

Optimizing Research on Intelligent Financial Decision Supporting System: A Case Study of Financial Analysis Function

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Abstract: Financial decision-making is an important part of enterprise financial mechanism, which is directly related to the formulation and implementation of incentive mechanism and supervision mechanism. With the development of Internet technology, intelligent financial decision support system (IFDSS) has gradually emerged and become a new direction of financial transformation for many enterprises. However, due to the lagging concept of financial management and the imperfection of financial system, the application of intelligent financial decision support system is restricted. Therefore, taking the function of financial analysis as an example, this paper discusses the current situation and problems of financial decision support system in enterprise application, and provides optimization solutions, in order to provide reform ideas for enterprise financial system optimization.

1. Research background

1.1 Literature review

The research of intelligent financial decision support system is inseparable from the model of financial analysis. Cao Xiaoli studied the current situation and characteristics of financial analysis, and discussed the methods and existing problems of financial analysis (Cao,2014). Lu Xia also studied financial analysis methods and problems, and gave detailed solutions from data processing, staffing, analysis process and so on. It provides a good reference and guidance for the follow-up content research of the article (Lu,2014). Moreover, scholars have provided a lot of information about intelligent decision-making. By introducing the intelligent financial decision-making system now used by relevant enterprises, Bao Quanlei explained to a certain extent how to turn the traditional financial decision-making system to the direction of intelligent development, which provided a good reference for the transformation of enterprises(Bao,2015). Pan Huiping integrates the intelligent financial decision support system into the enterprise, carries out systematic analysis and research, and explains how the enterprise integrates the system into the current enterprise development(Pan,2016). Ma Lu explained how to apply the intelligent financial system to the financial decision-making of enterprises from the aspects of data warehouse, data mining and artificial intelligence technology through the construction of the intelligent financial decision-making system of enterprises(Ma,2013).

1.2 Purpose of research

The development of the company is inseparable from the introduction and optimization of various systems. The success or failure of a company depends not only on the strength of the managers, but also on whether the managers can manage the company in an orderly way. Every manager has his own management system, which helps the company run normally. Successful managers are active in finding loopholes in the system. In addition to correcting them in time, they are also keeping pace with the times. As an indispensable part of the company's development, financial decision support system affects the prospects and future of enterprises. At present, most companies'financial decision support systems remain in the traditional mode, which leads to confusion in decision-making and brings huge economic losses to some enterprises. The content of

financial decision support system can cover almost all levels of enterprises. Although each link has a strong connection, once a link due to personal reasons leads to data deviation, the whole system will be paralysed. The result is a great waste of time, manpower and material resources. This paper aims to introduce the current status and characteristics of intelligent financial decision support system and financial analysis. Then it introduces the problems in the development of financial analysis, such as slow data acquisition, disordered analysis process, single method and poor quality of personnel, and puts forward relevant solutions, and intelligently integrates financial decision support system into it for optimization research. It provides reference for enterprises to introduce intelligent financial decision support system in the future.

2. Development of intelligent financial decision support system and financial analysis function

2.1 Development of intelligent financial decision support system

The information age not only brings convenience to people, but also promotes the emergence and development of intellectualization. Informatization makes intelligence gradually integrate into people's family life, company development and other channels. It includes the financial decision-making system used in enterprises. At present, the process of world economic globalization is accelerating, and the competition among enterprises is becoming increasingly fierce. It is a great challenge to promote enterprise reform and optimize all links. Financial decision-making refers to making reasonable and feasible plans, The aim is to optimize enterprise objectives. For example, how do enterprises control their own profit maximization and cost minimization? Therefore, for enterprises, improving the financial decision-making system plays an irreplaceable role in the development and prospects of the company. In the past, the financial system of enterprises was relatively weak, and most of them were manual responsibility. So for many traditional enterprises, optimizing the internal structure and solving the key links are of great help to the transformation of the company.

The advantage of Intelligent Age is that it can filter and extract the information of big data. For example: we are familiar with intelligent audio, according to people's different needs to understand the content of personal preference. The development of enterprises is also inseparable from intellectualization. Intelligent Financial Decision Support System (IFDSS) refers to the coverage of intelligence under the premise of financial decision-making. Intelligent Financial Decision Support System (IFDSS) effectively integrates business, finance and artificial intelligence, and quickly extracts the content needed by the company. But at present, most enterprises still adhere to the traditional financial decision support system. Therefore, the promotion of intelligent financial decision-making system has become one of the important contents at present(Yang,2018).

2.2 Characteristics of financial analysis function

Financial analysis is a means of evaluating relevant content information of enterprises. Financial analysis can provide accurate information and basis for the current situation and future of enterprises and other related information. Moreover, there are many methods and tools for financial analysis to be chosen by analysts. Through financial analysis, enterprises can understand the internal production management and external decision-making, and play an important role in prediction, assessment, planning and evaluation. Financial analysis, as an important part of company budget related projects, has been cited by many companies. However, most of the existing problems of companies are single methods, the content of financial analysis is obsolete, resulting in a lot of errors in the data content of many companies. As an important economic management activity, financial analysis plays an important role in promoting economic development. So at present, the company should pay attention to financial analysis and constantly update the current financial analysis methods and contents. With sound financial analysis, intelligent financial decision support system can play a key role in integrating into the company. At the same time, as two systems of the company, one has existed for a long time and the other is facing reform. Financial analysis and intelligent financial decision support system need to learn from each other, optimize

their own structure, and strive to improve the content of each link. In view of this, if the intelligent financial decision support system is to be developed and well optimized, it is necessary to learn all kinds of mature models to fill the existing loopholes, such as maximizing the advantages of financial analysis.

3. Existing problems of financial analysis function

3.1 Data acquisition is slow and accuracy is poor

At present, most enterprises save data in the form of reports, but in the aspect of records, data errors are caused by carelessness of employees. Moreover, some enterprises are mostly historical information when they analyze financial or other aspects of content. Therefore, there is a great lag in data, poor accuracy, can not keep up with the current era of evaluation indicators. In the financial aspect, the authenticity of the data determines the profit and loss of the enterprise. However, human factors often lead to errors in data and inaccurate analysis results, resulting in irreparable losses. Moreover, in the process of financial analysis, it is easy to produce artificial subjective initiative, and it is also unable to ensure the accuracy of data and the final results of impact analysis. Moreover, due to the lag of historical data and information, the financial statements are not accurate enough.

3.2 The analysis process is disorderly and inefficient

At present, the financial analysis of most enterprises is mostly personnel operation, even if the data is accurate, but often there will be the problem of multi-submission. Since most enterprises have more departments, they need to distribute the data to relevant departments after they come out. As a result, leaders require departments to submit data on the spot. On the one hand, there are many forms of data, on the other hand, they increase the workload. Because of the large amount of enterprise data and information, the system is cumbersome, and many data also need manual operation. Throughout the whole process, staff members have been under great pressure to aggregate data and submit them, and they are unable to continue to undertake financial analysis work. In addition, if there are large enterprises with more subsidiaries, the workload of data aggregation and submission will be even greater. The parent company will not only make it more difficult to collect these data, but also cause some valuable information to be omitted. In addition, most companies do not adopt the latest analysis methods in the face of complex financial data, resulting in confusion in personnel arrangements and overall inefficiency.

3.3 The method of analysis is single and restrictive

There are many methods used in financial analysis. For example, commonly used include: comparison, ratio and factor analysis and so on. Some large enterprises with subsidiaries only adopt a single analysis method because they receive a lot of financial data, so they are not comprehensive and scientific in the process of financial analysis. And because of the experience inertia of the financial personnel in the company, many financial personnel will use their own familiar methods when they use financial analysis. Thus, in the process of the development of the company, it will lead to the stagnation of a certain part of the content. Neglected the relevance of financial analysis methods, limited the company's development. In addition, the application of various methods in financial analysis of enterprises is still relatively backward, and it is difficult to achieve the desired results. Financial analysis relies too much on data, and backward methods can easily lead to errors in financial reports.

3.4 The overall quality of personnel is different and the error is large

The overall quality of financial analysts in most enterprises varies from high to low. The preparation of financial analysis reports generally requires professionals, and some are unfamiliar with the overall process. Moreover, in terms of academic qualifications, some enterprises have low requirements, which often leads to new employees do not understand the relative workflow. In addition, some financial analysts are older, and their knowledge is limited to the framework of the past. They are less observant of new things and are reluctant to learn. At the same time, because of

the difficulty of financial analysis as a whole, staff are unwilling to accept it.

4. Research on optimizing financial analysis function in intelligent financial decision support system

4.1 Optimize data channels to ensure authenticity

In the era of intelligence, information can be freely accessed at any time and anywhere. And in the era of intellectualization, all data exists in the background in a digital form. So companies can extract all kinds of information content from large data platforms in various forms. Therefore, after the introduction of intelligent financial decision support system, most companies can not only optimize the channel of financial analysis, but also make the storage of information more convenient. On the one hand, the intelligent financial decision support system can broaden the channels of information acquisition, on the other hand, it can centralize and optimize the complex data. The key lies in the intelligent financial decision support system. Through the financial analysis method, the data can be integrated into the intelligent decision-making, so as to help decision-makers make predictions or know the method that is conducive to the direction of the company's development. Big data platform provides strong channel support for company data storage, so it is also very helpful for the authenticity of information.

4.2 Segmenting work structure and optimizing resource allocation

Firstly, enterprises should make clear the division of labor and have special staff responsible for financial analysis and operation of intelligent financial decision-making system. A clear division of labor will not result in job confusion and data errors. Secondly, in the process of financial analysis, we should optimize the financial analysis mode to ensure the integrity of the financial analysis method.

4.3 Enhancing personnel consciousness and multidimensional analysis

As an important part of enterprises, financial analysis can promote the operation and management of enterprises. Therefore, the selection of personnel should first have a sense of responsibility. Responsible people can accomplish their own tasks well. Secondly, it is necessary to motivate more employees and stimulate their own enthusiasm. An employee who knows how to make progress can contribute to the future of the company. It can also promote employees to realize the importance of company data and improve the efficiency of enterprise management. Furthermore, we should strengthen the ideological awareness of financial personnel. Improve the efficiency of financial analysis to ensure the effective progress of enterprises.

4.4 Using financial analysis for reference to reasonable use of intelligent decision-making

Intelligent Financial Decision Support System (IFDSS), as one of the systems introduced by enterprises at present, can not promote the development of enterprises without standardized operation methods. As a mature part of the enterprise, financial analysis has a perfect process and system, so when guiding the intelligent financial decision-making, it will speed up the integration of the system and the enterprise, so as to better serve the company. Financial analysis provides more ways and means to promote the development of enterprises. Intelligent Financial Decision Support System (IFDSS) is a newly introduced decision-making system. Financial personnel can use the mature theoretical knowledge of financial analysis for reference and quickly apply the model to the company. Provide better and faster support for the company's follow-up intelligent decision-making.

5. Conclusion

The optimization and perfection of intelligent financial decision support system needs a long process. The company needs to continue to explore for a long time, optimize the intelligent financial decision support system with the proper mode, and achieve the process of integration into

the company system. It includes drawing lessons from the mature mode of financial analysis, introducing the existing problems of financial analysis in the company's development, and solving countermeasures. Through the advantages of financial analysis, the intelligent financial decision support system is optimized to avoid all kinds of unnecessary errors in the future development process, resulting in losses to the company.

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