The Use and of Financial Cloud from Nanjing Iron and Steel Group Corp (Nisco)

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Abstract. With the gradual integration of digital technology into people's daily lives, all kinds of data have become one of the most important assets of an organization. The digital economy is also seen as a new lever to move the global economy, giving rise to a wave of digital transformation in major enterprises. The finance department serves as the data center in the enterprise, and the digitization of finance builds a bridge to the digitization of the enterprise. Shared services, as a kind of information network technology to process and standardize the dispersed and repetitive financial accounting and bookkeeping operations in various branches of an enterprise, have become the first step for the enterprise to realize the overall digital transformation. Bring new advantages to your organization by integrating your finance department with shared services. Based on the financial sharing cloud of Nisco, this paper intends to explore its application and application effect in the enterprise through the process and utilization mode of its introduction of financial sharing cloud.

Keywords: Financial Cloud, group management, Business Financial Integration, Management and accounting synergies, Nisco.

1. Introduction

The emergence of digital technology has once again changed people's lives, making digital data one of the key assets for individuals, businesses and governments. In the past, firms were mostly mass-produced, winning on scale and product-centric, and corporate structures were generally hierarchical and centralized. Firms have competing human, financial, and operational forces, are labor or resource intensive, and have fixed office space. The competitive environment in which firms operate tends to be one of individual firms competing with individual firms and is dominated by regional competition. But in the future, digital technology may enable companies to become personalized and customized businesses that will win primarily on speed or quality, shifting from a product-centric to a customer-centric approach. Enterprise structures will also tend to be flattened and shared, decentralized. Competition for manpower, finance and business will change to competition for knowledge and information, while enterprises will be data-intensive, relying more on network mobility for office work. The competitive environment is also dominated by ecological and platform competition and developing a globalized competitive environment. The digital economy has become the new way to be able to transform the global economy, which has led to a rapid digital transformation of many businesses. In all enterprises, the finance department is the data center of the enterprise, with different data circulating every day, which makes the finance department the first gateway to the digital transformation of the enterprise. By now there are many companies that have completed the digital transformation of their finance departments and moved towards enterprise digital transformation. This paper explores the application and effect of Nisco financial sharing cloud through its establishment and use.

2. Specifics of Nisco and The Financial Sharing Cloud Concept

2.1. Specifics of Nisco

The company is in Nanjing City, along the river industrial development zone, the factory is equipped with a special railroad line and Beijing-Shanghai Railway, with its own Yangtze River cargo
terminal, transportation is very convenient. Nisco is a key large-scale enterprise group in Jiangsu Province, China. It now has a production capacity of 3 million tons of steel and 4 million tons of steel. Nisco has complete production system and auxiliary system such as mining, coking, sintering, pelletizing, iron making, steel rolling, etc. The business scope involves iron and steel production, distribution, design, transportation, real estate, culture, tourism and international trade. The company has formed a cross-regional and cross-border industrial group with steel industry as its main business, financial capital operation and science, industry and trade as an integral whole.

2.2. Financial Shared Cloud

Financial Shared Cloud is a financial shared service management model that combines various types of technologies such as big data, mobile internet, cloud computing, RPA robots, etc., to provide users with high-quality financial services in the cloud technology, which is highly comprehensive. The concept of financial cloud was first born in 2005 and formally put forward by ZTE Corporation in 2011. With the accelerated pace of social and economic development, enterprises' demand for financial management continues to grow, which in turn led to the construction of China's first financial shared service center. The role of the financial cloud is to promote the transformation and upgrading of enterprise financial management, realize the centralization and sharing of financial capabilities, and become the largest data center within the enterprise while supporting diversified data collection, collation, and analysis, thus promoting the digital development of enterprise financial management. Driven by modern information technology, finance has been given more expectations and positioning, and utilizing this new form of financial management model will become a key factor in promoting the development of enterprises [1].

In the context of the era of “Internet +”, building a financial sharing cloud and reducing operating costs through the financial sharing cloud is the most direct way to promote enterprises to achieve higher economic benefits. At the same time financial sharing cloud is also one of the important means for enterprises to improve their own productivity. The second is that the financial sharing cloud can help the group of companies on their overall control ability, but also help companies to improve the quality of their products or services [2].

3. Background and Process of Introducing Financial Sharing Cloud in Nisco

3.1. Time

Nisco started to build a financial sharing cloud in 2019 and officially went live in March 2020 to operate.

3.2. Background of Nisco's Establishment of Financial Sharing Cloud

Focusing on the digital new economy and the goal of “digitalization of all business and digitalization of all business”, NSC enters the era of digital intelligent operation with the support of digital rapid customization research and development system, QIS whole-process intelligent quality prediction system, advanced planning and scheduling system, advanced cost prediction system and e-commerce system. With the development of the enterprise, the original financial management structure and system cannot meet the development needs of the company. With the help of information technology, around the goal of “intelligent finance”, continue to promote efficient and intelligent financial management has become a new topic of financial transformation. “Financial sharing is the first major battle of Nisco's digital transformation!” The statement of Huang Yixin, Chairman of Nisco, very clearly indicates the important positioning of the financial sharing program.

3.3. The Basic Process of Establishing Financial Sharing Cloud in Nisco

In general, the enterprise construction of financial shared cloud needs to be combined with the actual situation of the enterprise, make sufficient preparations, the main work includes five parts:
change the idea of operation and management, select the address of the cloud platform of the financial
shared service center, determine the operation mode of the cloud platform of the financial shared
service center, and establish a sound and perfect information system [3]. Nisco has adjusted on the basis
of the specific situation of the enterprise. The digital transformation of the enterprise's finance has been
completed through the following four steps.

3.3.1. process re-engineering

Nisco firstly standardizes enterprise management through unified accounting rules, unified
business processes and unified audit rules. Make the enterprise internal control process, such as
standardized SOP process, to achieve the enterprise key control process, improve the group's financial
standardized management level, and strengthen the financial risk management and control
capabilities.

3.3.2. Organizational change

Secondly, through the establishment of a standardized, platform-based financial sharing team to
achieve centralized business processing, to complete the reform of personnel centralization; and then
the basic financial functions to further specialize the division of labor, to create an accounting factory,
to improve the efficiency of financial processing, to complete the functional specialization.

3.3.3. Establishment of a financial sharing system

Control measures then need to be systematized, with the aim of reducing human intervention and
subjective judgments, and monitoring the economic operations of subsidiaries in real time; and work
processing needs to be made efficient to support leaders and employees in using fragmented time to
report and approve accounts from any location. Improve work efficiency and respond quickly to
business needs.

3.3.4. Promoting management improvement

Finally, by promoting the integration of industry and finance, i.e., taking the financial sharing
platform as the interface, realizing the integration of industry and finance in data and management,
as well as the whole process of financial control and operation and multi-dimensional data collection,
providing management data support for it. In short, the financial sharing cloud construction is
committed to strengthening the control ability and improving management efficiency, helping the
company's dual main business high-quality development.

4. Analysis of Nisco's Model and Effectiveness of Utilizing Financial Sharing
Cloud

![Figure 1. Nisco Financial Sharing Cloud Level 1 Structure Graph]
Fig. 1 shows the first-level structure diagram of Nisco to create the Financial Sharing Cloud, which contains a total of 10 processes, i.e., expense reimbursement to payment process, procurement to payment process, sales to collection process, asset management process, general ledger to report process, tax management process, fund management process, physical file and image management process, business and financial integration process, and group and segment integration process. Nisco creates the financial sharing cloud in this order and links the financial status of subsidiaries to the headquarters through the financial sharing cloud. The following analyzes the utility of the financial sharing cloud for Nisco from three aspects.

4.1. Group Management

Considering from the perspective of the group's industry and finance integration, Nisco has constructed a financial data center with the financial sharing system, financial accounting system, capital system and tax system as the core, and realized the organic linkage of each business system in the “industry and finance ecosystem” through the formulation of the solidified standards and rules, so as to promote a high degree of integration of the four aspects of “industry, finance, capital and tax”. The financial sharing center is a strong measure to strengthen the financial control of the Group. Nisco has launched the construction of the financial sharing center since August 2019, and has successively realized the business on-line of expense reimbursement-to-payment, sales-to-collection and procurement-to-payment through four processes. At present, it has basically completed the project's three-phase on-line target, and completed the release of multi-currency and multi-language overseas platforms ahead of schedule. Nisco focuses on the construction goal of the Intelligent Sharing Center, and by promoting the application of AI+RPA robots and other technologies, it starts from the aspects of intelligent accounting, intelligent auditing, and intelligent tax filing, replaces high-frequency and repetitive labor, releases manpower, and realizes the reduction of cost and increase of efficiency and the enhancement of internal control.

For the above technologies, after integrating them into the financial shared cloud, the cost of financial work can be reduced by 30%-40% compared with the traditional financial work mode; compared with the operation cost of the early financial shared service center, the cost can also be saved by 20%-30%, which will bring considerable profits to the enterprise [4].

To improve information security and file management efficiency, Nisco started to implement electronic file management system. By linking ERP, sharing platform, invoice management system, image management and other systems, the electronic management of accounting information has really taken shape.

Data governance is the core of turning data into data assets. The purpose of establishing a financial sharing cloud at Nisco is threefold. First, the establishment of the data indicator system and data map, the formation of data and indicator analysis model, and the completion of the financial management report and cockpit data source combing. Secondly, the data governance specifications are clarified, and data collection, cleaning, processing, modeling and storage are carried out based on the Nisco big data platform. Thirdly, we plan and implement reports and indicators to analyze and display, and establish BI reports and Kanban boards to meet the analytical needs and visual display of each management level. The third objective is also to realize the goal of group control.

4.2. Business Financial Integration (BFI)

The specific realization path for traditional digital business finance convergence consists of the following two aspects. The first is the convergence of business and financial data. Utilizing artificial intelligence technology, centralized management of enterprise financial data and business data, making the enterprise business system and financial system work together efficiently, and promoting the deep integration of enterprise business and finance. Then there is process optimization. Intelligent shared accounting can realize the integration of intelligent reporting, intelligent approval and intelligent auditing in enterprises. Intelligent filling can automatically fill in enterprise data and realize automated internal reconciliation and report consolidation processing. Intelligent approval can
automatically sort out the approval process, reduce redundant links, and guarantee the compliance and fairness of the approval process. Intelligent audit can automatically detect abnormal data and improve the accuracy of data through automated technology [5].

Nisco operates in the four dimensions of strategy and budget management, operation management, cost management, investment and financing management, and performance management in the integration of industry and finance. By improving the application system of management and accounting tools, it enhances the systematic support capability of finance to business.

In recent years, through the continuous digitalization construction, Nisco has deeply promoted the application of management accounting tools. The application of management accounting tools such as operation cost method, target cost method, environmental protection cost and quality cost management has effectively enhanced the value creativity of finance, and provided strong financial support for the company's lean management and cost reduction and efficiency enhancement.

Nisco's finance team continues to promote the evolution of the financial statement cycle to real-time and support the construction of real-time enterprise. By eliminating information asymmetry and continuously improving and optimizing the systematization of financial information, the goal of one-day closure of accounts for the Ministry's statements and “T+2” reporting of business performance snapshots was achieved at the beginning of 2019.

The Basic Guidelines on Management Accounting issued by the Ministry of Finance of China in June 2016 pointed out that “management accounting should be embedded in the relevant fields, levels and links of the unit, based on the business process, utilizing management accounting tools and methods, and organically integrating finance and business”. This puts forward a programmatic guidance on the integration of business and finance. That is, by using the tools of management accounting to all aspects of the business group, so that the financial work plays a role at both the macro and micro levels, while guiding business activities and serving the strategic objectives of the enterprise, and ultimately realize the effective integration of finance and business [6].

Nisco complies with this guideline and integrates the management and accounting tools in the financial sharing cloud to realize the deep integration of business and finance.

4.3. Management Accounting Synergy

The Financial Sharing Cloud is a prerequisite for management accounting collaboration.

From the organizational structure level, the separation of financial post functions and the adoption of flat management by the Financial Shared Service Center have laid the foundation for the subsequent construction of the organizational structure of the management accounting system. On this basis, the functions of financial positions are gradually transformed into management accounting.

From the perspective of personnel reserve, the financial shared service center lays a human resource foundation for the development of management accounting. Under the shared model, management accountants have more opportunities to stand in the front-end of the business, examine financial issues from the business perspective, manager's perspective, and strategic perspective, and improve their ability to build business models and analyze and make decisions in the process of practice, which will make the career path planning of management accountants clearer and clearer.

In terms of system requirements, the financial shared cloud is an integral part of the management accounting system. The financial shared cloud is essentially an information technology platform, and the construction of a shared service system requires optimization of the business model and process reorganization, which will involve multiple business management links in the management system, and organic integration with multiple systems such as the business processing system, the comprehensive budget management system and the performance evaluation system.

From the data relationship, built from management needs, the model of financial sharing cloud is likely to be richer and more diverse, which will also make it the most important group-level data support platform for integrating accounting data, budget data, capital data, asset data, cost data, external benchmarking data, and other information related to enterprise management decision-making [7].
Nisco has gradually constructed a management accounting reporting system for different levels and an internal management accounting reporting process, which comprehensively empowers the company to make accurate decisions in terms of management-accounting synergy. In order to enhance the ability of lean management and decision-making support, in recent years, Nisco have made efforts to build a smart financial cockpit system, which focuses on financial indicators such as operating performance, capital management, ROE, etc., and realizes the dynamic management of thresholds and standardized values by continuously improving and evolving the financial accounting and management reporting system to support upward aggregation, downward drilling, and deviation management, so as to satisfy the needs of managers at different levels, and ultimately make the cockpit become the lens, microscope, and binoculars of enterprise management.

Taking the business performance cockpit under construction as an example, there are three core objectives: firstly, to decompose the responsible subjects layer by layer to meet the needs of managers at different levels; secondly, to analyze the key factors affecting the financial indicators item by item, combined with the dynamic management of thresholds and standard values, to support the management of the degree of deviation from the three dimensions of comparing with the budget, comparing with the same period and comparing with the counterparts; and thirdly, to promote the transformation of finance, and the future finance should be integrated with the business, the customers and the counterparts to build up the ability of converting the financial language to the language of the business and achieve the depth of the integration of the industry and the finance.

The visual display platform is an important means for the cockpit to realize decision support, so the PC version and mobile version of the business performance cockpit were designed to optimize the display model of the visualization platform by combining BI, digital twin and data visualization technology.

In the future, there may also be a need to explore the application of sand table deduction technology, sand table technology provides a powerful scenario simulation function, according to the policy, the market and other internal and external environmental changes, to support the enterprise management analysts to conduct real-time business sand table deduction; to assist decision-making layer to complete a comprehensive, scientifically sound insight into the analysis and decision-making judgment.

5. Conclusion

In today's world of rapid development of digital technology, enterprises cannot avoid the need to carry out digital transformation to keep up with the changes of the times, financial digitization can just help enterprises to start the transformation. As the data center of the enterprise, shared services can make up for the shortcomings in the speed of distribution, and help enterprises achieve more efficient financial management.

By establishing a financial sharing cloud, Nisco has entered the stage of enterprise digital transformation by realizing the digital transformation of the Group's finance in three aspects, i.e., "group control"; "business and financial integration"; and "management accounting synergy".

In terms of group control, by establishing a complete online declaration process for expenses and revenues and applying AI+RPA robots to replace high-frequency repetitive labor and reduce manpower, we have successfully achieved cost reduction and efficiency. Follow-up on the creation of an electronic file management system to electronically manage information and turn data into an effective asset. In the integration of business and finance, the systematic support capability of business and finance is realized through the tools of management and accounting, eliminating most of the information asymmetry problems, so that the lean management and cost reduction and efficiency of the enterprise have been given strong financial support. In terms of management-accounting collaboration, the Financial Sharing Cloud provides a strong foundation for management-accounting collaboration, including human resources and information technology platforms, to meet
the needs of different management levels of the enterprise and to promote the transformation of finance.

From the use of the Financial Sharing Cloud by the Nisco, we can also deduce that the Financial Sharing Cloud is more suitable for use in enterprises with a large scale, a wide range of businesses, international development, and a high degree of business diversity. In the future, with the popularization of digital technology and the reduction of the cost of using digital technology, small and medium-sized enterprises are also expected to be able to use financial sharing cloud and other digital technology to improve the ability of enterprises in all aspects.

References