Chapter 11
BI–FIT:
Aligning Business Intelligence End-Users, Tasks and Technologies

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ABSTRACT

Over the years many organizations have invested in Business Intelligence (BI) systems. While BI-software enables organization-wide decision support, problems are encountered in the "fit" between systems' provision and changing requirements of a growing amount of BI (end-) users. This chapter aims at investigating the factors that influence the "fit" between Business Intelligence (BI) end-users, tasks and technologies (BI-FIT). Based on an extensive literature study on the elements of BI-FIT, in this research the BI-FIT Framework is developed that shows the most relevant factors and the interrelationships between BI end-users, tasks and technologies. The framework can be used to help organizations to identify and fulfill the needs of BI end-users, thereby improving adoption and increasing satisfaction of the BI end-user base.

INTRODUCTION

In today's globalized economy, especially during times of recession, the uncertainty that organizations are facing when taking decisions has become bigger. In order to deal with this uncertainty, organizations process information (Daft & Lengel, 1986). According to Galbraith (1974, p. 28) "the principle of a managerial task is to reduce uncertainty by processing information." The demand for profits, increasing (global) competition, and demanding customers all require organizations to take the best decisions as fast as possible (Vitt,

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Luckevich, & Misner, 2002). Therefore, the ability to quickly take advantage of the exponential growing amount of information has become an extremely critical component for the success of the modern organization (Barlow & Burke, 1999; Huber, 2003). The need for fast decision making on the one hand, and the longer time needed to acquire the right information on the other hand causes a so-called "information gap" (den Hamer, 2005; van Beek, 2006). Business Intelligence (BI) is implemented in order to narrow down this information gap.

Background

Over the years BI has increasingly been moving into the mainstream of knowledge worker computing (Negash & Gray, 2003). No longer are BI solutions solely being used by information specialists or analysts. This is reflected in the population of BI-end users, which is becoming increasingly more heterogeneous in both the skills that end-users bring to BI-systems as well as in the demands they place on them (Gile, 2003). Unfortunately, according to several authors many BI projects fall short of their promise to deliver value. According to Raden (2004, p. 10), "business intelligence applications have low adoption rates within organizations". Furthermore, Biere (2003, p. 8) states that "too many organizations take the easy technology-driven route by selecting some tools, hoping the end users will "magically" emerge with what they want." Finally, Ferguson (1996, p. 13) states that "less attention is devoted to actual BI usage on the problem of getting data out of the system. This approach has diminished the potential benefit of BI systems since it assumes that all users are capable of finding their way around in this 'ocean' of information." In other words, an implementation from a technology-driven perspective does not ensure the adoption and usage of end-users, which constrains organizations to benefit from the potential of their BI investments.

Looking from an end-users perspective, end-users simply want a better way to solve data-related business problems. The end-user's perception of the benefits received from a BI solution is dependent on the degree of productivity increase or the amount of positive results that they receive. If a BI solution helps them look better, and lets them do their job better, they will be more likely to use it (Turban et al., 2007). While BI-software enables organization-wide decision support, problems are encountered in the fit between systems' provision and changing requirements of a growing amount of (end-) users (Dekkers, Versendaal & Batenburg, 2007). The main reason why this "fit" (hereafter referred to as BI-FIT) is missing is that when BI-solutions are implemented in practice, end-users are usually considered (if considered at all) to be equal in their adoption and usage of the system (Biere, 2003), which is not always the case (Borgman, 1989). If end-users get provided with a BI-solution that does not fit their capabilities or tasks, they will most likely not use it, or use it in the wrong manner, or even become negative about the BI-solution, which obviously does not contribute to a positive result. However, if end-users are equipped with a BI-system that fits their needs, they will produce better intelligence to support their decisions, and in the end reduce uncertainty. In order to establish this fit, in this chapter the BI-FIT framework is proposed, which provides an answer to the following research question:

"What are the major factors influencing the fit between Business Intelligence end-users and Business Intelligence solutions?"

Research Motivation and Methodology

Although BI is widely applied in practice, scientific research in the field is limited. Several authors state that BI research "seems to have flown under