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## INFORMATION-ANALYTICAL SUPPORT OF THE MANAGEMENT PROCESS IN THE ENTERPRISE: STRUCTURE, ADVANTAGES AND DISADVANTAGES

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### ІНФОРМАЦІЙНО-АНАЛІТИЧНА ПІДТРИМКА ПРОЦЕСУ УПРАВЛІННЯ ПІДПРИЄМСТВОМ: СТРУКТУРА, ПЕРЕВАГИ ТА НЕДОЛІКИ

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*In the process of modern enterprise management, information analysis support is an extremely important part. Information analysis support involves all aspects of enterprise management such as human resource, financial, production and sales.*

*The purpose of this study is to explore the importance of information analysis in business management and study the information needs of enterprises in the current situation, summarize the types of information and study the latest information analysis methods and steps.*

*The information should be used in the process of regulation can be classified into six types (macro information, industry information, competitor information, enterprise performance information, target consumer information and social humanities information).*

*The main activities of the information analysis process consist of identifying information needs, collecting information, analyzing information, evaluating and improving the effectiveness of information analysis.*

*Information analysis plays an important role in the management of a company, namely information analysis can reflect the objective situation of enterprise management; information analysis can help enterprise managers to make more reasonable decisions and plans; information analysis is conducive to the full play and utilization of information.*

*Information analysis must be based on reliable numbers. Only accurate figures can draw the correct point of view, and provide a reliable basis for managers' decisions. Improving information quality is a long-term and arduous task. Only when the accuracy of the information is guaranteed can the information analysis be carried out effectively.*

*The companies are gradually increasing the importance of information analysis. By using information analysis, they can guide the correct development direction of the enterprise and assist enterprise decision makers to make correct decisions. Data information is the core of enterprise value. Therefore, enterprises should conduct scientific and effective information analysis to lay the foundation for enterprise development.*

*У процесі управління підприємством інформаційний аналіз відіграє важливу роль. Інформаційний аналіз забезпечує управлінський процес інформацією щодо управління людськими ресурсами, фінансами, виробництвом та продажами.*

*Мета написання статті полягає в дослідженні важливості інформаційного аналізу в управлінні бізнесом та вивченні інформаційних потреб підприємств, узагальненні видів інформації, вивченні новітніх методів, етапів аналізу інформації.*

*Інформацію, яку необхідно використовувати в процесі управління, можна класифікувати на шість типів (інформація макrorівня, галузева інформація, інформація про конкурентів, інформація про діяльність підприємства, цільова інформація про споживачів та соціально-гуманітарна інформація).*

*Процес аналізу інформації складається з виявлення інформаційних потреб, збору інформації, аналізу інформації, оцінки та підвищення аналітичності, достовірності інформації.*

*Інформаційний аналіз відіграє важливу роль в управлінні підприємством, оскільки аналіз інформації може надавати характеристику управлінської системи; аналіз інформації може допомогти керівникам підприємств прийняти більш ефективні рішення та плани; аналіз інформації сприяє найбільш повному використанню інформаційних ресурсів.*

*Аналіз інформації повинен базуватися на достовірних даних. Тільки достовірні дані можуть реально охарактеризувати ситуацію та забезпечити надійну основу для прийняття управлінських рішень. Підвищення якості інформації є тривалим і складним завданням. Тільки достовірна інформація може забезпечити проведення якісного та ефективного аналізу.*

*У сучасних умовах підприємства надають перевагу інформаційному аналізу. Використовуючи інформаційний аналіз, суб'єкти господарювання мають можливість правильного вибору напрямів розвитку підприємства та видів управлінських рішень. Інформація є ціннісним ресурсом підприємства. Тому суб'єкти господарювання повинні проводити якісний аналіз інформації, щоб змоделювати оптимальну стратегію розвитку.*

*Key words: information, information analysis, information support, information optimization, enterprise management.*

*Ключові слова: інформація, аналіз інформації, інформаційна підтримка, оптимізація інформації, управління підприємством.*

## INTRODUCTION

Enterprise management is a general term for planning, organizing, commanding, coordinating and controlling a series of activities of enterprise production and operation activities and is an objective requirement of socialized large-scale production. Enterprise management is to use the human resources, material resources, financial resources, information and other resources of the enterprise as much as possible to achieve the goals of multiple, fast, good and province and to achieve the maximum input and output efficiency.

With the continuous progress of the social economy, the social environment in which enterprises are located has become complicated and changeable, so the management methods of enterprises are constantly changing. The traditional enterprise competition is mainly manifested in factors such as materials and customers. Now more and more enterprises are competing for information. Whether the information is comprehensively obtained, whether the analysis is thorough, and whether the summary and utilization are in place directly affects the enterprise's Business development. For modern enterprises, the level of information analysis affects the development of the entire enterprise. In the development of an enterprise, full use of information analysis can ensure the economic benefits of the enterprise and improve the overall management level of the enterprise. However, in the current enterprise management process, many companies do not attach importance to information analysis, or just carry out some simple information analysis, unaware of the importance of information analysis and do not conduct in-depth analysis of important data in the information. Therefore, in the current enterprise development process, it is necessary to establish a new information analysis system to make it deeply integrated with enterprise management to help the enterprise develop in an all-round way.

## LITERATURE REVIEW

Information analysis is widely used in various industries and many scientists have carried out related research on information analysis: Kuzichkin O., Arskii Yu., Torkunova J., Bondarenko L., Agapitov A., Shaitura S. and others.

## THE PURPOSE OF THE ARTICLE

The purpose of this study is to explore the importance of information analysis in business management and study the information needs of enterprises in the current situation, summarize the types of information and study the latest information analysis methods and steps.

## THE MAIN RESULTS OF THE RESEARCH

With the support of information analysis, enterprise managers can objectively and comprehensively understand the company's operating situation, current market supply and demand and competitors' relevant information. Through the support of information analysis, it indicates the direction of enterprise development for enterprise managers.

Since Frederick Winslow Taylor began implementing management exercises in the late 19th century, information analysis has been used in business. The mathematical foundation of information analysis was established in the early 20th century, but in the late 1960s, when computers were used in decision support systems, information analysis began to attract more attention. Since then, with the development of enterprise resource planning (ERP) systems, data warehouses, and a large number of other software tools and processes, information analysis methods have gradually matured. Therefore, information analysis is the product of the combination of mathematics and computer science [1].

The statistician John Tukey defined information analysis as: "A procedure for analyzing data, techniques for interpreting the results of these procedures, planning

methods for collecting information to make analysis easier, more precise, or more accurate and all methods applicable to information the mechanism and results of analytical (mathematical) statistics" [2].

If the information required by enterprises is classified, it can be divided into six categories: macro information, industry information, competitor information, enterprise performance information, target consumer information and social humanities information.

1. Macro information. Macro information is very important for guiding the future development of enterprises, including macroeconomic analysis, national policy trends and socio-economic environmental information. It is very important for companies to grasp the market environment and determine the strategic direction of enterprises. However, it requires national statistics to provide authoritative information.

2. Industry information. Every company is concerned about the situation of the industry, including the global industry development status, domestic industry trends, industry development trends and related industry trends. This information can help an enterprise provide sufficient guidance in analyzing the development stage of its own industry and how to lead the industry.

3. Competitors. Every enterprise is currently facing a fierce competition environment. Therefore, timely understanding of competitors' trends and analysis of the competitive landscape have become the key information for enterprises to deal with competition.

4. Corporate performance. Whether the enterprise is doing well or not, the customer satisfaction, competitiveness performance, brand performance, etc of the enterprise are all important measurement angles and this information can also help the enterprise to discover various problems of its own management level in time, so as to better maintain the enterprise healthy development.

5. Target consumers. Any company can't do without the target market it faces. Some companies' target consumers are companies and some companies' target consumers are the masses. However, if companies can gain a firm foothold in the market, they must understand the target customers' positioning and goals. Customer needs and consumer information.

6. Social culture. In addition to grasping the macro, meso and the company's own information, a leading company is also very important for companies to understand the changes in the social and human environment. For example, changes in cities, changes in the human environment and changes in social groups often contain companies. Innovative business opportunities [3].

In addition, an enterprise will also generate various data and information needs around the product life cycle it has. For example, during the product introduction period, the information required by the company includes the market environment, market potential and acceptance of new products. In the growth period, the information required by the company includes the product channel status, product advertising effectiveness, regional market demand, etc. During the period, companies need information such as competitor information, market share, consumer satisfaction, and market segmentation; during the recession period, companies need information on opportunities to exit the market, new product development and alternative products.

Information analysis is the process of checking, cleaning, transforming and modeling information. Its purpose is to find useful information, provide information for conclusions and support decision-making. Information analysis has many aspects and methods, including different technologies under various names and is used in different business, scientific and social science fields. In today's business world, information analysis plays an important role in making more scientific decisions and helping companies operate more efficiently [4].

The main activities of the information analysis process consist of identifying information needs, collecting information, analyzing information, evaluating and improving the effectiveness of information analysis [5].

Identify needs. Identifying information needs is the primary condition for ensuring the effectiveness of the information analysis process and can provide clear goals for collecting and analyzing information. It is the responsibility of managers to identify information needs. Managers should propose information needs based on decisions and processes. As far as process control is concerned, managers should identify which information to support, review process inputs, process outputs, the rationality of resource allocation, and optimization of process activities and discover abnormal changes in processes.

Collect information The purposeful collection of information is the basis for ensuring the effectiveness of the information analysis process. The organization needs to plan the collected content, channels and methods. When planning, you should consider:

1) translate the identified needs into specific requirements, such as the information that needs to be collected when evaluating the supplier, which may include relevant information such as its process capability and measurement system uncertainty;

2) clarify who collects the information by whom, when and where;

3) the record form should be easy to use;

4) take effective measures to prevent information loss and false information from interfering with the system.

Analysis information is to process the collected information into results by processing, sorting and analyzing. For example, use the association graph method, KJ method, system graph method, matrix graph method, data analysis method, PDPC method, fishbone arrow graph method to analyze information.

Process improvement. The organization's managers should evaluate the effectiveness of the information analysis by analyzing the following issues when appropriate:

— whether the information provided for decision-making is sufficient and credible and whether there is a problem of decision-making errors due to insufficient information, inaccuracy and lag;

— whether the information plays a consistent role in continuously improving the management system, process and product, whether it is expected to be used, whether the information analysis is effectively used in the product realization process;

— whether the purpose of collecting information is clear, whether the collected information is true and sufficient and whether the information channel is unblocked;

— whether the information analysis method is reasonable and whether the risk is controlled within an acceptable range;

— whether the resources required for information analysis are guaranteed.

The role of information analysis in enterprise management:

1. Information analysis can reflect the objective situation of enterprise management. Conventional information reports and survey information can usually only display a certain aspect or part of the enterprise. Even if the obtained enterprise information report and survey information are comprehensive, it is often difficult to understand the enterprise without corresponding research and analysis. The actual situation, if the enterprise manager uses the wrong information in the decision-making process, it will cause the enterprise to develop in the wrong direction [6]. By collecting and collating enterprise information reports and survey materials and conducting in-depth research and analysis, it can provide enterprise managers with more objectives, systematic and comprehensive

information analysis reports. Comprehensively introduce the actual business situation of the enterprise to the enterprise managers.

2. Information analysis can play a supervisory role in enterprise management. Before conducting information analysis, the information analysis department needs to fully grasp a large amount of objective and true corporate information. Through this process, it can be more comprehensive and truly understand the industry's economic dynamics and the development of enterprise operations, as well as the scope and source of relevant data. It is a good way to promote the implementation of policies by enterprises, complete business plans in time and ensure the effective implementation of various economic indicators of enterprises. It can be said that under the role of information analysis, it can promote the effective implementation of enterprise supervision and management, thereby providing objective and complete reference for enterprise managers to make decisions and formulate enterprise development plans.

3. Information analysis can help enterprise managers to make more reasonable decisions and plans. The decision of the operator directly determines the development direction of the enterprise and the prerequisite for good decision-making is to objectively formulate the enterprise's decision-making and development plan through the understanding and grasp of various information to achieve scientific and orderly management. Information analysis is the specific research and analysis of information. Through the deep content hidden behind graphics and expressions, it fully excavates its essential connotation and summarizes it in the process of deepening understanding. Managers make decisions based on information analysis, which can effectively promote the development of enterprises and increase the speed of enterprise development.

4. Information analysis is conducive to the full play and utilization of information. In order to obtain comprehensive and detailed information, the information analysis department collects and summarizes the information, which is a long and complicated process. However, in actual enterprise management, hard-won information cannot play its due value and the utilization rate of information is very low. The information analysis department conducts comprehensive and in-depth use of information at all levels and in all aspects through in-depth analysis and research of information, so that the content of information is richer and more diversified and it is transformed into information that is effective for the development of markets and enterprises to achieve information reasonable development and utilization.

The problems caused by the application of information analysis in enterprise management:

1. information analysis has not attracted enough attention from personnel at all levels, especially enterprise managers; it is believed that it has little impact on enterprise management and can even be ignored;

2. the information analysis is not in-depth and incomplete, the analysis frequency is not enough, the time is too long and some even half a year or one year without complete information analysis;

3. information analysis has not been institutionalized, standardized and professionalized, which makes the information analysis work unable to last effectively; some company personnel have not yet developed the habit of analyzing their work;

4. a lot of information analysis is only pure accumulation of data, which is not actually combined with work and enterprises and has little effect on business development and overall operation analysis of enterprises;

5. lack of information analysis professionals. Information analysis should not only use a large amount of original information, but also combine with a variety of analysis methods and practices. Only in this way can

problems be more effectively discovered and solved. This is a rather tedious and difficult task, which not only tests the analyst's knowledge reserve, but also his endurance and attitude.

Information analysis must be based on reliable numbers. Only accurate figures can draw the correct point of view and provide a reliable basis for managers' decisions. Improving information quality is a long-term and arduous task. Only when the accuracy of the information is guaranteed can the information analysis be carried out effectively.

Information analysis is based on rich information and on this basis, further processing and analysis. Therefore, enriching information sources and increasing the amount of information that is mastered are important conditions for improving information analysis [7]. For enterprises, information analysis is crucial. In order to increase the importance of information analysis, enterprise managers should require the information analysis department to provide statistical reports and strictly require the link and quality of information analysis to facilitate the orderly development of information analysis [8].

The enterprise information analysis department should adopt a series of different information analysis methods, the main factors of which include dynamic analysis, structural analysis, comparative analysis, predictive analysis and factor analysis, etc., so as to further conduct effective research and analysis of enterprise information and draw conclusions. To provide substantive advice to enterprise managers.

## CONCLUSION

The most important thing is that more and more companies are gradually increasing the importance of information analysis. By using information analysis, they can guide the correct development direction of the enterprise and assist enterprise decision makers to make correct decisions. Data information is the core of enterprise value. Therefore, enterprises should conduct scientific and effective information analysis to lay the foundation for enterprise development.

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