



Turnover Time Reduction in KPI Reporting Through Productivity Improvement

Dr. R. Mary Metilda¹ and Dhineshkumar.N²

¹Professor, Department of Management Studies, Sri Ramakrishna Engineering College, Coimbatore ²Student, Department of Management Studies, Sri Ramakrishna Engineering College, Coimbatore

Article Info Volume 83 Page Number: 4886-4889 Publication Issue: July - August 2020

Article History Article Received: 25 April 2020 Revised: 29 May 2020 Accepted: 20 June 2020 Publication: 10 August 2020

Abstract:

In the information age, KPIs (Key Performance Indicators) are commonly used for business performance measurement in organizations; however, there's no single best way about how to implement KPIs, which means that a company can select any arbitrary suitable KPIs. The project was aiming at helping organizations to develop and implement successful KPIs that are effective, complete, and aligned with their business strategy for how KPIs can be implemented. I designed a framework which was combined with the critical factors of successful KPIs, the framework was designed for helping companies diagnosing and improving the effectiveness, completeness and alignment of their KPIs. However, the framework need to be further tested for a general usefulness.

Keywords: Key Performance Indicator, Project Management, Framework, Effectiveness, Management.

1. INTRODUCTION

Key performance indicators are financial and non-financial indicators that organizations use in order to estimate and fortify how successful they are, aiming previously established long lasting goals. Appropriate selection of indicators that will be used for measuring is of a greatest importance. Process organization of business is necessary to be constitute in order to realize such effective and efficient system or performance measuring via KPI. Process organization also implies customer orientation and necessary flexibility in nowadays condition of global competition.

New business conditions where information is the most important resource impose new approaches in measuring performances of organizations, related to traditional performance measurement system which evolved just financial and accounting indicators. One of the newer approaches. refer on measuring performances of organizations via KPI. KPI are financial and nonfinancial measures that organizations use to reveal how successful they were in accomplishing long lasting goals. In order to constitute effective system of performance measurement it is very important to have defined and standardized all processes within the organization. Significance of process approach could be seen through the fact that it is a base of two nowadays management systems: strategic management, via BSC, and technical standardization, via QMS. Due to that fact in first part of this paper will be explained the meaning of process approach, and a way of constituting it. In second part of this paper will be explained what are KPI, and importance of organization performances measurement,

and in third part of the paper will be explained and shown some of the KPI that Toyota dealerships uses in their business.

As it was previously said constitution of process organizations is a necessary base for constitution of measurement system via KPI. Such statement could also be find in the literature: Business process are base for organization functioning because companies constituted basically of processes, not products or services. On the other words, business management of organizations means process management "(Skrinjar et al., 2007; Stefanovic et al., 2010). Process definitions are base on which the whole philosophy of organization functioning have been constituted. The process approach means that attention is shifted from end output (products and services) to the activity chain that shapes this output (Rentzhog, 1997). Importance of process orientation arise from the first half of XX century, where Walter A. Shewharts stated that highly qualified product could be get only by process management. Process orienatation constitutions are very important. Traditional ways of business that imply functional and hierarchical.

As the industrial age type of competition is shifting to the information age type of competition, it is no longer possible for companies to gain sustainable competitive advantage by merely deploying new technology into physical assets rapidly; neither is this possible by excellent management of financial assets and liabilities. The information age environment for the both manufacturing and service organizations requires new



capabilities for competitive success which is the organization's ability to mobilize and exploit its tangible and invisible assets.

In order to monitor and improve business performance in a competitive way, a new management tool with a proper set of Key Performance Indicators (KPIs) is required by information age organizations. Key Performance Indicators (KPIs) are quantitative and qualitative measures used to review an organization's progress against its goals. To complement traditional financial measures of business performance, those KPIs are related to a diverse set of performance measures, including financial performance, customer relations, internal business process, learning and growth. In order to measure business performance in the most effective way KPIs should be aligned with business goals and strategy, and moreover for a large organization with multiple units, each business unit of that organization is required to develop its own KPIs to meet its unique strategy, while it's also important to define the top KPIs used in common for all the business units, for the executives to make evaluations from the whole group point of view. However, there's no single best way about how to implement KPIs, which means that it's different for a company to select certain suitable KPIs.

2. THEORITICAL BACKGROUND OF THE STUDY

In 2000, Marlys discussed that, to complement traditional financial measures of business performance, those KPIs are related to a diverse set of performance measures, including financial performance, customer relations, internal business process, learning and growth.

Robert S. Kaplan in 1996 discussed that, the information age environment for the both manufacturing and service organizations requires new capabilities for competitive success which is the organization's ability to mobilize and exploit its tangible and invisible assets. As the industrial age type of competition is shifting to the information age type of competition, it is no longer possible for companies to gain sustainable competitive advantage by merely deploying new technology into physical assets rapidly; neither is this possible by excellent management of financial assets and liabilities.

In 2009, Wayne W. Eckerson stated that, in order to monitor and improve business performance in a competitive way, a new management tool with a proper set of Key Performance Indicators (KPIs) is required by information age organizations. Key Performance Indicators (KPIs) are quantitative and qualitative measures used to review an organization's progress against its goals.

Marlys also stated that, in order to measure business performance in the most effective way KPIs should be *Published by: The Mattingley Publishing Co., Inc.*

aligned with business goals and strategy, and moreover for a large organization with multiple units, each business unit of that organization is required to develop its own KPIs to meet its unique strategy, while it's also important to define the top KPIs used in common for all the business units, for the executives to make evaluations from the whole group point of view. However, there's no single best way about how to implement KPIs, which means that it's different for a company to select certain suitable KPIs.

3. REVIEW OF LITERATURE

Staron, M., K. Niesel and W. Meding (2015) conducted a study on "Dashboard Selection Model". Visualizing of organizational performance is a basis for the monitoring, controlling and improvement of the operations of organizations. Dashboards are often used for this purpose as they are a powerful tool to comprise relevant information in a single view providing graphical overview of the current status. A dashboard is defined as an easy to read real-time user interface, showing graphical presentation of the current status (snapshot) and historical trends of an organizations Key Performance Indicators to enable decisions.

Yigitbasioglu, O. M. & Velcu, O. (2012) conducted a study of "Implications for Dashboard Design and Research", has stated that, Information overload is a recognised phenomenon related to the continuous increase of data and the corresponding need to process that information. Business Intelligence has attempted to manage overload using tools like dashboards, which enables concepts like scorecards to be merged, providing valuable information to assist stakeholders and employees to improve performance and make the most effective decisions. There is also little agreement regarding how dashboard should look like and what should do, with the majority of focusing on considerations like its features or customisation options instead. In addition, a small number of papers has studied the use of dashboard in Higher Education (HE), with particularly limited investigation of the critical factors that make using them successful in this context or the metrics to determine this success. Therefore, this paper will present the literature regarding dashboards, to provide a better understanding of their use at an organisational level.

Donhost and Anfara Jr (2010) did research on "Data driven Decision Making". The amount of information available to individuals and businesses is increasing at an exponential rate, with some experts claiming that the actual amount increases by 60% every year. However, it has been argued that "a wealth of information creates a poverty of attention". As a consequence, all sectors, including education, are under increased pressure to



provide evidence to support and manage the decision making process.

Mandinach, E. B. (2012) in his research stated that, In the era of big data, the power of data to manage our decisions indicates that fact-based decision making is increasingly important within organisations. Therefore, specialists able to support decision making utilise descriptive, predictive, and prescriptive analytics are increasingly in demand to provide data analysis of the vast amount of information that is available.

4. METHODOLOGY

Quantitative research design is used for this project. Quantitative research is for cases where statistical conclusions to collect actionable insights are essential. Numbers provide a better perspective to make critical business decisions. Quantitative research design methods are necessary for the growth of any organization. Insights drawn from hard numerical data and analysis prove to be highly effective when making decisions related to the future of the business.

Under Quantitative research design, descriptive research design is chosen, It is a theory-based design method which is created by gathering, analysing, and presenting collected data. This allows a researcher to provide insights into the why and how of research. Descriptive design helps others better understand the need for the research.

The sample size consists of 443 project managers who are all in charge for German projects in Altran India and the sampling method used is Purposive Sampling, this type of sampling involves the researcher to select a sample that is most useful to the purposes of the research. The framework of the study made is as follows:

- Initial data survey
- Create project list and request KPI
- Record feedback
- Consolidate KPIs
- Create report
- Update backbone
- Feedback and continuous improvement

5. RESULTS & DISCUSSIONS

Data validation

The entries that has been collected has to be constantly monitored and has to be compare with the master list in order improve the efficiency of the process. The status of the entries is depicted as shown below.

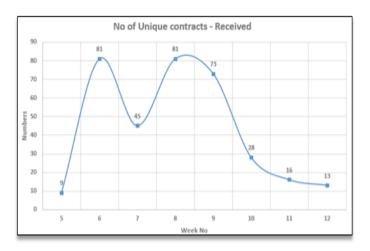


Fig. no: 5.1 Weekly Status Update of the Entries

Identification of missing projects:

The automatic update of the missing list from the consolidated project list are shown directly in the summary sheet. The process feeded in the automation includes the direct count of the consolidated no. of projects from the consolidation macro and then comparing it with the master list to give away the no. of missing list from it.

Status Summary Status Summary	
No of Contracts in the Master List	1036
No of Contracts Consolidated	263
No of Contracts consolidated and available in Master list	197
No of Missed Contracts	840
No of contracts missed in Master list	61
Last file updated on 17/03/2020 22:49	

Fig. no: 5.2 Summary of the Process

Standardizing the framework:

Continual measuring of organizational performances via Key performance indicators is essential for companies today. It helps organization to testify how successful they are in their business. So it comes under One of the necessary condition for effective and efficient system for performance measurement formulation with all automized standardized processes.

CONCLUSION

Continual measuring of organizational performances via Key performance indicators is a newer concept that uses companies of today. In this study the importance of the Key Performance indicator is being discussed and is also tested by taking in account of the projects from 443 project managers. KPI tells you where performance has been in the past, where it is now, and perhaps more useful, where performance is likely to be in the future.



SUGGESTIONS FOR FURTHER RESEARCH

In order to be sure about the developed framework can be used to diagnose KPIs successfulness in any organizations and in any industries, the framework should be tested formally in more organizations. If extensive studies with the framework can be carried out this could verify if the framework could be used as a universal model to evaluate the KPIs successfulness in general.

REFERENCES

- 1. Arazy, O., Kopak, R. & Hadar, I. (2017), "Heuristic Principles and Differential Judgments in the Assessment of Information Quality", The Journal of the Association for Information Systems, Vol. 18, pg. 403.
- 2. Basili, V. R. (1992), "Software modeling and measurement", The Goal/Question/Metric paradigm.
- 3. Donhost, M. J. & Anfara JR, V. A. (2010). "*Data-driven Decision Making*", The Middle School Journal, Vol. 42, pg. 5663.
- 4. Gitzel, R., Turring, S. & Maczey, S. (2015), "A Data Quality Dashboard for Reliability Data", Business Informatics IEEE, pg. 90-97.
- 5. Janes, A., Sillitti, A. & Succi, G. (2013), "Effective dashboard design", The Cutter IT Journal, Vol. 26.
- Koopman, R. J., Kochendorfer, K. M., Moore, J. L., Mehr, D. R., Wakefield, D. S., Yadamsuren, B., Coberly, J. S., Kruse, R. L., Wakefield, B. J. & Belden, J. L. (2011), "A diabetes dashboard and physician efficiency and accuracy in accessing data needed for high-quality diabetes care", The Annals of Family Medicine, Vol. 9, pg. 398-405.
- 7. Mandinach, E. B. (2012), "A perfect time for data use: Using data-driven decision making to inform practice", Educational Psychologist, Vol. 47, pg. 71-85.
- 8. March, S. T. & Hevner, A. R. (2007), "Integrated decision support systems: A data warehousing perspective", Decision Support Systems, Vol. 43, pg. 1031-1043.
- 9. Marlys, G. L. and Steven E. Salterio (2000), "The balanced scorecard: Judgmental effects of Common and Unique Performance Measures", The Accounting Review, Vol. 75(3), pp. 283-298.
- 10. Pauwels, K., Ambler, T., Clark, B. H., Lapointe, P., Reibstein, D., Skiera, B., Wierenga, B. & Wiesel, T. (2009), "Dashboards as a service: why, what, how, and what research is needed?", Journal of Service Research, Vol. 12, pg. 175-189.

- 11. Radovic, M., Karapandzic, S. (2005) "Process Engineering", Faculty of Organizational Science, Beograd.
- 12. Rahman, A. A., Adamu, Y. B. & Harun, P. (2017), "Review on dashboard application from managerial perspective", Research and Innovation in Information Systems (ICRIIS).
- 13. Rentzhog, O. (1997), "Basis of enterprises of tomorrow", Prometej, Novi Sad.
- 14. Skrinjar, R., Indihar Stemberger, M., Hernaus, T. (2007), "The Impact of Business Process Orientation on Organizational Performance", Conference on Proceedings of the Informing Science and IT Education.
- 15. Staron, M. and C. Wohlin (2006), Case Study on the "Choice between Language Customization Mechanisms", 7th International Conference, PROFES, Amsterdam.
- 16. Staron, M., K. Niesel and W. Meding (2015). "Selecting the Right Visualization of Indicators and Measures", Dashboard Selection Model.
- 17. Wayne W. Eckerson (2009), "How to create and deploy effective metrics", TDWI best practices Report.
- 18. Yigitbasioglu, O. M. & Velcu, O. 2012. A review of "Dashboards in performance management: Implications for design and research", International Journal of Accounting Information Systems, Vol. 13, pg. 4159.