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## HOSHIN KANRI AND BALANCED SCORECARD APPLICATIONS IN TERMS OF STRATEGIC PERFORMANCE EVALUATION IN CIVIL AVIATION

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### ABSTRACT

HoshinKanri and Balanced Scorecard applications, which are generally used by many businesses in the civil aviation sector, are intended to increase the daily and long-term performance of civil aviation businesses. HoshinKanri and Balanced Scorecard applications are used in civil aviation due to their ability to integrate daily activities with long-term planning.

In this study, the importance of HoshinKanri and Balanced Scorecard performance measurement systems, which have been carried out in the civil aviation sector, will be mentioned and the achievements of civil aviation businesses will be emphasized.

**Key Words:** Civil Aviation, HoshinKanri, Balanced Scorecard, Performance

### INTRODUCTION

Performance is qualitative or quantitative results obtained by a person, group or organization by fulfilling the task given to them within a certain time. Performance should be measured to improve the effectiveness and efficiency of organizations and managers. Performance management includes the process of gathering and analyzing information about today's and future situations in order to guide the organization to the desired purpose.

Many businesses value their performance only by financial measures when developing strategies as to their customer relationships, competitiveness, and capacities. It has been determined that the operating performance will increase at the same level in order to increase the motivation levels of the people working in the civil aviation sector and at the same time to increase the importance given to innovation. Balanced Scorecard and HoshinKanri maintain financial measurement results as a summary of performance, at the same time taking into account existing customers, in-company functions, employees, and more general units of measure that link the system's performance to long-term financial success. Balanced Scorecard and HoshinKanri track the financial results the companies have achieved, while at the same time it ensures they track the development in the capacity and intangible values they will need to grow in the future.

In general manner, the civil aviation sector is growing day by day and is beginning to have a strategic importance. All processes in the sector, from daily tasks to short and long-term goals, should be determined and managed with a specific performance measurement. In this context, it is important to implement HoshinKanri, which ensures the applicability of strategic goals, and Balanced Scorecard, which evaluates the performance of the applied strategies, within the civil aviation industry.

HoshinKanri and Balanced Scorecard applications, which are generally used by many businesses in the civil aviation sector, are intended to increase the daily and long-term performance of civil aviation businesses. HoshinKanri and Balanced Scorecard applications are used in civil aviation due to their ability to integrate daily activities with long-term planning.

In this study, the importance of HoshinKanri and Balanced Scorecard performance measurement systems, which have been carried out in the civil aviation sector, will be mentioned and the achievements of civil aviation businesses will be emphasized.

## **1. STRATEGIC PERFORMANCE EVALUATION**

Performance is qualitative or quantitative results obtained by a person, group or organization by fulfilling the task given to them within a certain time. According to another definition, it is to determine quantitatively and qualitatively the place and point reached in line with the plans made to achieve a determined goal. In other words, performance is the level that shows how much a determined goal has been achieved (Akal, 1996). According to Healey and Potter (1987), performance measurement emphasizes that it is necessary to concentrate on how to meet better and what the goals and services are actually achieved when responding to customer needs.

Performance should be measured to improve the efficiency and productivity of employees, organizations and managers (Ghobadian& Ashworth, 1994). At the same time, the necessity of measuring the efficiency and productivity of the organizations and managers emerges as well as their quality and development.

The literature on performance measurement is more extensive than the literature on performance management. Performance management is generally used regarding individual performance management and appreciation. Here the focus is disproportionately on the individual rather than the individual and the organization. On the other hand, the main subject of performance measurement literature deals with the measurement process, with less reference to the content in which the measurement will be maintained. There are few discussions about the structure of performance information and the structure of the organization's strategic choices (Atkinson &McCrindell, 1997). Performance and work related to it stimulate learning cycles in organizations. The transfer of knowledge, practices, and behaviour is seen across countries, levels of management, and service types. Performance management requires the evaluation of proportional changes (Bouckaert& Peters, 2002).

Performance management includes the process of gathering and analyzing information about today's and future situations in order to guide the organization to the desired purpose. The responsibility of ensuring continuity in the development of performance and making the necessary arrangements belongs to the enterprises. The enterprise is obliged to determine whether higher levels can be reached with the resources available by determining the current situation first. In this way, the ideal level to be reached will be determined and it will be possible to establish a performance management system for the goals which the organization desires to achieve in the future (Songur, 1995).

The survival of enterprises in the information age depends on their use of measurement and management systems determined based on their strategies and capabilities. Many

businesses value their performance only by financial measures when developing strategies as to their customer relationships, competitiveness, and capacities. Balanced Scorecard and HoshinKanri maintain financial measurement results as a summary of performance, at the same time taking into account existing customers, in-company functions, employees, and more general units of measure that link the system's performance to long-term financial success. Balanced Scorecard and HoshinKanri track the financial results the companies have achieved, while at the same time it ensures they track the development in the capacity and intangible values they will need to grow in the future (Kaplan ve Norton, 1992).

### **1.1. HoshinKanri**

HoshinKanri, one of the tools of the lean leadership approach, is often referred to as target spread (Jolayemi, 2008; Tennant & Roberts, 2001; Witcher et al., 2008). Other names used for HoshinKanri are policy deployment, management for results, goal opening, and policy management.

Goal deployment is a system approach to the management of changes in critical processes of the organizational structure, and it is the whole of the methods used to divide long-term plans into short-term integrated goals. At the same time, it is a disciplined approach which starts with the vision of the organization, where the strategic plan is developed for 3-5 years ahead, and this developed plan is reduced to a narrower time, to one-year goals, and the goals are monitored periodically.

HoshinKanri is a business management system that aims to achieve excellence in customer satisfaction in the world competition. This system starts with the demands expressed by the customer verbally and forces the organization to constantly improve the quality and cost parameters.

The HoshinKanri method, also known as policy deployment, is a technique to ensure that the strategies which a company devise to achieve its goals generate progress and actions at all levels of that company. This eliminates information waste coming from an unreliable direction and insufficient communication between units.

HoshinKanri provides a step-by-step planning, implementation and review process for managed change programs. It provides a systematic approach in the management of change programs, especially in critical business processes. This system is the process that creates a series of coordination in the realization of the basic goals created by the business.

In the West, HoshinKanri, which brings a perspective to senior executives, offers a suitable planning method so that enterprises can see the areas they prioritize, direct their resources to these goals, and cope with changing competition conditions.

HoshinKanri, which is vision-oriented and engages all employees, promoting innovation and creativity, is a management technique based on a kind of structural improvement implemented by businesses to keep up with increasingly competitive conditions, a planning system developed from "Management According to Goals" and Total Quality Management, which aims to bring businesses to their strategic goals despite changes. HoshinKanri presents an application of the principle of "Walk the thousand miles step by step" (Tennant & Roberts, 2001).

The HoshinKanri method, which is used in the integration of management processes, is defined as a systematic approach that integrates the daily activities of the entire organization with its strategic goals (Akao, 1999: 24). Daily activities include not only the operation of an organization, but also everything necessary for the routine management of the missions of the organization (Asan&Tanyaş, 2017).

## **1.2. Balanced Scorecard**

When we look around, everything in the life process has a balance. Providing balance, which is also valid for people, is also a situation that applies to businesses. In evaluating the performance status of enterprises, it is important to develop and evaluate multi-faceted perspectives and to apply them in a balanced way to all processes (Pirtini, 2012).

Balanced Scorecard is the reflection of short and long term business objectives to corporate strategies in a balanced way by establishing a relationship between performance and result indicators and examining these relationships in a cause-effect hierarchy. It creates harmony between goals and behaviors as a key to ensuring the effectiveness of organizations, managers and employees in order to achieve results that can be achieved in difficult times. Balanced Scorecard is also evaluated as a new management approach which supports the implementation of these activities by companies that have not achieved sufficient success in converting corporate strategies into action, relates its strategies with implementation goals and checks whether the strategies are achieving the expected results by monitoring the variables that represent these established relationships, and brings the desired results closer. It is considered as a model that approaches performance measures as a whole, focuses on customer requests and the market, improves the shared strategy understanding, makes the action to be used easier, makes its interdependence felt in different organizational areas, and is suitable for flexibility and adaptation for each organization (Tunçer, 2006).

The Balanced Score Card application, which was put forward by Kaplan and Norton, is a performance measurement system that determines the extent to which businesses can achieve their goals (Kaplan & Norton, 1992).

## **2. EVALUATION OF STRATEGIC PERFORMANCE IN CIVIL AVIATION**

In general manner, the civil aviation sector is growing day by day and is beginning to have a strategic importance. All processes in the sector, from daily tasks to short and long-term goals, should be determined and managed with a specific performance measurement. In this context, it is important to implement HoshinKanri, which ensures the applicability of strategic goals, and Balanced Scorecard, which evaluates the performance of the applied strategies, within the civil aviation industry.

### **2.1. HoshinKanri in Civil Aviation**

HoshinKanri is just one of the pillars of total quality management. According to HoshinKanri, although the current performance of the enterprise is at a good level, it is necessary to force civil aviation organizations to develop, since maintaining the same performance will lead to a decline in the future. In order to do this, a civil aviation organization needs to develop activities that will eliminate the weaknesses that are detected in its existing systems, visible, and perceived to exist in the future even if it is not a problem at the moment, and that will improve the overall system from start to finish. The control systems included in the HoshinKanri application are implemented in order to increase performance across civil aviation enterprises by supporting improvements in operational processes. These improvement activities are only a part of the total quality management applied in civil aviation.

In order to apply the HoshinKanri method, first of all, the enterprise must operate in an environment in a complex, non-linear relationship with the environment it interacts with. The main reason of it is that, it is the first step in both planning strategies and analyzing the factors originating from the environment before the annual plans in the HoshinKanri technique.

HoshinKanri is a systematic approach that combines and integrates the daily operations of all civil aviation organizations with the strategic goals they have set, such as their management. The civil aviation sector is suitable for the implementation of HoshinKanri practices.

In the civil aviation sector, first draft targets should be established in accordance with the strategic objectives. By applying various methods that will ensure the goals, criteria and review that will achieve these draft goals and objectives, a mutual agreement is tried to be reached between units and the final version is given. Strategies are created by the resulting goals and applied to daily activities, ensuring integrity between strategies and daily activities. Monitoring and controlling the implementation of these policies also creates a link between goals and daily activities.

HoshinKanri includes a series of applications that integrate predetermined strategies to achieve goals and operations in daily practice. In the HoshinKanri method, the organizational performance of the last year is checked and the necessary measures are taken by conducting environmental analyzes before short, medium and long term plans are prepared in the "check and take measures" phase. Thus, the integration of planning and organization, orientation and coordination processes can be achieved. That is because it is possible to experience problems in the organization, orientation and coordination processes if the planning is not found realistic and feasible by the implementation teams. (Akbaba, 2018)

In the HoshinKanri system, annual business policies are determined as a result of mutual meetings between top management, mid-level managers, and implementation teams. First, draft targets suitable for strategic planning are determined without giving any criteria. These draft targets are "migrated in the departments and sections where the activities are developed. The key point in the opening of business policies is bidirectional communication between upper, middle and lower level managers, and this two-way communication begins by this migration. " This two-way communication continues until an agreement is reached in determining the criteria for the draft goals and the pathways to achieve these criteria.

## **2.2. Balanced Scorecard in Civil Aviation**

Conditions in the civil aviation sector are constantly changing. There is a general view that the unit costs are high and the earnings obtained are low in civil aviation.

There is intense competition between businesses in the civil aviation sector. The services provided by civil aviation businesses show similar characteristics in many companies. For this reason, it is of great importance for civil aviation companies to provide different services and develop them in order to keep customers (Yıldırım & Şimşek, 2005).

It has become even more important today that civil aviation enterprises in the service sector take into account the human factor, making performance measurements. For these reasons, enterprises in the civil aviation sector need the Balanced Scorecard approach, in which they will also follow material elements and intangible operation control systems (Tunahan, Esel, & Takıl, 2016).

The Balanced Scorecard application is used in the performance measurements of some non-financial indicators in civil aviation, namely the indicators that evaluate aviation operations. With the Balanced Scorecard, civil aviation enterprises can perform performance measurements of critical and important points and direct future operations. For this reason, the issue of using multidimensional systems such as the Balanced Scorecard in the civil aviation sector has become very important and is used by the operation units of many civil aviation companies. (Süzer, 2020)

## CONCLUSION

In the civil aviation sector, which has a chaotic and complex structure today, it is very important to use the resources in the best way and to measure the performance in the continuation of the operations. There is complexity not only in the external environment but also in the internal structure of the business.

HoshinKanri and Balanced Scorecard applications, which are generally used by many businesses in the civil aviation sector, are intended to increase the performance of enterprises. HoshinKanri and Balanced Scorecard applications have long been used in civil aviation due to their ability to integrate daily activities with long-term planning.

When the literature is examined, it is known that HoshinKanri and Balanced Scorecard applications are widely used in the civil aviation sector and are actively used in all operational processes (Süzer, 2020; Akbaba, 2018). In fact, if a new activity is to be started and added to the organization, HoshinKanri and Balanced Scorecard methods are used in the integration of these processes. Step by step implementation of the strategies is provided.

In HoshinKanri, the planning phase starts with the senior management, and the goals are conveyed to the middle management in order to determine the strategy and projects. These projects are finally sent to the implementation teams. It provides two-way communication between these three groups to form the target, criterion, and review system.

Year-end reports are prepared at HoshinKanri and submitted to management for evaluation. It helps to determine the strategies for the next periods.

Balanced Scorecard is particularly effective in determining customer satisfaction in civil aviation. It has been determined that they have a competitive advantage in the sector by focusing on customer satisfaction.

With the cycle of "check and take measure", it ensures that possible problems in the internal and external environment of the enterprise operating in civil aviation are detected and improvements are made.

With the application of the integrated approach to the system in Hoshin Kanri application, it provides contributions to the aviation business, such as the belonging of the employees, the development of relations between the employee groups, the elimination of conflict issues. In addition, it includes advantages such as determining and removing barriers related to implementation, an improved flow of information between management and employees regarding the currently implemented projects, and being able to react faster compared to existing opportunities. Can integrate with Hoshin Kanri method, resource-based management or Balanced Scorecard.

Hoshin Kanri application contributes to the improvement of financial results tables and operational planning system in the sector, as well as participating in the planning process, especially by improving critical business processes. It is preferred with the idea that the best performance will be achieved in achieving the set goals.

HoshinKanri and Balanced Scorecard are of great important for performance measurements of daily strategies applied to improve the mission and vision of civil aviation businesses. It is emphasized that the strategies determined with HoshinKanri and Balanced Scorecard are utmost importance in determining the goals of the civil aviation sector. In addition, the strategies determined with the help of HoshinKanri and Balanced Scorecard in the civil aviation sector can be separated annually and daily. In this way, routine works in civil aviation can be integrated with long-term operations. In addition to all these, another important feature is that performance criteria among departments can be determined. In this way, full performance in the civil aviation sector can be achieved and the strategic targets of all departments can be determined separately.

## REFERENCES

1. Akal, Z. (1996). *Performance, Measurement and Control in Businesses, Versatile Performance Indicators*, 2nd Edition, Ankara: MPM Publications.
2. Akao, Y. (1999). *HoshinKanri*, Management Compass, MESS.
3. Akbaba, A. (2018). The Problems that are Met in Integration of Management Systems in Transition to E-Business and Solution Proposals for it: Implementation of HoshinKanri Integrated Management Model in THY Integrated Operation Control Center, Istanbul Gelişim University, Published Doctoral Thesis.
4. Asan, Ş. S., & Tanyaş, M. (2017). Integrating HoshinKanri and the Balanced Scorecard for Strategic Management: The Case of Higher Education, *Total Quality Management and Business Excellence*, Issue:13, p.996-1008.
5. Atkinson, A. A. and McCrindell, J. Q. (1997). Strategic Performance Measurement in Government, *CMA Magazine*, Issue:71, Volume:3, p.20-23.
6. Bouckaert, G., & Peters, B. G. (2002). Performance Measurement and Management: The Achilles'Heel in Administrative Modernization, *Public Performance and Management Review*, Issue:25, Volume:4., p.359-362.
7. Ghobadian, A. ve Ashworth, J. (1994), Performance Measurement in Local Government-Concept and Practice, *International Journal of Operations and Production Management*, Issue:14, Volume:5, p.18-29.
8. Healey, M. ve Potter, J. (1987). *Making Performance Measurement Work for Consumer, Performance Measurement and the Consumer*, London: National Consumer Council.
9. Jolayemi, J. K. (2008). HoshinKanri And Hoshin Process: A Review And Literature Survey, *Total Quality Management and Business Excellence*, Issue:19, Volume:3, p.295-320.
10. Kaplan, R. S. & Norton, D. P. (2009). *Balanced Scorecard*, 4th Edition, Sistem Publishing.
11. Marek Bugdol ve Piotry Jedynak, (2015) *Integrated Management System*, Springer, Switzerland,
12. Pirtini S. (2012). *Customer Focus and Balanced Scorecard in Marketing*, Istanbul: Beta Publishing.
13. Songur, M. (1995). *Performance Measurement in Local Administrations*, Ankara: General Directorate of Local Administrations Publications.
14. Süzen, E. (2020). The Effects of Innovation Strategies and Employee Motivation on Business Performance: An Application in Civil Aviation Management, Gelişim University, Published Doctoral Thesis.
15. Süzer, A. (2020). Evaluation of balanced scorecard applications as a performance measurement tool in airline enterprises in Turkey, Gelişim University, Published Doctoral Thesis.
16. Tennant, C., & Roberts, P. (2001). HoshinKanri: Implementing The Catchball Process, *Long Range Planning*, Issue: 34, p.287-308.
17. Tunahan, H., Esen, S., & Takıl, D. (2016). Comparative Analysis of Financial Risk Levels of Airline Companies with Fuzzy Logic Method, *Journal of Accounting, Finance and Auditing Studies*, Issue: 2, Volume: 2, p.239-264.
18. Tunçer, E. (2005). Multidimensional Performance Evaluation Models and a Balanced Scorecard Application, AfyonKocatepe University (*Published Doctoral Thesis*)
19. Witcher, B. J., Chau, V. S., & Harding, P. (2008). Dynamic Capabilities: Top Executive Audits and HoshinKanri at Nissan South Africa, *International Journal of Operations and Production Management*, Issue: 28, Volume: 6, p.540-561.

20. Yıldırım, A., & Şimşek, H. (2005). *Qualitative Research Methods in Social Sciences*, Ankara: Seçkin Publishing House.