Should Dashboards be Designed from the Bottom up or top down?

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Eckerson [1] defines performance dashboards as a method that interprets the organization’s strategy into objectives, metrics, initiatives, and tasks tailored to each group and individual in the organization. It observes, examines, and supervises people and processes of a firm in the right direction [1].

Many dashboard projects fail to meet their potential as a result of organizations committing one, or all, of the following common mistakes: a) Focusing on meaningless measures; b) Designing from the bottom up; c) Not allowing actual users to be involved with the dashboard design; d) Neglecting the user interface; e) Trying to accomplish too much; and f) Not planning for growth [2].

The top down design of a dashboard is considered as the optimum solution. It has been widely accepted and dominated empirical studies on the process of operations strategy e.g. Hewlett Packard [3]. The top down approach helps an organization identify data strategy problems that the company must address to become more effectively driven. It requires a needs analysis of what answers or information the dashboard users require on a daily basis to govern their part of the business. The results of that analysis form the basis of what is designed into the dashboard. This design might require access to data that cannot be accessed easily or is not currently collected [2]. A successful dashboard project addresses the actual needs of its users, which often requires that processes be changed or added that allow the dashboard to access the essential data that supports those needs [2]. Brodeur and Pergler [4] state that the vast majority of ERM approaches fail at the top down system with regards to risk management in financial trading.

However, a few case studies have documented an alternative process—of bottom-up operations strategy—that emerges in the absence, or lack, of a corporate (or strategic business unit) strategy e.g. the International Truck and Engine Corporation [3]. The bottom up approach can help a company identify a weak operational system, bring out the issue to the right managerial level, and make the right risk return trade off to fix the problem [4]. Therefore, we can conclude with the above discussion that both dashboard approaches, depend on the company’s operations and organizational structure, and are suitable in different organization scenarios.

How will Natural Language Processing (NLP) systems change the business intelligence arena and enhance measurement systems?

Cambria, and White [5] define NLP as a theory-motivated range of computational techniques for the automatic analysis and representation of human language. It requires high level symbolic capabilities, including: creation and propagation of dynamic bindings; manipulation of recursive, constituent structures; acquisition and access of memories; control of multiple learning/processing modules and routing of information among such modules; grounding of basic-level language constructs (e.g., objects and actions) in perceptual/motor experiences; and representation of abstract concepts [5].

Today, most of the existing appr Top-down ERM: A Pragmatic Approach to Managing Risk from the C-Suite. Top-down ERM: A Pragmatic Approach to Managing Risk from the C-Suite. oaches are still based on the syntactic illustration of text, a method mainly relying on word simultaneous frequencies. Such algorithms are limited to the information that is seen by these systems. While NLP research has made great steps in producing artificially intelligent behaviors, e.g., Google, IBM’s Watson, and Apple’s Siri, none of such NLP frameworks actually understand what they are doing—making them no different from a parrot that learns to repeat words without any clear understanding of what it is saying. Today, even the most popular NLP technologies view text analysis as a word or pattern matching task [5].

Latest NLP technologies promise to reduce costs and improve quality for healthcare providers by processing text directly with computer applications by loading the patient information, their medical history, which reduces the cost of working with clinical documentation, and automates the coding and documentation improvement processes. NLP allows applications to work with the most valuable form of clinical communication: the clinical narrative [6]. Such applications are visible in Kuwait clinics and hospitals.

NLP’s consulting services in Canada offer a complete and unique expertise in the fields of information management with the licensed methods, translating legal and government documents, workflow management, contextual authoring and translation memories, document management system, web content management system, legal field e.g. Canadian immigration law, tax law, etc., innovative technologies such as Machine Translation and Translation Memories, Information Extraction, Automatic Summarization, RandD on text and Voice Processing, and Research projects in universities.

Therefore, we can conclude that NLP systems have evolved and progressed well and will change the business intelligence arena and enhance measurement systems through:

1. Organized analysis of the company’s requirements - Failure to undertake this stage carefully may well mean total failure to meet objectives regardless of how well the subsequent stages are carried out [7].

2. Effective integration of the natural language technology with the target database ensuring current applications are not adversely affected - This used to be quite difficult at first and many companies didn’t want to spend heavily, but as technology has progressed, so have the systems [7].

3. Introduction of the system to new users that resulted in realistic user expectations and enabled effective use of the natural language software - Users need to be aware of the constraints.

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and boundaries in order to use the interface efficiently, hence need training [7].

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