

An Introduction to the Integration of Management Accounting Tools in Research Organizations

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Abstract:

With the rapid development of China's comprehensive national power and science and technology, the state has invested more and more in scientific research organizations. At the same time, the state has put forward new requirements for the financial management ability of scientific research organizations. With the development of modern financial management, it makes a wide variety of accounting work to be applied in the work, such as budget management, balanced scorecard, economic value added, operation cost method and operation base management. However, due to the lack of theoretical understanding of the differences and complementarities of these tools, research units lack systematicity in the specific application of these tools, which is not conducive to the effective embodiment of the functions of management accounting. This paper attempts to start from the function of management accounting, integrate the application system of management accounting tools, in order to give full play to the comprehensive role of various management tools, improve the management level of China's scientific research institutions, realize the value of national scientific research units, in order to meet the expectations of the state for the financial management of scientific research units.

Keywords:

Research units; financial management; management accounting; integration

1. Introduction

Management accounting tool integration is the effective integration and application of relatively independent management accounting tools, such as budget management, balanced scorecard (BSC), economic value added (EVA), operation cost method (ABC), and operation base management (ABM). The reason for the relative independence of these management accounting tools is, on the one hand, the formation of a relatively independent control and management closure. On the other hand, management accounting tools work at cross-purposes and overlap, and to some extent form complementary roles to each other.

In the new situation, according to the deepening reform guidelines put forward by the state for scientific research units, the financial reform of scientific research units should establish a modern financial system and improve the modernization level of governance capacity; on the other hand, in the fierce market competition, scientific research units to strengthen the budget performance management has become its intrinsic requirements. Therefore, it is necessary to strengthen the application and effective integration of management accounting tools in scientific research units. As there are great differences between scientific research units and ordinary scientific research units, the application and integration of management accounting tools also differ greatly. Drawing on and assimilating various tools and instruments of western management accounting, we can enhance the integration ability of management accounting tools in Chinese scientific research units, and continuously improve and develop the financial management ability of Chinese scientific research units.

2. Current status of the application of management accounting methods

With the deepening of economic globalization, the development of scientific research units as well as the production background is also changing. The traditional unitary management accounting methods are not suitable for the development of scientific research units as soon as they are hot. Therefore, in recent years, China's research units and scientific research units have been introducing advanced western management accounting tools, which, after localized and adaptive reforms, strongly support the improvement of the internal management of China's scientific research units. These management methods are relatively independent and can form a corresponding management system. However, the use of a single management accounting

tool in China is not ideal, many scientific research units are obsessed with the idea that the more management accounting tools and methods used, the better the functions and roles of the various tools, which results in the duplication or even conflict of the functions of various tools, making the scientific research units in management accounting to produce a certain degree of confusion, which is not conducive to the long-term development of scientific research units.

3. Motivations for the integration of management accounting tools in China's research units

The application of management accounting tools essentially reflects the mastery of management techniques by research units, and the integration of management accounting tools is a trend in technological innovation. According to the needs of technological innovation, the application of management accounting tools also needs to be constantly renovated and innovated. So the integration of management accounting tools has become a need for technological development. However, due to the neglect of the recognition of the relatively independent characteristics and connotation of various management accounting tools, it has led to the following three situations in the application of management accounting tools in scientific research units: (1) focusing on the systematic and comprehensive nature of a single management tool, thus ignoring the limitations of its application, and even more so, ignoring the complementarity between each other; (2) blindly choosing a variety of management tools to carry out management work, and believing that the more management tools (2) blindly choose a variety of management tools for management work, that management tools, the more the better, resulting in "functional" duplication and a variety of tools contradict each other, not only resulting in a large amount of waste of resources, and even make the internal management of scientific research units appeared in a chaotic phenomenon; (3) that the scientific research team as the country's innovative core scientific research units, should focus on innovation, accounting management work is to be constantly innovated. As a result, some scientific research units are keen on updating management tools without considering the continuity of the organizational management culture and the variability of the effectiveness of the use of management tools, and continue to pay the expensive system conversion costs, so that scientific research units in the financial management of the expenses continue to increase.

There are many reasons for this phenomenon. This paper argues that the key reason lies in the fact that there is no clear guiding principle in theory for the articulation and integration of various management accounting tools, especially the old and new management accounting tools. Therefore, it analyzes the characteristics and logical relationships of several major management accounting tools and proposes a basic framework for the integration of various management accounting tools, which is crucial for the financial management of scientific research units in China.

4. Main Solutions for integrating management accounting tools in China's research units

Integration of management accounting tools is to combine various management accounting tools according to the optimal level with different management modes to form a more effective management system, which is more suitable for the development needs of scientific research units. No matter what kind of management tools to realize the development strategy of the research unit as the ultimate goal, therefore, the strategic direction of the research unit is the selection criteria for a variety of management tools, will be selected from a variety of new management accounting tools for effective integration, the formation of an integrated accounting management model.

Since the management accounting tools will generate conflicts in practical application, for this reason, it is necessary to integrate the various tools well so as to contribute to the healthy development of the research unit. After a rough analysis, the author believes that the integration framework should be constructed with the strategic objectives of the research unit as the support point.

4.1 Formation of strategies in research units

The strategy formation stage requires qualitative and quantitative analysis of the situation related to the research unit's resources and core competencies. Through quantitative analysis and other methods, combined with the mission and vision of the research unit, the internal and external environment of the research unit and all aspects of competitors are analyzed to form a strategy model suitable for the actual situation of the research unit. At this stage of integration, accurate strategies are formulated, and effective management data are provided for the research unit based on the direction of development and the actual situation of the research unit.

4.2 From the strategic planning situation of the research unit

After the initial stage of strategy formation is completed, the research unit should plan the planning strategy. To complete the strategic planning of the research unit, the first step is to fully implement the overall planning and planning of budgetary, operational, investment, and financial activities. Long-term and comprehensive forecasting of the comprehensive budget, business, and financial situation of the scientific research unit, in this case, the balanced scorecard is needed to turn the long-term goals of the scientific research unit into short-term goals, specific promotional indicators, and the development of specific business practice management plan. The Balanced Scorecard breaks down the strategic objectives of the research unit into four dimensions: learning and growth, internal operational processes, customer management, and finance. Key factors are identified within each subject and assessment metrics are developed from each level forming the Balanced Scorecard. While adopting the balanced scorecard, economic value added is to be used as a financial indicator. In this way, we have effectively integrated the three management accounting tools while enabling the research unit to accomplish strategic planning, providing the research unit with a short-term business plan and long-term development goals.

4.3 From the strategic implementation of the research unit

The integrated budget plays an important role not only in the strategic planning phase but is also indispensable in the implementation of the strategy. When implementing the strategy, we need to provide a concrete implementation process. This is a time when a comprehensive budget cannot be done effectively. We need to effectively combine the balanced scorecard and activity-based costs to complete the internal processes of the research unit. In the implementation process, a specific method and management are needed to master the most favorable customer management, after using the activity-based cost method and balanced scorecard management, the scientific research unit can avoid unnecessary costs, improve the internal process, customer management, identify the main customers, in order to achieve efficient operation.

4.4 Internal oversight from scientific research

The whole process of strategy formation, planning, and implementation of scientific research units cannot be separated from the self-discipline of scientific research units. Reasonable supervision and management is the guarantee to realize the strategic objectives, which requires scientific research units to establish a supporting performance management assessment system. Performance management should use the balanced scorecard to clarify the relationship between short-term interests and long-term interests so that scientific research units can be fully self-restricted and regulated to give up immediate interests, realize long-term interests, and continue to develop and grow.

5. Conclusion

As we all know, scientific research units are units established after the founding of New China that focus on scientific research. With the rapid development of scientific research in China, especially the rapid rise of private scientific research institutions, the state has put forward new requirements for scientific research institutions, hoping to realize the self-financing of scientific research units through reform. In the complex and changing competitive environment, unprofitable scientific research units need to continuously improve their competitiveness, so it is necessary to strengthen the application and integration of management accounting tools and methods. Although there are still many problems to be solved in the application of management accounting tools, we believe that with the continuous exploration of Chinese researchers, the integration of management accounting tools and methods can be improved and perfected, and applied to China's scientific research units, and continuously enhance the financial management capability of China's scientific research units.

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