Abstract

A very important challenge for organizations is to have an integrated measurement framework that effectively defines the performance measures and connect them with the organizations' strategies, then to analyze and report the results efficiently. Here comes the role of the Business Intelligence (BI) as an essential key factor that presents and translates the measurement results, for the performance measurement is one of the BI techniques. This paper focuses on adopting the Balanced Scorecard (BSC) as a key framework for performance measurement to manage and measure the organizations' businesses. Merging both BI and BSC approaches gives a very strong roadmap to identify strategic goals, measures and take the right actions according to the measurement results. In this paper, the BSC model was applied along with some BI tools such as dashboards, analytical charts and performance measures on the IT arm for the civil aviation in Egypt to define clear connections between strategic objectives, the business processes by which the strategies are executed, and the Key Performance Indicators (KPIs) that measure business performance. Moreover, the current system was fully evaluated, and suggested corrective actions were reported to the strategic management, and a quick look is provided for how the BSC results can be presented using the
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BI techniques.

References

- Rouse, Business Intelligence (BI), searchdatamanagement. techtarget. com, (2014).
- Tounsi, application and survey of business intelligence (bi) tools within the context of military decision making, Monterey, California. Naval Postgraduate School, 2012.
- Chandi, R. , "Key Performance Indicators Measuring Performance in the Oil & Gas EPC Industry", 2009.
- Savkin, Integrating Balanced Scorecard and Business Intelligence (BI), bscdesigner. com, 2015
- BSC Institute, Building & Implementing a Balanced Scorecard: Nine Steps to Success, balancedscorecard. org, 2015.
- Queenan and Forti, Measurement as Learning: What Nonprofit CEOs, Board Members, and Philanthropists Need to Know to Keep Improving, bridgespan. org, 2011.
- Klipfolio, KPI-Dashboard operational metrics top 10 guidelines, klipfolio.com, 2014.

**Index Terms**

Computer Science

Artificial Intelligence

**Keywords**

Business Intelligence; Strategic Performance; Balanced scorecard; Performance measurement; KPI Dashboards; Strategic Objectives.