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Research on optimization mode of performance management for circulation enterprise based on information technology

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# ABSTRACT

With the promotion and popularization of computer technology, every aspect of the society can not be separated from information technology. Circulation enterprise especially relies on information technology. In an era of economic globalization, EPR management system is one of the representatives in the operation and management of modern enterprise, and EPR environment provides a good platform for performance management of the enterprise. Balanced Score Card (hereinafter abbreviated as BSC is an important tool for performance management, which can perfectly meet the requirements of strategic management of the enterprise, which can also comprehensively evaluate the performance of strategic operation of the enterprise. ERP information management of the enterprise provides a good environment for the performance evaluation; cooperated with ERP, BSC can have a better performance evaluation effect, which provides more reliable guarantees for long-term development of the enterprise. Through the introduction to relevant theories concerning ERP and performance management, the specific implementation methods and processes for optimal performance management can be concluded, and education optimization mode of circulation enterprise can be accordingly obtained.

# KEYWORDS

Performance management; Formation of mode; EPR management system; Balanced score card.

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#### INTRODUCTION

Traditional circulation activities are led by tangible sales network and tangible commodity sales; enterprise conducts the sales and provides the service by sales network. However, modern information technology broadens the traditional operation concepts and modes. With the constant development of internet, online sales stores can provide cheaper, faster, more convenient and direct-selling service, therefore, they are more competitive.

### Impacts on organization and management mode of the enterprise

Modern information technology has the features such as networking, rapidity, intelligence, distributed processing and information sharing, which provides global-oriented transaction environment, rapid intersecting channel for information exchange, convenient decision-making information and virtual online mall etc. These operation modes have great influences on business management and organization of circulation enterprise; moreover, original management level and management mode of the enterprise are faced with challenges. In the meantime, transformation of operation mode also broadens management modes and management objects of the circulation enterprise; as a result, traditional management mode which takes the internal people, money and commodities as the major management objects is extended to the management mode which takes information, people, money and commodities as the major management objects and which takes internal management and external management as the major contents. At the same time, information system for original artificial internal management of the circulation enterprise will be replaced by active wide area information system integrated with external interaction.

# Impacts on operation and development strategy of circulation enterprise

Firstly, modern information technology is transformed into scientific decision-making of information analysis by replacing the original strategic decision-making method. Modern enterprise must make strategic guidelines for development and optimization plans for enterprise performance that are consistent with the enterprise. Only in this way, the enterprise can meet the social requirements and handle the challenges from different circulation forms, which ensures the enterprise to gain more developments; secondly, based on specific operating mode and strategic decision-making of the enterprise, information system of the enterprise can provide scientific and thorough support; thirdly, based on global sales mode of internet, enterprise can gain more advantages in competitions, which provides guaranties for higher profits.

### Impacts on the functions of circulation

Directness of circulation can be enhanced. In the traditional circulation mode, there are often a lot of middlemen between commodities and consumers, and e-commerce provides a convenient communication channel for manufacturers and consumers, which can guarantee instant and efficient communication. This enables manufacturers directly take part in the circulation process, which further shortens the length of supply chain. Information technology makes sales mode of "integration of production and marketing operations" become possible and traditional circulation enterprises are confronted with an unprecedented challenge. As for the management of supply chain, modern information technology greatly broadens the sphere of circulation and accomplishes the seamless business connections between industry, business and enterprise. The appearance of modern information technology has changed some parts of traditional circulation business modes and circulation patterns; however, circulation itself is strengthened instead of being weakened. Modern circulation modes further improves the positions and roles of circulation in social life. Based on modern information technology, the networking market becomes the core part in economic system.

# RELEVANT THEORETICAL OVERVIEWS ON PERFORMANCE MANAGEMENT OF THE ENTERPRISE

#### Theoretical overviews on ERP

Management system of Enterprise Resource Planning, abbreviated as ERP, is the management platform established on the base of network information technology, which provides the management and staff in the enterprise with strategic decision-making and operation. Based on various resources of the enterprise, ERP mainly utilizes the advanced information technology and realizes information sharing, information management well as integration of capital flow, material flow and information flow. It can take overall control over the whole decision-making process, which can provide instant, precise and scientific basis for the decision-makers in the enterprise to make strategic decisions. The major stages of enterprise resource development are displayed as follows Figure 1:

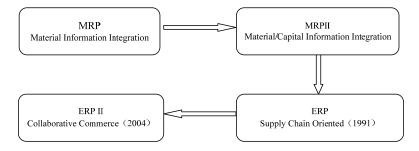


Figure 1: The major stages of enterprise resource development

#### **Basic theories of ERP**

# Basic theories of ERP include the following aspects

- (1) System Settings. This part is mainly for initialization of the system and maintenance of basic data, which conducts unified collection of business in the enterprise and then carries out the corresponding maintenance; therefore, after initiating ERP, relevant information and materials can be obtained quickly, which lay the foundations for the establishment of integrated system information database.
- (2) Capital Management: This part mainly includes financial accounting and financial management. Financial accounting is mainly for recording, accounting, reflecting and analyzing the movement of funds in enterprise activities. Specifically, it mainly includes general ledger module, account receivable module, account payable module, cash management module, fixed assets accounting module, multi-currency module, wage accounting module and cost module. Financial management is mainly for analyzing and predicting the data of financial accounting, which can therefore make sure that the enterprise can manage and control its operating activities in real time. It specifically includes financial plan, financial analysis, and financial decision-making.
- (3) Production Control: As the core module for ERP, it integrates the whole production process and enhances the production efficiency of the enterprise, which optimizes the production procedures and ensures continuous production process so as to prevent the occurrence of disconnected production. First of all, enterprise will make production plans, which, after being decomposed by the system, will be distributed to every department for implementation, and which will be transformed into product plan by the system. Then work loads of all departments will be matched with specific work plan so as to further confirm the needs of the enterprise. Moreover, it can set the dynamic operational plans that change with time.
- (4) Logistics Management: Logistics management mainly includes purchasing management, inventory control and distribution management. Purchasing management determines reasonable order quantity and chooses safe places for storage, which plays the role of tracking. Sales management starts with product sales plan, and the whole process includes detailed scientific managements and statistics of different information such as including sales products, sales regions and sales customers. Inventory management is mainly for controlling the storage volume of raw materials so as to guarantee the normal operation of the whole process.

# Theoretical overviews of performance management

Performance is the key content that draws the attention from modern enterprises. Under the rapidly changing marketing environment, competition gets increasingly fierce, and the survival and development of every enterprise are confronted with unprecedented competition; therefore, enterprises need to enhance constant and stable development of the enterprise by means of performance management.

Performance: As for enterprises and employees, it refers to the investment of various resources such as human power and material resources, and the accomplishment of enterprise objective and employees' tasks in terms of quality, quantity and efficiency in a certain period. In the case of enterprise, performance is used to measure operating conditions of the enterprise. In the case of employees, performance is used to measure the personal working achievements.

Performance management: It means that, according to the development situation of enterprise as well as the industry standard, by choosing proper performance indicator system, enterprise makes open, fair and impartial evaluations on the working performance of different departments and their employees in a certain period of time. On the basis of the evaluation results, proper punishments or rewards could be conducted over the employees' working behavior standards so as to improve management efficiency of the department and set a higher goal for economic profits of the enterprise.

Elements of performance management mainly include enterprise strategy, performance plan, performance coaching, performance evaluation, performance feedback interview, application of performance result, which are all very important during performance appraisal, and which are also indispensable. The errors in any of them will cause performance management of the enterprise to lose application value.

- (1) Enterprise Strategy. Strategy of the enterprise plays a supporting role in the rapid and persistent development of the enterprise. This strategic objective can make the employers realize that, only this kind of performance management can be accepted by the employees and can stimulate their working enthusiasm, which can give a full play to performance management.
- (2) Performance Plan. When the enterprises set the performance plan, they should firstly set the performance indicator. With reasonable performance indicator, employees can learn and understand management objectives and expectations of the enterprise. Enterprises should conduct the guiding work for employees, which inspire them to work towards the common development goals. Of course, enterprises should determine the evaluation standards, which are the measurement criteria for performance management.
- (3) Performance Coaching. As the important stage for the managers and employees to achieve the performance goals by working together, this stage directly affects the final results of performance management. Performance management emphasizes the common evaluation process for employees and managers; during the evaluation stage, the communication between the managers and employees is very important. Communication with managers can make timely adjustment of the deviations caused by employees in this critical stage; besides, if employees encounter difficulties, managers can help them settle the problems in time.

- (4) Performance Evaluation. As the stage for checking and receiving the performance results, it still needs the effective communication between managers and employees. According to the results of evaluation and employees' actual working performances, performance results that truly correspond to reality will come into being and should be instantly fed backed to the employees so that they could determine their own working directions in the future. Rationalities of evaluation system and evaluation skills have great influences on the evaluation, and they even affect the validity of the whole performance; therefore, performance evaluation can not be separated with basic principles of justice.
- (5) Performance Feedback. Managers should feedback the above performance results and make further discussions on the evaluation results, which can enable managers and employees to reach consensus on performance evaluation results. While evaluating the employees, if employees' performances are not satisfying, it can also be a clear recognition stage for employees' own problems, which helps employees discover their shortcomings by themselves and improve their working performances in the future. After reaching consensus, performance goals and tasks in the next stage can be discussed and developed.
- (6) Application of Performance Results. The goal of performance evaluation is to improve employees' working performances so as to improve the performance of the whole enterprise. Therefore, after the evaluation, results of performance evaluation should be used as the basis for bonus distribution, salary adjustment, adjustment of personnel appointment, promotion and demotion etc., which can give a full play to performance evaluation results.

#### IMPLEMENTATION OF PERFORMANCE MANAGEMENT

# **Balanced Score Card (BSC):**

According to statistics, among top global 500 enterprises, most enterprises have carried out BSC system. Many famous enterprises choose BSC as management tool. The basic theory of BSC is to evaluate and examine the working performance on the basis of four core levels including finance, customer, internal process as well as learning and growth of the enterprise, which promotes the performance evaluation up to a strategic level of the enterprise, and which considers performance of the enterprise and people from an overall perspective. Based on strategic goal and the needs for competition, BSC highlights the importance of non-financial indicators, and it evaluates the relationship between strategic goals of the enterprise and operation activities of the enterprise by the following four aspects, namely finance, customer, internal process as well as learning and growth, which finally will achieve the goal of interest balance. Moreover, as the final goal of business operation, finance is also the key in enterprise development. The relationship between four core levels of BSC is displayed in Figure 2:

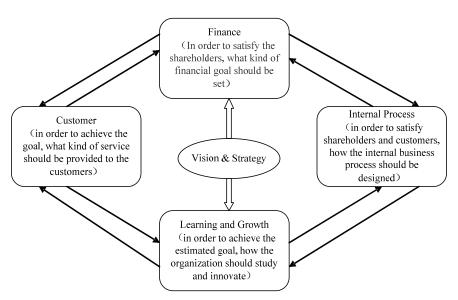


Figure 2: Relationship between four core levels of BSC

These four levels can respectively achieve a good balance between financial indicators and non-financial indicators, external benefit and internal benefit, evaluation process and performance result, long-term goal and short-term goal, management performance and operation performance etc. Therefore, BSC can comprehensively reflect the overall operating conditions of the enterprise, which can finally achieve the goal of everlasting and sustainable development of the enterprise.

# System Design of Performance Management under the Environment of ERP

Enterprise effectively combines ERP system with performance management and designes five output modules, including date management, knowledge management, model management, comprehensive evaluation and evaluation result. Functional chart of performance management system is displayed in Figure 3 as follows:

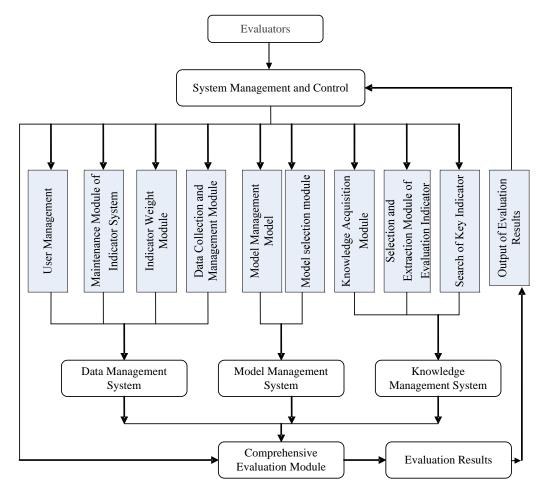


Figure 3: Functional chart of performance management system

- (1) Data Management. Data management includes input of data acquisition and establishment of indicator system. First of all, evaluation cycle and evaluatees should be determined, and database can provide the customers with the function of searching data indicators; moreover, alternative indicators, relevant information data and evaluation results of the enterprise are summarized in the database.
- (2) Model Management. According to actual conditions of the enterprise, the modeling for the two models including data calculation and performance evaluation could be conducted. After enterprise determines the evaluation time, evaluation objects as well as performance evaluation indicators, comprehensive evaluation can be carried out scientifically and reasonably on the basis of the specified weight.
- (3) Knowledge Management. Knowledge management includes three specific modules which are knowledge acquisition, selection of evaluation indicators and search of key indicators. Major tasks to be accomplished are to collect some experiential knowledge in different processes and to accumulate relevant knowledge during the process of performance management, which provides theoretical support for evaluation.
- (4) Comprehensive Evaluation. This module is a module that calculates the evaluation results; according to relevant requirements for evaluation, after managers input evaluatees' original data for the employees receiving the evaluations, the evaluation results can be automatically calculated.
- (5) Output of Evaluation Results. This module is an output process after the evaluation results. Relevant detailed information such as evaluation time, evaluation indicator, evaluation results and feedbacks will be provided in the results, which are used for managers' reference.

# ISSUES THAT NEED TO BE NOTICED DURING THE SPECIFIC IMPLEMENTATION OF PERFORMANCE MANAGEMENT AND FEEDBACK SYSTEM

# Issues that need to be noticed

Firstly, performance evaluation must gain the attention from the leaders and require them to take part in the evaluation; besides, careful organizations, attentions from different departments of the enterprise as well as comprehensive arrangements are also needed, which is mainly embodied in two aspects: decomposition of the indicators and application of performance evaluation results. As for the processing of results, the positive effects of performance evaluation must be highlighted; secondly, as the leading personnel for performance management of the employees, managers of different levels

carry out the specific implementation processes; therefore, during implementation process, managers should enhance their communication with employees so as to ensure smooth operation of the whole performance process and to ensure that performance evaluation goal can be achieved; thirdly, publicity and training should be enhanced so as to help the employees form correct concept of performance evaluation, which makes the employees perceive the functions of performance evaluation and their relationship with performance evaluation. During the training, employees are guided to learn about the formulation of performance evaluation and master the working methods.

# Importance of performance feedback

During performance management, performance feedback is very important. The goal of performance evaluation in the enterprise is to apply the evaluation results to daily management of the enterprise; however, performance feedback is important as well; only with timely and scientific feedbacks, performance evaluation can get good foundations, and employees can see their own shortcomings more clearly. Specific contents of performance feedback are displayed in Figure 4 as follows:

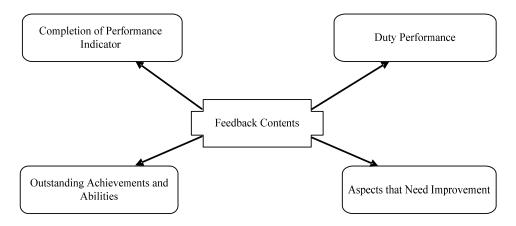


Figure 4 : Specific contents of performance feedback

#### **CONCLUSION**

With increasing improvements of information technology in modern society, economic environment for the enterprise has experienced dramatic changes; accordingly, competition becomes increasingly fierce. Traditional performance management can not meet the requirements of modern enterprise any more, and BSC can make up for the insufficiencies of traditional methods, which can realize various balances in enterprise development. Besides, ERP information management system of the enterprise provides good environments for performance evaluation; with the cooperation of ERP, BSC can have a better performance evaluation effect, which provides more reliable guarantees for long-term development of the enterprise.

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