Dashboard Necessary in Every Field

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Abstract—In this paper we will review three different dashboard in different fields. First is performance dashboard that is used for measuring, monitoring and managing business. It is to focus on the work of employees so that everyone are going in the same direction. Second is a model driven dashboard used for business performance. Describing models that can effectively represent all the elements necessary for the business performance reporting process on the basic interactions among them. Third is Marketing dashboard that is used to compare performance across different products, market segments or units. Fourth is dashboard as integration tool and testing platform which is used by a consortium of eleven academic institutions to develop a suite of bidirectional machine translation system for nine pairs of Indic languages.

Keywords—Dashboard, performance, key, indicators.

I. INTRODUCTION

A performance dashboard is really a performance management system. It communicates strategic objectives and enables business people to measure, monitor, and manage the key activities and processes needed to achieve their goals. To work this magic, a performance dashboard provides three main sets of functionality, which I will describe in more detail later. Briefly, a performance dashboard lets business people:  Monitor critical business processes and activities using metrics of business performance that trigger alerts when potential problems arise.  Analyze the root cause of problems by exploring relevant and timely information from multiple perspectives and at various levels of detail.  Manage people and processes to improve decisions, optimize performance, and steer the organization in the right direction[3].

Benefits

The reason so many organizations are implementing performance dashboards is a practical one: they offer a panoply of benefits to everyone in an organization, from executives to managers to staff. Here are many benefits, communicate strategy, refine strategy, increase visibility, give a consistent view of the business, reduce costs. In short, performance dashboards deliver the right information to the right users at the right time to optimize decisions, enhance efficiency, and accelerate bottom-line results[3].

Dashboard and marketing reminds us of the need to better understand how management copes with the increasing diversity and complexity of market signal, performance, evaluation and planning. It brings together marketing departments with different values, performance metrics and reporting practices. Originally dashboard was probably a single measure such as chart of sales which may accurately describe the performance of the self employed selling a single durable product on commission while facing little local competition. Need additionally to consider cost(profits), their marketing inputs, relative to competition(relative price and quality). No single measure can adequately summarize performance(Ambler 2003,Lehmann and Reibstein 2006)

Reibstein et al. (2005) propose five stages of dashboard development:

1. Selecting the key metrics.
2. Populating the dashboard with data.
3. Establishing relationships between the dashboard items.
4. Forecasting and what if analysis.
5. Connecting to financial consequences[1].

II. RELATED WORK

Now we are going to look the work done in different fields.

A. Performance Dashboard

One of the more popular types of performance dashboards today is the Balanced Scorecard, which actually specific methodology for aligning organizations with corporate strategy. A Balanced Scorecard is a strategic application, but as we shall soon see, there are other types of performance dashboards that optimize operational and tactical processes that drive organizations on a weekly, daily, or even hourly basis[3] as shown in Fig 1.

Fig. 1 A balanced scorecard use to show the performance.
B. Model Driven Dashboard

There is a growing trend in using model-driven methodologies [9][21] for developing large system software, due to their high level abstraction and code re-use (or regeneration). They have been widely applied in related areas, such as software reuse [11][12], reverse engineering [13][14], and user interface design [6]. The benefits of adopting model driven design include reduced software development time, enhanced code quality, and improved code maintenance [15][16]. There are also numerous related works about business processes. Business process management enables the management and analysis of operational business processes [17]. Business processes can be implemented using a workflow or a state machine model [20]. BPEL [10] defines a program understandable language to represent business processes for web service environments. Yet, BPEL can only orchestrate the flow execution; business data are still not synchronized, correlated, or linked together for the auditing and analysis purposes.

C. Marketing Dashboard For Business Performance

Basically dashboard was probably a single measure such as chart of sales which may accurately describe the performance of the self employed selling a single product on commission while facing little local competition. Need to save time in a model driven business transformation project[1].

3. Too manual as many highly skilled business analysts spend several days a week collecting information and too manually updated[3].

4. This dashboard provide a narrow or parochial view of the business that leads to confusion and chaos[3].

5. Limiting the critical metrics to approximately 10, the steering committee realized that it could not reduce the number below 25 at the present time due to lack of clarity and understanding in which metrics would offer the most valuable insights. Reduce the number of metrics to a single visual display is a key benefit from a dashboard. Identifying such a comprehensive set of metrics is a separate problem from reducing them to a manageable number [1].

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