objective indicators, thus achieving a balance between subjective and objective. The four dimensions of BSC are not irrelevant. They are inseparable from each other. Together, they form an organic evaluation system that takes into account the internal and external factors of the cause and effect of performance results. It is a comprehensive and comprehensive scientific evaluation system.

BSC is not only a strategic evaluation and assessment tool, but also a link between strategic planning and comprehensive budget management. Through the good use of the balanced scorecard, the strategic intention is truly implemented in all aspects of the overall budget. The overall budget target is classified on the basis of the stratification of strategic objectives. The budget targets at each level include the four dimensions of financial indicators, customer indicators, internal process business and growth opportunities mentioned in the BSC. The biggest advantage of using the Balanced Scorecard is that it not only pays attention to financial indicators, but also integrates all human and material resources of the enterprise into the system of resource allocation and effect. This is the important difference between traditional budget and comprehensive budget. According to these four
dimensions, the performance evaluation indicators are selected under the specific targets of each level, and the driving factors behind each indicator are analyzed to formulate specific plans and action routes for achieving the indicators. On the basis of making up for the disconnect between the traditional budget and strategy, the Balanced Scorecard also compensates for the shortcomings of the traditional budget. Under such conditions, the enterprise manager can immediately monitor the entire operation of the enterprise and adjust the deviation, and finally combine the strategy with the specific operation through the budget to reflect the financial statement.

7. Conclusion
As a universally recognized and comprehensive management system, comprehensive budget management was first implemented in state-owned enterprises and achieved certain results. Taking power and energy companies as an example, the company improved its management after implementing comprehensive budget management. The level and company performance, its experience is worth learning. But at the same time, we also need to see the problems that power energy companies have in the budget. Based on this paper, the countermeasures and suggestions are also given.

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