



Original Article (Qualitative)

Factors affecting the design of the management dashboard framework with an emphasis on the components of human resources productivity

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Abstract

The purpose of this research is the effective factors on the design of the management dashboard framework with an emphasis on the components of human resources productivity. The research method is applicable in terms of purpose, qualitative in terms of execution method, and cross-sectional survey in terms of nature. The statistical population of the research includes 15 senior managers of Mapna Company and knowledgeable academic staff members in the field of research; and the interviews continued until reaching theoretical saturation. Semi-structured interviews were used to collect information. Delphi method was used to analyze the data. The findings of the research showed that after collecting data and conducting interviews and conducting the Delphi method, 15 dimensions and 53 indicators were counted in the final model in 4 main components. Among these, group dynamics and team spirit, success motivation and talent assessment and completion of talent banks of employees, documentation and continuity in learning, creating motivation and success among employees with a weighted average of 4.9 are among the most important factors identified.

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Extended abstract

Introduction

Today, fierce competition has prevailed in various jobs. Senior managers and middle managers in organizations must make decisions faster and more accurately than before. It is obvious that obtaining quick and accurate knowledge is necessary for decision-making, and as a result, effective tools such as management dashboards are included in the information technology roadmap of companies. Dashboards can easily be used as a tool to help evaluate performance and support efficient decision-making by identifying trends, patterns and anomalies in information (Vagzgo et al, 2020). It collects information gathered from all departments of the organization, which contains various sources related to various business functions. This information is combined and replicated by providing a user interface in the form of graphs, reports, visual indicators and alerting mechanisms. (Lin et al., 2023). Management dashboards are a subset of business intelligence systems, actually a new software system that help organizations achieve goals by enriching information and analyzing them. Dashboard is a set of applications such as strategy map, balanced scorecard and business intelligence to manage the performance of organizations that provides information in a specific format to decision makers (Salgado et al, 2022). In this regard, the main research question is: What are the factors influencing the design of the management dashboard framework with an emphasis on the components of human resources productivity?

Theoretical framework

Definition of productivity

In an article on the three concepts of power, production and income published in the Journal of Political Economy, productivity is defined as the concept of the relationship between the amount of product obtained in a certain period of time and the amount of factors consumed during the production of that product (Otoo, 2019).

The role and importance of manpower productivity

Measuring and evaluating productivity is a useful tool for analyzing changes in productivity over time and the causes of those changes. By measuring productivity, a producer will understand which sector or part is reducing or increasing productivity, and a country can thus compare changes in different sectors and industries. Using productivity as a standard is useful for calculating efficiency, and can guide efforts to allocate resources optimally. In this way, productivity can act as a variable in forecasting and planning. For example, it is possible to predict the total output in the future by planning the growth of the labor force and the productivity of the labor force. By comparing the productivity levels and trends with those of other countries, you can understand your success and plan to improve your position in the global market and industry. Of course, today, productivity is considered beyond a standard and as a culture and attitude to work and life, and according to economists and management thinkers, its improvement provides the main basis for economic development (Philip, 2017).

Definition of organizational dashboard

Organizational dashboards are very suitable tools for graphically displaying evaluations. Today, many softwares have been created to provide organizational dashboards that can communicate with various databases and display the results of information graphically while performing computational operations (Su, 2020). Dashboards help managers to identify trends, patterns, and visual anomalies about the business, which is important for visual information design. Several different goals are expected from the dashboard, which include consistency and stability, planning monitoring and control, and communication (Paul, 2021).



Akbari & Nazari (2023) investigated the design and validation of the model of the factors affecting the productivity of human resources with a mixed approach. The productivity of human resources was considered as the main theme, and the organizing themes and the basic themes related to the factors were also identified, and the relationships between them were shown. The path analysis test also confirmed the relationship between these factors. Human resource managers can increase the level of productivity of their human resources by identifying organizing themes and strengthening basic themes.

Lin et al, (2023) conducted a research titled management dashboard and identification of key performance indicators in the field of human resources. It resulted to counting 40 indicators in 4 areas of human resources of the General Department of Education, Human Resource Planning and Administrative Transformation (management training and development, human resource planning, human resource supply, and human resource research) and how to calculate them.

Research methodology

The research method is applicable in terms of purpose, qualitative in terms of execution method, and cross-sectional survey in terms of nature. The statistical population of the research includes 15 senior managers of Mapna Company and knowledgeable academic staff members in the field of research; and the interviews continued until reaching theoretical saturation. Semi-structured interviews were used to collect information.

Research findings

Delphi method was used to analyze the data. The findings of the research showed that after collecting data and conducting interviews and conducting the Delphi method, 15 dimensions and 53 indicators were counted in the final model in 4 main components. Among these, group dynamics and team spirit, success motivation and talent assessment and completion of talent banks of employees, documentation and continuity in learning, creating motivation and success among employees with a weighted average of 4.9 are among the most important factors identified.

Conclusion

The current research was conducted with the aim of the effective factors on the design of the management dashboard framework with an emphasis on the components of human resources productivity. The results of this research are in agreement with those of Abidi et al, (2024), Akbari & Nazari (2023), Lin et al, (2023), Salgado et al, (2022), Noori & Motadel (2022), Nikkhah (2022), Abbasi (2020), Hashemi et al, (2019), Hashemi et al, (2018), Shirdel (2013), Wagesgo et al, (2020), Bach et al, (2019), and Monte et al, (2019). Bach et al, (2019) showed that there is a significant difference between managers' willingness to take risks before and after the implementation of the management dashboard. In other words, the challenge of information overload can be managed by using management dashboards.

According to the research results, the following suggestions were made:

Recognizing and rewarding powerful employees and thereby motivating them to improve their own and other employees' performance is one of the main reasons for performance appraisal.

In job development, by removing the slowness of tasks and repetitive operations, it is tried to give more variety to the job. Personal or career development is an ongoing process of assessing the educational needs of each individual and planning to meet these needs. This process helps employees to reflect on their knowledge, performance or success; and to plan their personal and educational development.