



# Design Research of Enterprise Financial Management Information System under the Concept of Business and Finance Integration

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**Abstract.** With the rapid development of information technology, the informatization of enterprise financial management has been initially realized. The organic integration of financial information system and business information system can comprehensively improve the enterprise's internal management ability. The article briefly expounds the concept of business and finance integration, and analyzes the internal relationship between business and finance integration and financial management information system. Under the concept of business and finance integration, enterprises put forward new functional requirements and performance requirements for financial management information system. The article gives the overall design of enterprise financial management information system under the concept of business and finance integration, which is divided into the strategic management module, comprehensive budget module, cost management module, investment and financing management module and risk management module, and the design of each module is described to provide reference for relevant researchers.

**Keywords:** Financial management information system, business and finance integration, business-finance integration

## 1 Introduction

The concept of business and finance integration is gradually popularized in Chinese enterprises, which can greatly promote enterprise value management, improve the efficiency of decision-making and the application level of management accounting

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[1]. However, the application of business and finance integration in enterprise management practice is difficult. On the one hand, as the business and financial departments have different understandings of the concept of business and finance integration, business personnel lack recognition of financial management, and financial personnel lack support services for front-end businesses. On the other hand, different enterprises have different stages of integration, especially in the initial stage of integration. Some enterprises blindly build information systems. The information system cannot support process optimization and work efficiency improvement. The essence of business and finance integration is process integration. Through business and financial information sharing and supervision and control mechanism, the purpose of optimizing decision-making and preventing and controlling risks can be achieved. The integration must be bidirectional, that is, the finance participates in the business process, and the business also participates in the financial process. The integration of industry and finance is not an isolated and one-way operation process, but a process in which the business and financial departments participate. It is the process of financial embedding into the whole life cycle of business operation. The realization of business and finance integration cannot be separated from the support of information systems. Through efficient information systems, data collection and integration can be completed, standardized conversion of business data to financial data can be realized, and the operation process of financial accounting can be standardized [2]. This paper will discuss the design of enterprise financial management information system under the concept of business and finance integration based on the actual situation of enterprise development in China.

## **2 Overview of Relevant Theories**

### **2.1 Business and Finance Integration**

Business and finance integration refers to the integration of the concept of financial management into the whole process of business management by making use of the characteristics of real-time data sharing on the information platform, realizing the interconnection and integration of business and finance, and ultimately achieving the purpose of effectively allocating enterprise resources and improving enterprise value [3]. The integration of industry and finance has the following characteristics. Overall, the integration of industry and finance will ultimately achieve a comprehensive and organic integration of enterprise business and finance, covering all businesses and the whole process of business development. At the same time, it needs the support and promotion of the enterprise management and all employees, affecting the overall business strategy of the company. Collaboration. In the process of enterprise financial integration, business departments and financial departments need to coordinate, cooperate, communicate in depth, and share information to achieve consistency at the enterprise level and eliminate enterprise information islands. Openness. The integration of industry and finance relies on a flat organizational structure, without obvious management boundaries and hierarchical barriers. It is also sensitive to changes in internal and external factors, and is conducive to the strategic adjustment

of enterprises. The key of business and finance integration is to use the characteristics of information data real-time transmission on the information platform to achieve the integrated control of financial business and improve the efficiency of financial data sorting and business process operation. The integration of industry and finance not only updates the relevant concepts of financial management, but also has a certain impact on the enterprise management model. Through the establishment of business and finance integration mode, the exchange of enterprise information and the real-time supervision of business development are realized to a great extent, and the timeliness of financial data is greatly enhanced [4]. Therefore, the key step for an enterprise to realize the integration of industry and finance is to build an information system according to the actual situation of enterprise operation and change the management mode of the enterprise.

## 2.2 Financial Management Information System

Without enterprise management, the development of enterprises will lose its direction; Without financial management, enterprise management will lose its direction. From the perspective of this transfer relationship, without the financial management system, the development of enterprises will be limited. In the specific practice, the enterprise also pays more and more attention, and invests huge manpower and financial resources to support the construction of its financial management system. The biggest innovation of the financial management of the financial software team is the breakthrough of technical means [5]. No matter how professional and high-quality the financial personnel are, under the pressure of huge data volume, objective errors are inevitable, especially those enterprises with complex business activities. Nowadays, the financial software completely uses computer technology to avoid the drawbacks of manual errors, and greatly reduces the error rate of data processing. At the same time, based on the accurate financial information of the enterprise, using the financial management information system, the management of the enterprise can realize a certain financial forecast through quantitative analysis when making decisions. The financial management information system can reorganize the financial institutions in the enterprise, avoid the establishment of multiple homogeneous financial institutions, and return financial activities to the financial management information system to achieve standardization, centralization, and process. Different from the traditional financial management model, the financial management information system can break the traditional hierarchical financial institutions and hierarchical management, and achieve centralized financial settlement and accounting. It can realize the reasonable allocation of resources and reduce the operating cost of the financial system. A reliable enterprise financial management information system can provide accurate enterprise financial information, which is conducive to the real-time adjustment of business strategy in the following business activities [6].

### **2.3 Relationship between Business and Finance Integration and Financial Management Information System**

The financial management information system based on the integration of industry and finance should serve the value creation of the enterprise, assist the enterprise in completing the leading strategy, allocating various resources, effectively controlling risks, costs, optimizing the value chain, conducting performance evaluation and other management activities. Consolidate the data base of financial management information system [7]. Without data, management accounting will be useless. This is because all functional activities of management accounting need a lot of business financial data to support. The internal data of an enterprise is mainly generated in business activities and transferred to the financial department for processing. Through the construction of the information system, the specific implementation of the budget, budget evaluation and other related information can be timely and orderly transferred between the business system, financial system, and the comprehensive budget management module to achieve real-time control over various budget activities and improve budget efficiency, which in turn can promote the deep integration of industry and finance. The same is true in the cost management module. The optimization of enterprise value chain and the refined management of cost are the value embodiment of business and finance integration. Therefore, the construction of financial management information system based on business and finance integration can effectively play the role of financial management and bring the value of business integration into play [8].

## **3 Demand Analysis of Enterprise Financial Management Information System under the Concept of Business and Finance Integration**

### **3.1 Functional Requirement**

The financial budget business is mainly to meet the requirements of enterprise informatization and process operation, so that the system can automatically complete various business accounting. The most fundamental purpose of financial budget business is to complete the budget management of enterprises [9]. Enterprise budget management refers to the establishment of a scientific and reasonable budget management system based on the theoretical research of budget management in a variety of budget preparation methods according to the characteristics of enterprises. The fund management business is mainly used to ensure the management of enterprise fund plan, fund settlement, fund security, and fund analysis. Fund plan refers to the process of planning and handling the use of enterprise funds for the rational use of operating assets. Fund settlement is mainly used to calculate the amount of funds receivable and payable in the daily business activities of an enterprise. Capital security refers to a series of insurance measures adopted by enterprises to reduce the risk of possible loss of enterprise funds during their use or preservation. Fund analysis refers to the analysis of the source and destination of

funds retained or in use by an enterprise. Tax management mainly includes tax payment, tax analysis, tax planning, tax public relations and other processes. Tax payment refers to the act of calculating and paying taxes according to the tax rate of the enterprise. Cost management business is mainly managed under the activity-based costing. According to the selected cost accounting method and the allocation method of various expenses, process and calculate the cost accounting data in the financial system, and finally output the cost accounting results or other types of statistical data required by the enterprise after accounting according to the entered information [10].

### **3.2 Performance Requirement**

For enterprise financial management information system, security is very important [11]. This aspect mainly includes the following two parts. They are internal security of financial management information system and external security of financial management information system. The internal security of the financial management information system mainly refers to the data security, which mainly includes the processing of data and the shielding of illegal data information. The external security of the financial management information system mainly refers to the application of isolation to restrict the access to external information in the process of system connection to effectively ensure the stability and security of the financial management information system. In the process of designing the financial management information system of enterprise units, the staff must pay attention to the flexibility of the system, enrich the functions of the financial management information system, and thus provide various information queries for the staff of enterprise units. If the complexity of the internal financial data of an enterprise is relatively high, the financial management information system must be able to quickly identify and calculate the financial data to effectively improve the flexibility of the use of financial data [12].

## **4 Design of Enterprise Financial Management Information System under the Concept of Business and Finance Integration**

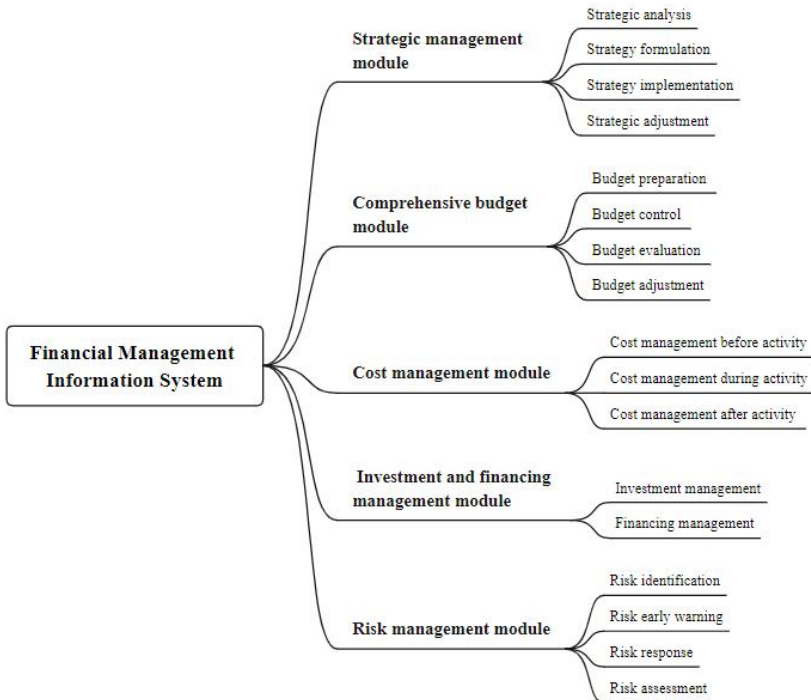
### **4.1 System Objectives**

The value of building an information system is to enable information to be processed, transmitted, and fed back in an orderly manner, reducing the disorder of data information. Based on the nature of the information system, from the input and processing of information to the output and then to the output feedback back to the input and processing, management accounting report is both the output of the system and the input of the system. According to the principle that “garbage input will lead to garbage output”, the information flow is used to drive the improvement of the management level, and the effective control of various business activities is strengthened [13]. All responsible units, departments and management levels within an enterprise are the providers and users of internal management accounting

information. According to different levels of the organization, the report output objects of the financial management information system can be divided into the strategic level, the management level, and the business level. The information needs at different levels are different. Enterprises should build the system on the premise of weighing the advantages and disadvantages. In addition, enterprises should not blindly learn from the experience of other successful implementation systems and pursue the construction of some management accounting functions that are incompatible with their own development. The functional modules of the system should meet the current or predictable future management needs of the enterprise.

### 4.2 Overall Design

According to the goal of system construction and the main contents of management accounting in the enterprise, the management accounting information system is divided into five main functional modules: strategic management, comprehensive budget, cost management, risk management, investment and financing management. At the same time, each main module can be further subdivided into different sub functional modules, which interact and promote each other, The information output of each functional module is summarized, sorted out and automatically generated by the management accounting report module, which provides timely and targeted information to the information demanders.



**Fig. 1.** Overall architecture of financial management information system (figure credit: original)

### 4.3 Modules Design

Strategic management module. Strategic analysis is mainly based on the comprehensive performance report information, production situation, internal resources, and other information in recent years. It allows manual input of relevant information that does not exist or has not been updated in the system to form strategic analysis reports such as business analysis reports and competitor analysis reports. Strategy formulation and decomposition. Based on the strategic analysis report, the strategy layer uses the relevant similar knowledge and experience in the knowledge base of the system, and then combines its own experience to finally determine the strategic objectives. The business layer of the enterprise implements the strategy according to the goals set by the strategic layer. The implementation of the strategy directly affects whether the enterprise can create good economic performance. Therefore, the system needs to track the actual implementation of each responsibility center in the business layer in real time. Strategic adjustment. When the internal and external environment changes abnormally, which makes it difficult to advance the strategic objectives, the strategy layer needs to adjust the strategy accordingly according to the strategy implementation table and the strategy evaluation table [14].

Comprehensive budget module. The comprehensive budget is regarded as the lifeline of an enterprise, as it relates to the enterprise's strategy and the business activities. It is a management activity that integrates strategy, prediction, planning, implementation, control, analysis, and evaluation, requires the participation of all staff, and comprehensively reflects and controls the whole process of the business activities of the enterprise to implement the strategic objectives of the enterprise. The main function of the comprehensive budget management module is to decompose the overall strategic objectives and business objectives of the enterprise into various departments and responsible units in the form of plans and budgets based on the scientific and comprehensive prediction of future business conditions, allocate various resources within the enterprise, and at the same time monitor and control the utilization of resources, that is, the actual implementation of the budget in real time, Then the specific results of the implementation will be evaluated and fed back to the enterprise management and all business levels in a timely manner.

Cost management module. Cost drives the output of enterprise profits. The enterprise's resources realize the value improvement through the occurrence of cost, and realize the value transfer by obtaining income through sales or service provision [15]. Refined cost management plays an important role in enterprises. The main function of the cost management module is to focus on the entire value chain of the enterprise by combining with the comprehensive budget module and the performance

evaluation module, use relevant methods and models to manage the costs of the enterprise in advance planning, in-process control, and post analysis and evaluation, and finally form the cost management accounting report to provide decision-making basis for managers at all levels. Cost management before activity is mainly realized by the cost budget in the comprehensive budget management module. Cost management during activity is mainly used to monitor and reflect the actual cost information of various business activities in real time. Cost management after activity is mainly to analyse and evaluate the actual cost of various businesses of the enterprise.

Investment and financing management module. After determining the strategy, the enterprise needs investment activities to implement its strategy. In order to meet the investment demand, financing activities are also essential. The main function of the investment and financing management module is to analyze the development of investment and financing based on sufficient internal and external information, monitor its specific progress, evaluate, and summarize the actual implementation, and finally form an investment and financing management report, which provides a basis for enterprise investment and financing decisions. The main function of investment management is to analyze the feasibility of various investment activities based on the enterprise's strategic planning and investment

Budget table, supervise, and control relevant activities, and evaluate the specific situation and benefits of investment activities. The main function of financing management is to analyze the feasibility of various financing activities and conduct real-time supervision and evaluation of the specific situation and benefits of financing activities based on the investment needs of enterprises and the financing budget table.

Risk management module. Every enterprise will face risks, and strictly controlling them within the scope of compliance with relevant institutional requirements and the enterprise's risk tolerance is the guarantee for the enterprise to promote its strategy. The main function of the risk management module is to complete the comprehensive identification, real-time monitoring, accurate response, analysis, and evaluation of various risks faced by enterprises, and form a risk management report to assist enterprises in decision-making. The risk management module is mainly divided into four sub modules: risk identification, risk early warning, risk response and risk assessment.

## **5 Benefit Analysis Of Financial Management Information System under the Concept of Business and Finance Integration**

We take S Company as an example to discuss the benefits of financial management information system under the concept of industry finance integration. The establishment of the financial management information system has brought many



benefits to S Company. This paper makes a comparative analysis based on the functions of the system, which is helpful to judge the value of the system.

**Table 1.** Benefit analysis of financial management information system (table credit: original)

Items		Before system	After system
Consolidate statements	Consolidation	About 12 days	About 1 hour
	Accuracy	About 65%	More than 98%
Budget management	Budget	About 3 days	About half of a day
	Approval	Complex	Simple
	Profit	No significant	Increase about 10%
Investment management	Decision	About 7 days	About 1 days
	Project	About 30 days	About 3 days
Financing management	Financing	Subjective	Scientific
	Financing	About 5%	About 4.5%
Data query	Accuracy	About 90%	More than 98%
	Timeliness	About 1 day	Real time
Financial analysis	Time	About 7 days	Real time
	Accuracy	About 80%	More than 95%

After the completion of the system construction, each module runs well, and it greatly improves the accuracy and timeliness of data. The business and financial data are directly visible, improving the working efficiency of financial personnel in S Company. The system enhances the financial management level of the company, and timely generates all kinds of information needed for leadership decisions. The information communication of the enterprise is smooth, and the financial data can be queried in a timely manner, which is convenient for leaders to control the economic operation of the enterprise, such as cost, inventory, capital, etc.

## 6 Conclusions

The integration of business and finance is the development trend of financial work in the future. The enterprise urgently needs to apply the financial management information system consistent with the goal of business and finance integration to provide effective reference for the enterprise and make sustainable decisions. Accelerating the design of enterprise financial management information system is the key to improve the comprehensive strength of enterprises. The realization of information management can make enterprises more competitive in the market. Therefore, enterprises should design management systems that meet their own financial needs according to the design principles of information systems and in

combination with their actual characteristics and operational capabilities to improve the efficiency of enterprise financial management.

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