

FINANCIAL MANAGEMENT INNOVATION OF BEIJING ENTERPRISES WATER GROUP LIMITED IN THE CONTEXT OF DIGITAL TRANSFORMATION: EFFECTIVENESS AND IMPLICATIONS

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Abstract: In the wave of digital transformation, BEWG has realized a remarkable leap through financial management innovation. It has deeply reshaped its financial management system by utilizing advanced technologies such as the financial shared service center. Digital transformation not only greatly improves the efficiency and accuracy of financial processing, but also promotes the intelligent process of financial management. Relying on the information-based monitoring platform and technologies such as RPA and OCR, NCCW realized automated processing and standardized management of financial data, effectively reducing human errors and accelerating data processing speed. At the same time, through the close integration with the business system, it realizes the seamless connection between finance and business, builds a comprehensive financial management knowledge base and intelligent customer service system, optimizes the management process, and improves the operational efficiency and service quality. The practice of BEWG has proved that digital transformation is a key driver of financial management innovation, injecting new vitality into the development of enterprises. This successful case provides valuable experience for the water sector, that is, enterprises should actively adopt new technologies and accelerate the intelligent transformation of financial management to meet future challenges and achieve sustainable development.

Keywords: Digitalization; Financial management; Financial sharing; Sustainable development

1 INTRODUCTION

With the advancement of the global wave of digitization and the rapid development and popularization of digital technologies, all industries are actively exploring and practicing digital transformation, with a view to achieving sustainable development of enterprises through the introduction of new technologies and other means. In recent years, China has attached great importance to the development of digitalization, clearly put forward the Digital China Strategy, and issued a number of relevant policies to encourage and support enterprises to carry out digital transformation. For example, the Notice on Accelerating the Digital Transformation of State-owned Enterprises issued by the General Office of the State Council of China in 2021 clearly states that it is necessary to consolidate the foundation of digital transformation, accelerate the digital innovation of industries, comprehensively promote the development of digital industrialization, and create a model for the demonstration of digital transformation of industries, among other decisions. Secondly, with the rapid development of big data, cloud computing, artificial intelligence and other digital technologies, the water industry is also facing unprecedented opportunities for change. Digital transformation can help companies achieve intelligent management, improve operational efficiency, reduce operating costs, and promote the industry to a greener, low-carbon, sustainable direction. Finally, as a leading enterprise in the industry, Beijing Enterprises Water Group Limited has a huge business scale and complex operation system. The traditional financial management model has been difficult to meet the needs of the rapid development of the enterprise, so it is necessary to improve the efficiency and quality of financial management through digital transformation, to provide strong support for the high-quality development of the enterprise.

In view of this, this paper selects Beijing Enterprises Water Group Limited as the main research object, to understand the digital transformation strategy of enterprise financial management, to study and explore the impact of the financial management innovation of Beijing Enterprises Water Group Limited on enterprise financial measures in the context of digital transformation. The research in this paper has important theoretical significance and practical significance, first of all, through the in-depth study of Beijing Enterprises Water Group Limited as a typical case, it can further understand the specific impact of digital transformation on enterprise financial management, the role of the mechanism and its implementation path. This helps to reveal the intrinsic connection between digital transformation and financial management innovation from the theoretical level, enriching the existing financial management theory. Second, combined with the case of Beijing Enterprises Water Group Limited, this paper discusses the application of digital transformation in the financial management of this enterprise and the changes it brings, as well as how financial management can be innovated in the context of digital transformation and how it can adapt to the new market environment and management needs. Thirdly, Beijing Enterprises Water Group Limited provides a template for other enterprises to learn from. These successful cases can not only help other enterprises reduce the trial-and-error costs of digital transformation and accelerate the process of their financial management digitization, but also inspire enterprises

to explore unique financial management innovation paths according to their own characteristics, thus promoting the development of the whole industry in the direction of digitization and intelligence. Finally, the digital transformation practice of Beijing Enterprises Water Group Limited provides new research cases and materials for the discipline of financial management. Through in-depth study of the digital transformation process and financial management innovation practice of Beijing Enterprises Water Group Limited, its applied financial management model can be widely used and promoted in other enterprises.

2 THEORETICAL BASIS

2.1 Digitalization Theory

Digital transformation is a profound and wide-ranging process of change, which is not just a simple upgrade or replacement of the existing technological framework, but is rooted in the solid foundation of the enterprise's digital transformation and comprehensive upgrading, and further touches the company's core business areas. The essence of this transformation lies in the innovation of technological means to promote enterprises to cross the traditional boundaries, and explore and build a new business model that has never been seen before and is highly adaptive to market changes and customer needs. Its core pursuit is to lead enterprises to transform from the traditional operation mode to a new form of enterprise with data as the core and technology as the driving force, and to realize a high-level transformation of the enterprise in multiple dimensions, such as strategy, organization, process, products and services. In this process, a lot of complex and variable information is transformed into quantifiable and analyzable figures and data, and then based on these figures and data, enterprises establish precise digital models, transform these models into a series of codes and introduce them into the computer system for unified processing, which is the basic process of digitization, aiming to bring more efficient and smarter operation mode and business innovation for enterprises through data-driven.

2.2 Information Island Theory

Information silo is a phenomenon that cannot be ignored in the contemporary information technology environment. It refers to the phenomenon of functionally unrelated interactions, non-sharing and interchange of information, and disconnection of information from business processes and applications between different systems, departments or individuals due to various reasons in an environment where information technology is widely used. The challenge of information silos is prevalent in both business, government organizations, and broader societal information systems. Information silos are usually manifested in four forms: firstly, data silos, i.e. data between different systems or departments cannot be effectively integrated, forming data barriers, leading to data redundancy, inconsistency and even conflict, which seriously affects the accuracy and value of data; secondly, system silos, which refers to the fact that although there are multiple information systems, there is a lack of the necessary interfaces and protocols between these systems to realize the windless transmission and exchange, resulting in functional isolation between systems; then business silos, which is mainly due to irrational business process design or poor interdepartmental collaboration, resulting in poor articulation between business segments, impeded information flow, affecting the overall fluency and efficiency of the business; and finally, control silos, which is mainly reflected in the disconnect between the intelligent control equipment and control systems and management systems, which makes it impossible for the management to obtain real-time access to critical This is mainly reflected in the disconnection between intelligent control equipment and control systems and management systems, making management unable to obtain key data in real time and effectively monitor and adjust business processes. The reasons for the formation of information islands are complex and varied, mainly including: irrational organizational structure, poor communication and collaboration, single technical function and the stage of information technology development.

2.3 Process Reengineering Theory

The revolutionary management concept of process reengineering theory, initially proposed by Michael Hammer and James Champy in the United States, has not only profoundly affected the management practices of global enterprises, but also led to a profound change in the operational efficiency and competitiveness of enterprises. Specifically, process reengineering is a systematic process, which requires companies to first conduct a comprehensive and in-depth review of all internal processes, and identify those core processes that are critical to business performance and strategic development. Subsequently, through the introduction of innovative thinking and technology, these processes will be completely redesigned and optimized, aiming to break the long-established traditional mode of operation, which may have become rigid and inefficient. This process is not just a simple restructuring or optimization of processes, but a fundamental reshaping of the logic of business operations.

3 LITERATURE REVIEW

3.1 Effectiveness of Digital Transformation

In recent years, with the rapid development and popularization of science and technology, digital transformation plays an important role in the development of enterprise change, and many scholars conduct in-depth research on digital transformation. The effectiveness of digital transformation presented in the existing academic results can be summarized in the following aspects:

In the context of the booming development of the contemporary digital economy, the digital transformation of enterprises has become the core driving force to promote the high-quality development of enterprises, and is an effective way to comprehensively enhance the comprehensive competitiveness of enterprises[1]. First, in the context of the digital era, Nie Xingkai et al. argued that digital transformation can significantly enhance the comparability of accounting information[2]. From the perspective of accounting information transparency and corporate governance level, Sun Dezhi and Xu Ling'en pointed out that with the increase of digitalization, the comparability of accounting information shows an enhanced trend[3]. It is argued that the transparency of accounting information and the level of corporate governance play a key role in the digital transformation to promote the enhancement of accounting information comparability. Meanwhile, regarding the research on the impact of digital transformation on corporate technological innovation, related scholars have the following findings: first, digital transformation has become a catalyst for promoting corporate technological innovation; second, by alleviating financing pressure and reducing two types of agency problems, digital transformation significantly drives the enhancement of corporate technological innovation; third, in the context of fierce market competition, weak audit supervision, low equity checks and balances and a low proportion of independent directors, the positive effect of digital transformation on firms' technological innovation level is more significant. This finding further confirms the significant value of digital transformation in promoting technological innovation in enterprises[4]. Second, in terms of studying the improvement path of accounting information quality, the degree of digital transformation of enterprises is positively correlated with the improvement of their accounting information quality and brings stronger governance effects for enterprises. Based on the core motivation and specific mechanism of agency theory, digital transformation can effectively reduce multiple agency costs and optimize the internal control mechanism, thus achieving significant improvement in accounting information quality. At the same time, digital transformation can also reduce real surplus management, improve the comparability of accounting information, and reduce the simultaneous fluctuation of the company's stock price, fully demonstrating the positive effects of corporate governance[5]. The depth of enterprise digital transformation significantly improves the effectiveness of internal control, and the significant increase in the effectiveness of internal control is more obvious when the competitive environment of the product market is intense and the life cycle of the enterprise is in the non-growth period[6]. As a core factor of accounting information governance, digitalization plays a key role in optimizing corporate governance structure and mitigating the managerial agency problem, which in turn promotes the quality of accounting information-accounting robustness of enterprises[7].

3.2 Factors Driving Innovation in Financial Management

As a key means of value creation and value-added financial management, it is urgent to continuously innovate the management mode and management thinking to meet the needs of enterprise development. The traditional financial management model gradually shows its limitations, and it is difficult to keep pace with the rapid development of contemporary enterprises, and even hinder the development of enterprises, resulting in the emergence of development bottlenecks. Therefore, financial management innovation has become an inevitable choice for enterprises to break through the development bottleneck. Especially in the context of today's digital era, multiple external factors and internal dynamics intertwine to promote financial management innovation[8]. First of all, the integration of industry and finance has become a major trend in the development of today's finance, in this context, the traditional financial management model has been unable to meet the growing business volume of the current situation, the integration of industry and finance under the perspective of enterprise financial management innovation is imminent[9]. Secondly, in the context of the big data era, enterprise financial management is faced with many problems, such as: some enterprises are still using the traditional financial management model, the concept of financial management is outdated: under the influence of the traditional sloppy management mode, the management technology lagging behind and other problems still exist, the implementation of information management is not in place; the enterprise financial risk management system has defects. Financial management informatization construction has become a major trend of development[10]. Finally, Ding Shenghong and Zhou Hongxia corroborate the theoretical innovation of financial management of different types of enterprises believing in different corporate values through the case information of Haier's financial management practice innovation[11]. They summarized the law of financial management theory innovation of different types of enterprises at different economic stages. They believe that there are two factors of financial management innovation, the first point is the evolution of the material-based economic development concept of the human-based economic development concept, but also to change the basic view of enterprise financial managers on the innovation of enterprise financial management. The second point is that different economic development concepts dominate the development of different economic innovations, and in this process, different types of enterprise values dominate different types of enterprise financial management theory innovation[11].

4 CASE INTRODUCTION

4.1 Introduction to Beijing Enterprises Water Group Limited

Beijing Enterprises Water Group Limited (hereinafter referred to as “BEWG”) is a flagship enterprise of Beijing Enterprises Group Company Limited focusing on water resources recycling and water ecological and environmental protection. Since its successful listing in the Hong Kong stock market in 2008, the company has always been focusing on the core areas of efficient recycling of water resources and water ecological and environmental protection. The company integrates diversified functions such as industrial investment, planning and design, construction, operation and maintenance, professional and technical services and capital operation, and its water treatment capacity ranks among the best in the same industry in China.

BEWG 's extensive business territory not only covers all provinces and autonomous regions in China in depth, involving more than a hundred prefectural-level cities, but also crosses the border and extends to eight countries, including Malaysia, Singapore, Australia, New Zealand, Portugal, Angola and Botswana, to build up a globalized service network. The total number of water treatment facilities and township wastewater treatment projects operated by the company has reached 1,370, with a total daily treatment capacity of 44,886,000 tons, demonstrating its strong operational capability and service scale.

Adhering to the business philosophy of “customer-centered, innovation-driven development”, NWCL has formulated the strategic goal of “asset scale, technology and management innovation as the engine, promoting business transformation and upgrading, improving operational efficiency and realizing sustainable development” as the core. The company is actively embracing the wave of digital transformation, and is committed to becoming a world-class integrated water and environmental services provider trusted by the industry and leading the future, and constantly moving towards the pinnacle of the environmental protection field.

4.2 Beijing Enterprises Water Group Limited Digital Transformation Process

4.2.1 Multi-stage evolution of financial shared service center construction

Initial decentralized and small-scale exploration stage. From 2017 until 2020, based on the complexity of personnel integration and the importance of business continuity operations, BEWG has adopted a geographically decentralized strategy to establish miniaturized financial shared service centers in more than twenty regions, aiming to initially achieve the physical centralization of financial processes. However, at this stage, due to the decentralization of services and the limited volume of business in each region, accounting standardization and quality face challenges, limiting the full release of the scale effect of financial sharing.

Transformation of the single-center full-mode pilot phase. 2020 October, BEWG officially launched a centralized financial shared service center construction project, after ten months of careful preparation, successfully completed the whole process from planning, design, site selection to trial operation. The project makes full use of information technology, closely focuses on user needs, promotes profound changes in financial management functions, realizes efficient integration of financial accounting and fund settlement through in-depth reengineering of business processes, and lays a solid foundation for building a professional, intelligent and service-oriented financial organization.

Intra-group promotion and standardization stage. Since July 2021, BEWG has extended the successful experience of financial shared services to more than 400 subsidiaries within the group, established the transfer of financial data as a top priority for management optimization, and formulated 35 strict transfer standards and implemented the “source management” strategy to strengthen the audit and rectification of accounts. Currently, the center is located in Qingdao, with two core sections, namely transaction processing and operation support, providing a full range of financial shared services for the group’s member companies, including document auditing, financial accounting, fund settlement and file management, and the annual processing volume of documents has exceeded 950,000 sheets.

4.2.2 Digital technology drives the deepening of financial sharing practices

Optimization of direct linkage between banks and enterprises to promote efficient processing of documents. Relying on the data analysis capability of the information monitoring platform, NWCL Water has refined the division of financial functions and systematically optimized business processes, thus significantly improving the efficiency of document processing. At the same time, relying on RPA technology, it has realized seamless connection with eight major banks, including China, agriculture, industry, construction and recruitment, etc. The function of direct linkage between banks and enterprises supports one-key batch payment, which shortens the time for each payment from 5 to 10 minutes to an average of 5 seconds, and improves the efficiency of the overall documents and payment by more than 60%.

In-depth integration of business and financial processes to strengthen integrated management. BEWG Financial Shared Service Center has comprehensively sorted out and reconstructed the whole chain of processes from business to finance, established 78 standardized business scenarios, and subdivided the financial functions into seven key areas of accounts receivable, accounts payable, reimbursement, general ledger, tax, funds and file management, and implemented a centralized approval mechanism. On this basis, BEWG has promoted the integration of business and finance, broken the phenomenon of data silos, built a close data interaction ecology with procurement, operation, sales, human resources and other systems, front-loaded the business and finance data rule setting, and strengthened the ability to collect source data. Through the implementation of standardized processing procedures, BEWG precisely identifies and solves the breakpoints in cross-departmental systems and processes, and significantly improves the integration and standardized management level of financial data.

Digital technology empowers and strengthens the cornerstone of intelligent finance. The Financial Shared Service Center of BEWG has built a smart financial ecosystem with smart budgeting, funding, reporting, accounting, reporting, analysis, archiving and sharing as the core elements, relying on the dual-drive mechanism of “data + processes” to

realize the unified input and output management of financial data. As an intelligent processing center for financial data, the center not only enhances the degree of information structuring and accessibility, but also makes full use of OCR and other cutting-edge recognition technologies to achieve automatic capture of external data such as invoices, itineraries and standardized processing of internal document formats, which further improves the speed and accuracy of data processing. In addition, BEWG has also established a comprehensive financial management knowledge base and intelligent customer service system, integrating resources such as management system, operation guidelines and FAQs, providing users with a more convenient and efficient service experience through the combination of intelligent Q&A and manual service, effectively enhancing service satisfaction and user loyalty.

5 CASE ANALYSIS

5.1 Analysis of Financial Measures

From the above digital transformation history of BEWG, it can be seen that its transformation has gone through three stages, this part collects financial data related to BEWG from 2013 to 2022¹, and carries out a comparative analysis before and after the transformation from the four aspects of the relevant measures of solvency, operating capacity, profitability and development capacity, to further explore the impact of BEWG's financial management innovation in the context of digital transformation.

5.1.1 Solvency analysis

The water industry is usually characterized by large scale of investment, long return period and slow capital recovery, etc. These characteristics make water enterprises need a large amount of financial support in the process of expansion. BEWG in the development process, in order to expand market share and enhance competitiveness, need to continuously invest in capital for the construction and operation of new projects. These projects often require huge capital investment, and debt financing is one of the important ways to obtain these funds. Banks and other borrowings account for a high proportion of its liabilities. These determine that the gearing ratio of the BEWG is usually higher than 60%. Figure 1 shows the changes in the gearing ratio of the BEWG over the past ten years. It can be seen that over the past ten years, its gearing ratio has shown some volatility, starting in 2018 in decreasing and slightly increasing in 2022. Although a higher gearing ratio is likely to increase the financial cost of the enterprise, it also reflects that the group has a strong financing ability and market recognition. Figure 2 demonstrates the change of current ratio and quick ratio of BEWG. From Figure 2, it can be seen that the current ratio and quick ratio of BEWG have certain fluctuations, but overall maintained at a relatively good level, there is a certain difference between the current ratio and quick ratio, but the difference is very small. Compared with 2013 and 2014, the rest of the year, the two declined by a relatively large percentage. However, in general, the current ratio and quick ratio show a fluctuating upward trend. At the same time, the values of both are also fluctuating around 1, both of which reflect the strong short-term solvency of the BEWG. Comprehensive analysis of long-term solvency and short-term solvency of the two aspects of the relevant measures, reflecting the impact of digital transformation on the solvency of the BEWG – to a certain extent, to Improve the overall solvency of the group.

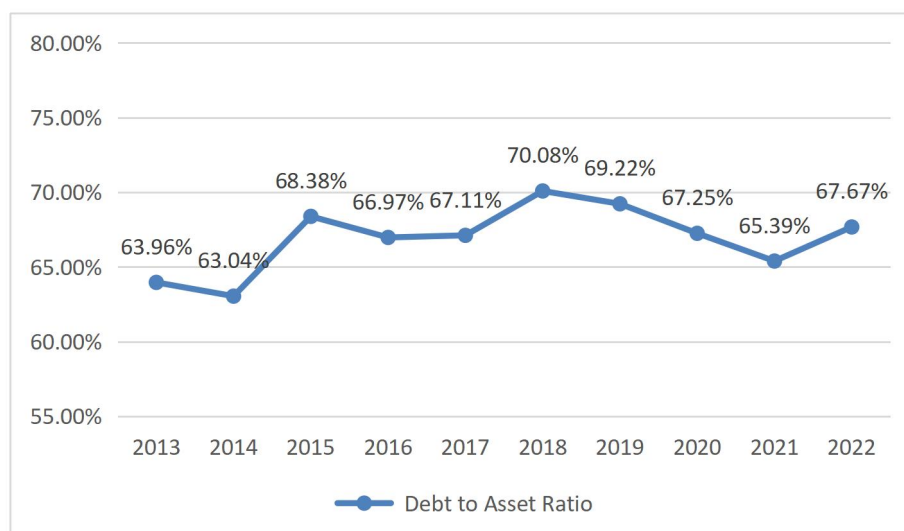


Figure 1 BEWG Trend of Debt to Asset Ratio 2013-2022

¹ The currency unit of the financial statements of the BEWG will be changed from HKD to RMB in 2023, so in order to maintain the accuracy and comparability of the data, the data for 2023 has not been selected.

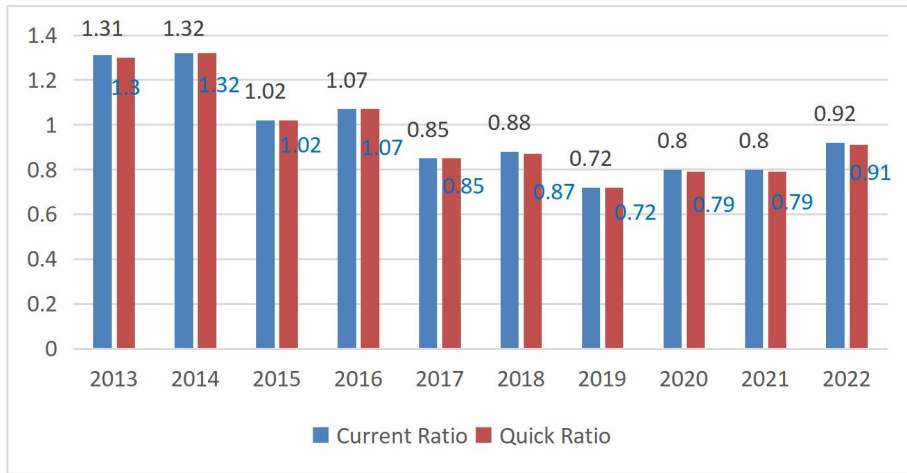


Figure 2 Trends of Current Ratio and Quick Ratio of BEWG 2013-2022

5.1.2 Operating capacity analysis

Operating capacity reflects the enterprise’s ability to utilize and manage assets, the paper analyzes the impact of digital transformation on the operating capacity of BEWG by selecting four financial data measures, namely, inventory turnover ratio, current asset turnover ratio, total asset turnover ratio and accounts receivable turnover days from 2013 to 2022.

Current asset turnover and total asset turnover reflects the efficiency of the enterprise’s utilization of assets, from Figure 3 we can see that the current asset turnover and total asset turnover reached a peak in 2017 and 2016, respectively, and then began to show a downward trend, current asset turnover decreased by 37.78%, the former fluctuation is larger than the latter, according to the financial statements of the relevant data to be analyzed, the reason is that the change in asset size is higher than the change in sales revenue. Analysis shows that the reason for this is that the change in asset size is higher than the change in sales revenue, and the backlog of inventory among current assets is one of the more important factors causing the growth of current assets. Figure 4 shows the trend of inventory turnover ratio and accounts receivable turnover ratio of BEWG, from which we can see that the inventory turnover ratio and accounts receivable turnover ratio reached a peak in 2017, and showed a fluctuating downward trend after that, and the decline in accounts receivable turnover ratio reflects the increase in the proportion of enterprise sales revenue and credit sales revenue in sales revenue. BEWG has carried out a series of business restructuring in recent years, actively laid out overseas projects and continuously explored new development strategies. With the rapid development of the environmental protection industry, the market competition faced by BEWG has become increasingly fierce. Combining the constant changes of various internal and external factors, the efficiency of asset utilization of the BEWG has declined, and its operating capacity has declined. Overall, the financial digital transformation has an average ability to influence the BEWG.

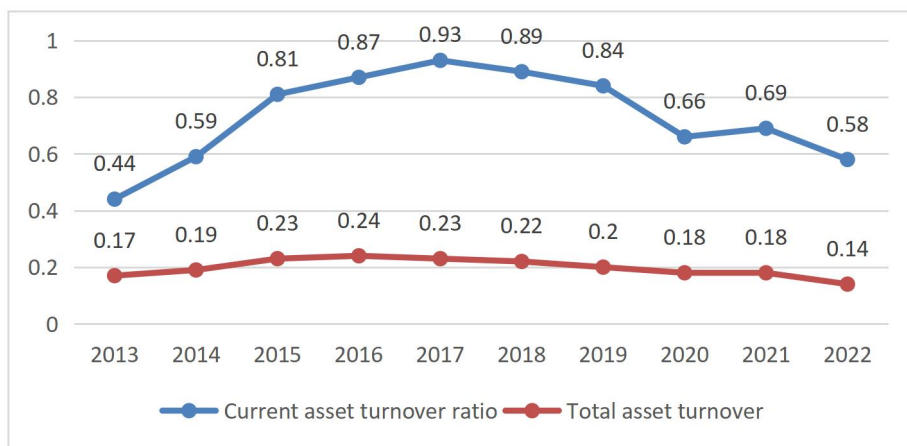


Figure 3 Trends in Current Asset Turnover Ratio and Total Asset Turnover Ratio of BEWG, 2013-2022

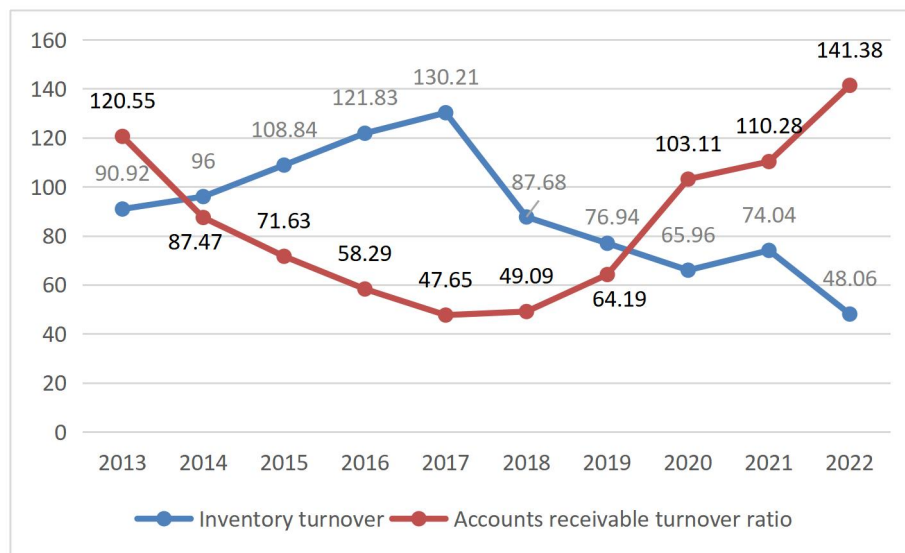


Figure 4 Trends of Inventory Turnover Ratio and Accounts Receivable Turnover Ratio of BEWG 2013-2022

5.1.3 Profitability analysis

Based on the analysis of the profitability perspective of sales revenue, the BEWG from 2013 to 2022 net asset margin and net sales margin basically maintained at a relatively stable level, 2020 to 2022, a more substantial decline, it is not difficult to see the trend of the two convergences. Overall, its operating income profit showed a relatively good upward trend during the period. It was mainly affected by factors such as the epidemic and the macroeconomic environment, which led to an overall decline in the Group’s performance. The net cost and expense margin fluctuated within a bit of a range during this decade, being relatively more stable from 2019 to 2021, and showing a substantial decline in 2022. Overall, the Group has performed well in controlling costs and expenses. The decline in 2022 is mainly due to the cost of goods sold remaining at a high level despite a substantial decline in net profit. The high cost is mainly due to the growth in actual water treatment volume and the increase in raw material cost and electricity cost.

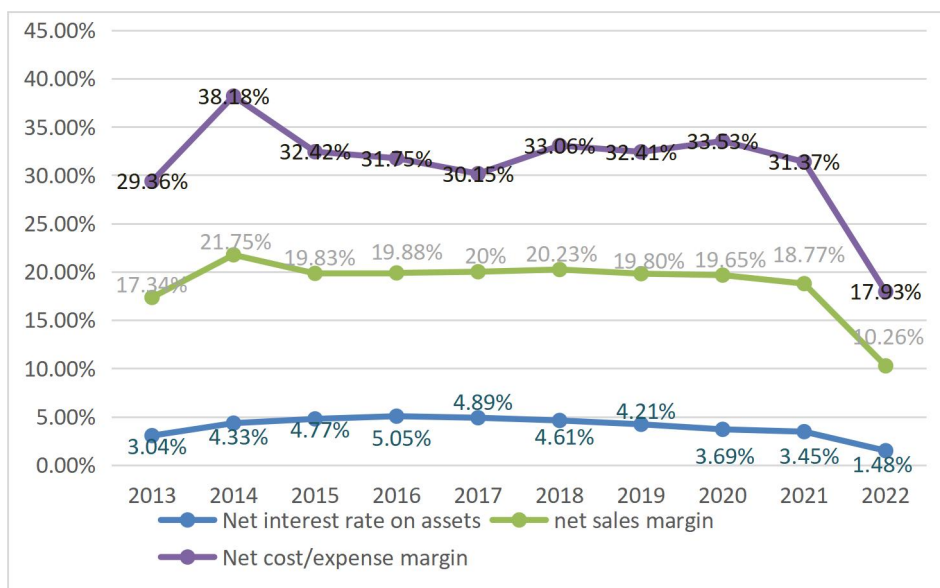


Figure 5 Trends in Profitability Related Measures for BEWG 2013-2022

From the analysis of asset-based profitability perspective, ROA and ROE of NCC Water Group generally show a fluctuating trend in amplitude, and ROA and ROE are generally on the rise between 2013 and 2018, and the Group’s ability to obtain benefits from the use of shareholders’ equity and the efficiency of asset utilization have gradually improved. From 2019 to 2022, ROE has a large decline, mainly due to the relative decline in net profit. ROA also shows a fluctuating downward trend, probably due to the rapid expansion of asset size and the relatively slow return from assets.

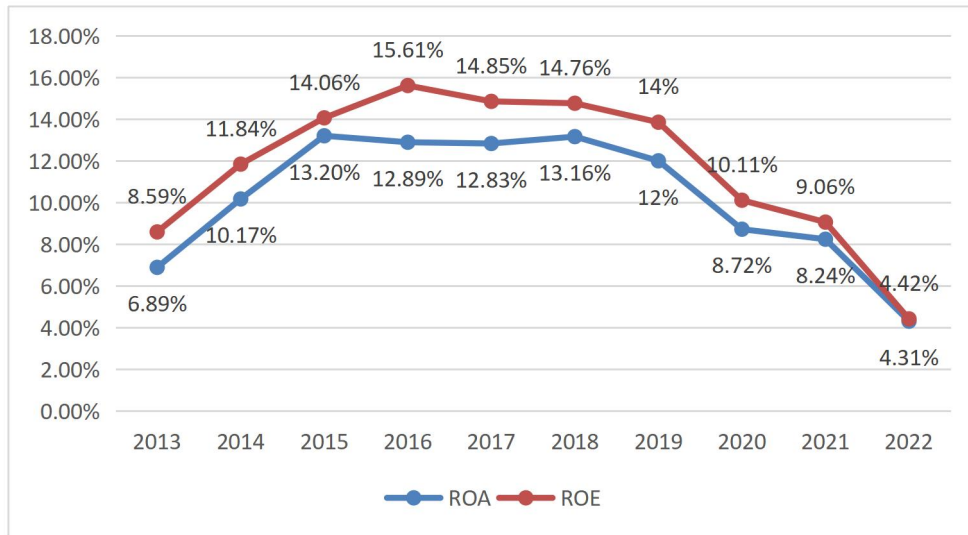


Figure 6 ROA, ROE Trends of BEWG, 2013-2022

From 2019 to 2022, affected by the new crown epidemic, the market situation has deteriorated, and it is more difficult to carry out business, and corporate benefits have been affected accordingly. Comprehensive analysis of various influencing factors to see the BEWG from the start of the digital transformation in 2017, the profitability of the relevant measures has appeared a positive development trend, financial digital transformation on the profitability of the BEWG has also produced a positive effect.

5.1.4 Development capacity analysis

Figure 7 shows the trend of changes in the growth of net profit, sales revenue and profit of BEWG. From Figure 7, it can be clearly seen that the trend of profit growth rate and net profit growth rate change is basically consistent, with a difference in 2017 and 2018, which is due to the fact that some subsidiaries enjoy tax incentives in 2017 and 2018, and the effective tax rate for the China business is 14% and 20% respectively. From 2013 to 2022, the Group’s sales revenue showed an overall growth trend, with the highest growth rates of 71.85% and 51.28% in 2013 and 2015, respectively, benefiting from the continuous expansion of the Group’s water market and the diversification of its business. 2020 and 2022 saw a certain degree of decline in sales revenue, which was related to the changes in the macro-economic environment and market competition factors that have intensified. Figure 8 illustrates the trend of the asset growth rate and equity capital growth rate of the BEWG from 2013 to 2022. During the ten years selected for the data, except for 2022, the asset growth rate of NCC Water Group is greater than zero, indicating that the asset size of the Group has increased and expanded relatively fast in the past ten years, and the asset growth rate in 2021 reaches a peak point due to the relative decline in 2020. Analysis of the data shows that the Group’s equity capital growth rate is positive except for 2022, and maintains a flatter fluctuating trend from 2017 to 2012, implying that the Group’s growth rate has slowed down. However, on the whole, the equity capital of the NCCW Group still remains at a high level and possesses a strong development capability.

From a general point of view, analyzing all factors together, the development capability of the BEWG shows a good trend of positive development.

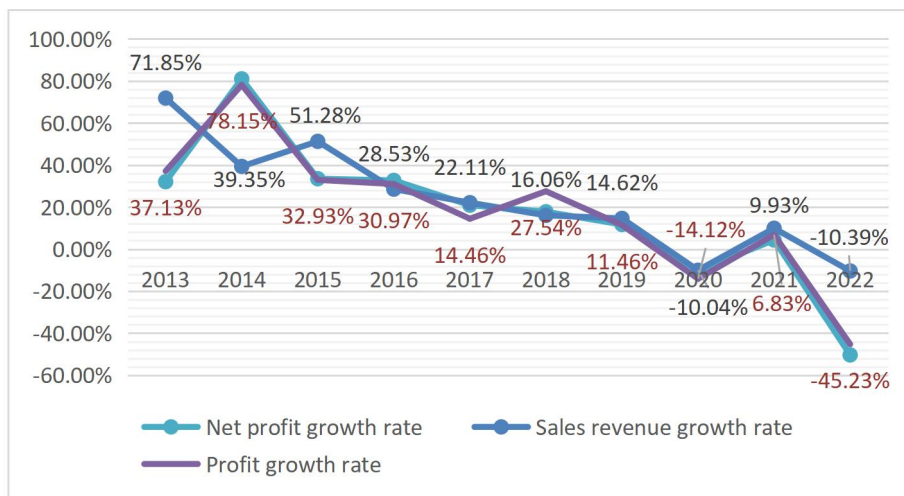


Figure 7 Trends in measures related to the development capacity of BEWG, 2013-2022

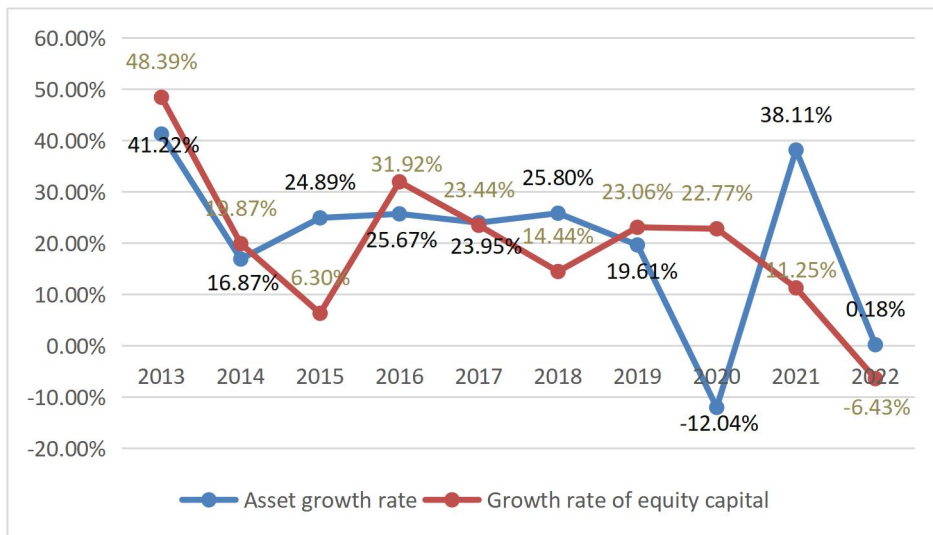


Figure 8 Trends in Asset Growth Rate and Equity Capital Growth Rate of BEWG, 2013-2022

5.2 Analysis of non-financial measures

The analysis of non-financial measures focuses on the in-depth analysis of the three dimensions of market position, innovation ability and social responsibility of BEWG from 2013 to 2023, to further study the impact of financial management innovation of BEWG in the context of digital transformation for BEWG.

5.2.1 market position

In 2018, it is the first year of the “dual platform” strategy of BEWG, and the light asset transformation of BEWG is also ready to set sail. In order to adapt to the changes in the internal and external environment, BEWG actively adjusts its strategic layout, and in the annual work conference in 2019, it determines its work objectives and development direction as asset-light transformation and high-quality development. Figure 9 shows the changes in the market capitalization of BEWG from 2014 to 2023. As shown in the figure, after the implementation of the asset-light model, the market capitalization of BEWG has increased, but the growth has been fluctuating, and in general, the increase has been low. In 2019, under the background of the tightening of environmental protection policies, water companies are facing higher requirements and market opportunities, and the market demand continues to grow. The country’s investment in environmental protection and water resource management has broadened the development space of enterprises such as BEWG, which leads to fluctuations in the industry cycle, thus affecting changes in market value. In light of the market and industry environment, BEWG is still in a good position to develop after implementing the asset-light model.



Figure 9 Changes in market capitalization (adjusted) 2014-2023 for the BEWG

5.2.2 Innovation ability

BEWG also continues to innovate. Figure 10 shows the key milestones and achievements in the process of technological innovation and digital transformation of BEWG from 2015 to 2023. In 2015, BEWG realized technological achievements in the fields of drainage and energy saving of sewage plants, and built a number of demonstration projects. In 2016, it innovated the capital cooperation mode, established a technology research and development platform, and promoted key technological breakthroughs. In 2017, digital transformation In 2019, BEWG explored the practice of intelligent water services based on 5G industrial Internet. 2020, BEWG created an intelligent enterprise with management digitization, promoted intelligent business with business digitization, issued relevant strategic guidelines, and stimulated the awareness of innovation within the enterprise. 2021, BEWG, in the context of digital transformation, set up the Beijing Enterprises Yuehui Digital Technology Platform In 2023, BEWG actively launched an innovation event platform to promote innovation results and carry out management and operation innovation. In terms of management innovation, it will build a “delivery integration platform”; in terms of operational innovation, it will focus on frontline employees to improve operational technology, equipment, processes, etc., so as to achieve the effects of improving work efficiency, saving costs and improving quality.

To sum up, BEWG has set a benchmark in the water industry through continuous technological innovation and digital transformation during the period from 2015 to 2023, and it is more obvious that BEWG has more innovative possibilities and opportunities after the digital transformation, and these innovations not only enhance the market competitiveness of the enterprise, but also bring more growth points for the enterprise.

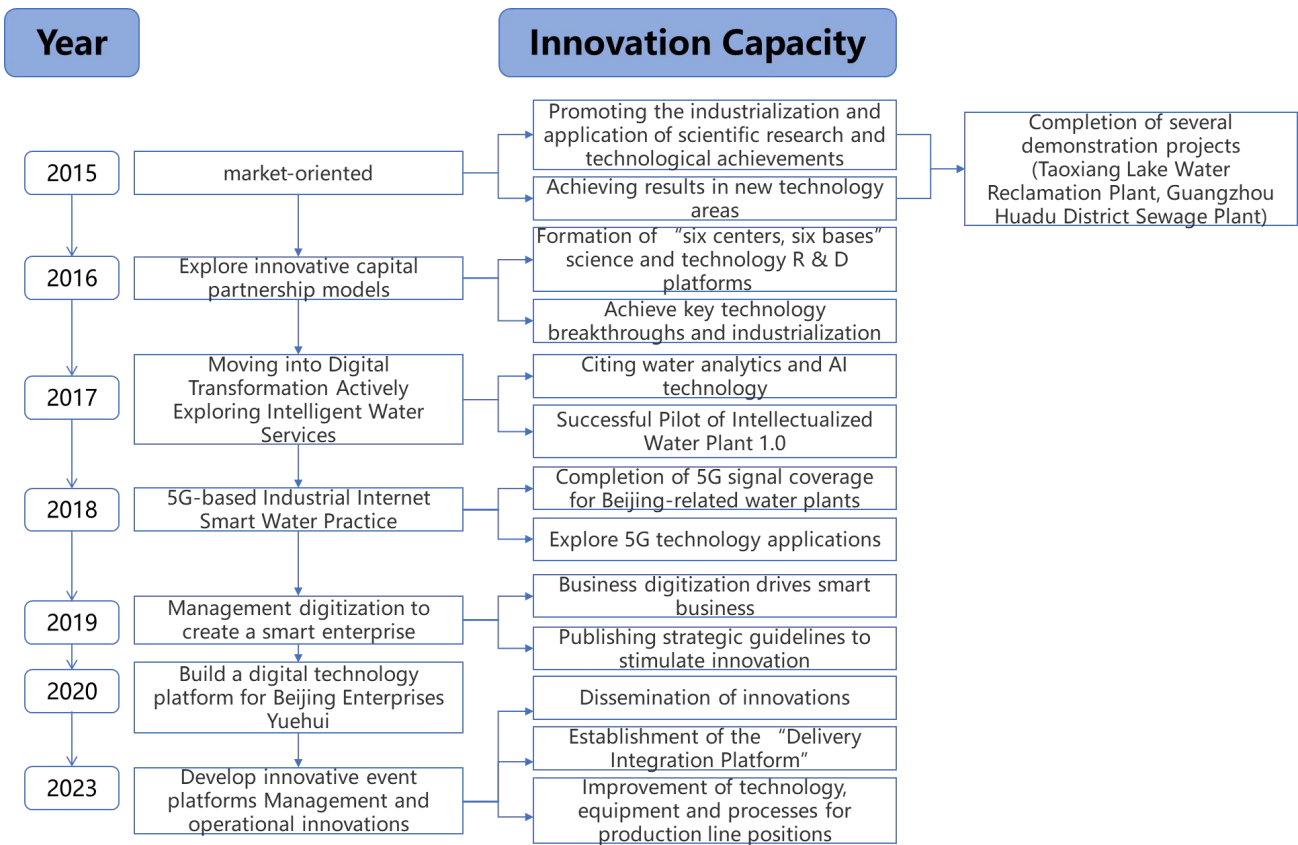


Figure 10 BEWG Innovation Process Map

5.2.3 Social Responsibility

BEWG is deeply committed to the recycling of water resources and ecological environmental protection, and has integrated the concept of sustainable development into its development strategy. In 2015-2016, BEWG made deep efforts in wastewater treatment projects, and the effectiveness of wastewater treatment was significantly improved. By the end of 2015, the total scale of wastewater treatment plants reached 13.05 million tons per day, benefiting areas including 26 provincial administrative regions in China and 2 overseas countries. By the end of 2016, there were a total of 452 sewage treatment facilities, with a sewage and reclaimed water treatment capacity of 15,957,000 tons per day. In 2017, BEWG actively explored intelligent water services, and as of the end of 2017, BEWG was involved in the operation of 788 sewage facilities. In 2018, BEWG implemented the digital “twin” plan for sewage plants, through the use of cloud computing. “ plan, through the use of cloud computing, big data analysis and other technologies, to build a number of highly efficient intelligent water plant pilots, and as of the end of 2018, the intelligent transformation of 12 water plants had been realized. after 2019, BEWG adopted an asset-light strategy, efficiently integrating resources, and

the effectiveness of wastewater and water supply management was remarkable. In 2020-2023, after the implementation of the asset-light strategy, the effectiveness of wastewater treatment is remarkable, with continuous innovation and improvement year by year. For example: the use of medium water after sewage treatment as a heat source to provide heating and cooling protection for working and living areas; BEWG adheres to independent innovation and develops a new technology for sewage treatment - Anaerobic Ammonia Oxidation (ANAMMOX), which significantly reduces the energy consumption for aeration and the production of sludge compared with the traditional process, and helps to reduce the emission of greenhouse gases.

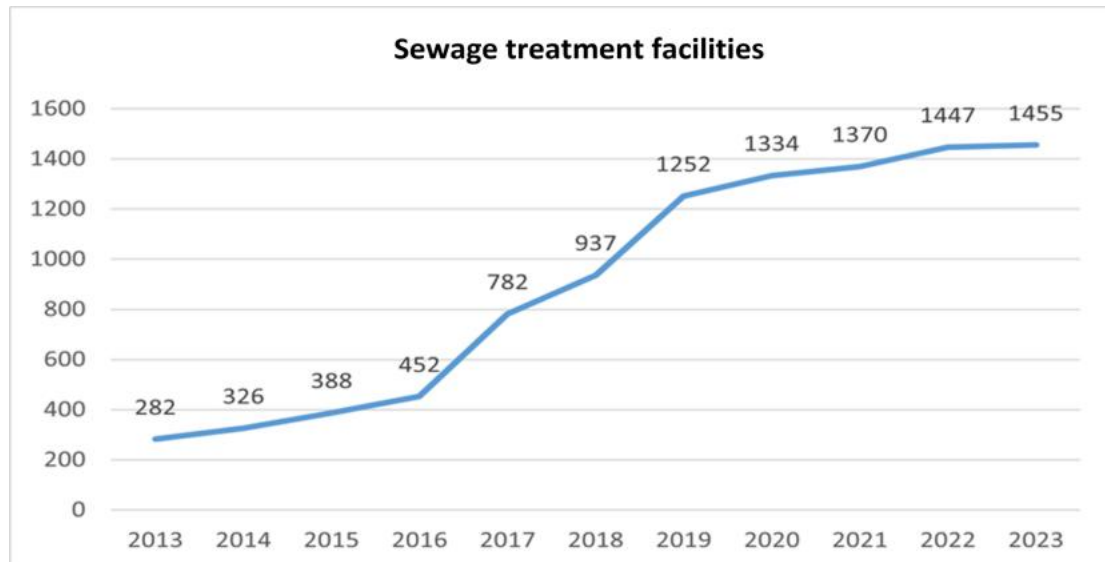


Figure 11 Sewage treatment facilities

In summary, the growth trend in wastewater treatment facilities from 2013 to 2023, with an accelerated growth trend in 2019, also confirms that companies are better able to innovate and develop against the backdrop of digital transformation, and that the resulting new results are better able to proactively take on social responsibility and further enhance the Group's impact.

6 CONCLUSION

This paper screens and analyzes the relevant data of BEWG from 2013 to 2023, aiming to comprehensively reveal the impact and changes triggered by the group's innovative practices in the field of financial management in the wave of digital transformation. During this decade, with the rapid development of information technology, BEWG has actively responded to the call of the times by deeply integrating digital technology into all aspects of financial management, which has not only reshaped the traditional financial management model, but also injected new vitality into the sustainable development of the enterprise. This paper comprehensively explores the impact of financial management innovation in the context of digital transformation through an in-depth analysis of financial and non-financial measures, and draws the following specific conclusions:

In the process of implementing digital transformation, BEWG, through the multi-stage evolution of the construction of the financial shared service center and the deepening of digital technology-driven financial sharing practices, its solvency, profitability and development capacity have shown a positive development trend, and its operating capacity has declined due to the impact of the market environment, business adjustments and other factors. However, there are still certain problems in the process of transformation, such as: risk control of liabilities, optimization of operational efficiency, and coping with the impact of external factors in order to enhance the stability of profitability. In addition, the implementation of asset-light transformation of BEWG, its market position has been improved, and its innovation ability has been strengthened, while assuming more social responsibility, and its continuous investment in environmental protection technology and digital management has enabled it to play a positive role in promoting the green transformation of the industry. However, its market position is affected by factors such as market environment and industry cycle, and its market capitalization shows fluctuating growth. In summary, in the context of digital transformation, BEWG has not only significantly improved its financial performance, but also promoted comprehensive innovation and development. This success story provides valuable experience and inspiration for enterprises in the same industry and even in other fields, i.e., embracing digital transformation is a must for realizing financial management innovation and enhancing enterprise competitiveness. And BEWG will further uphold the concept of sustainable development and continue to deepen its work in water services.

COMPETING INTERESTS

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