Chapter 15

A Business Intelligence Maturity Evaluation Model for Management Information Systems Departments

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ABSTRACT

One of the biggest challenges for managers today is decision making. The adoption of technological solutions to obtain information more easily and intuitively is increasing, so decisions are taken with greater coherence. In this aspect, Business Intelligence (BI) appears as a tool that extracts, transforms, and enables data to be crossed to assist managers in making decisions. This chapter proposes a BI maturity assessment model to assess the level of this phenomenon in the management of the Information Technology (IT) area to verify the main reasons why the IT managers of a company from the private sector in the city of Salvador, Bahia, Brazil, do not use BI tools in their management practices whereas their clients implemented such processes in the last two years. As a result, the level of maturity reached was 01, denominated empirical management or without maturity.

DOI: 10.4018/978-1-5225-9993-7.ch015
INTRODUCTION

The adoption of an agile management model, currently, is needed for any organization, which wishes to promote a management with focus on results, in an effective and efficient way. This is because the demands and implementation of solutions happen in a brief time.

In the competitive scenario, where one of the business differentials is the speed in managerial actions, decision-making has become fundamental for organizations. In this regard, the area of information technology (IT) contributes by providing a solution that seeks to integrate all information available in enterprise management systems and other systems of the company. Business Intelligence (BI) is a concept of tools that aims to group and present information from the most varied areas, allowing analysis through reports and screens created by the users themselves according to their specific needs.

Since the advent of BI in organizations, managers have a set of tools that extracts, transforms and enables the cross-referencing of data to assist them in their strategic management and decision support. Such tooling is developed and kept by the IT sector and, in some cases, IT managers do not use BI in their management practices.

In the IT sector of organizations, the reality is no different. The fact that it is a strategic sector, where the control of the productivity and resources used directly affects the strategic aims of the organization, imposes that the IT sector needs, more than ever, tools to monitor and control its operations, besides decision-making process. Another point to highlight is the great difficulty for IT managers to deal with the decision-making process, which justifies the need to adopt a technological solution, such as BI, where it is possible to obtain information more easily and intuitively, to make decisions more consistently. This environment forces the manager, because he does not have a set of technological solutions to help him in the decision-making process, to make decisions based only on historical data or individual experiences.

To understand the reasons why IT managers do not use BI in their management practices, it is first necessary to evaluate the level of maturity of use of this tool. Talking about maturity implies an evolutionary process to achieve specific skills or a final goal, that is, it is a measuring instrument between the current state and the intended state. Such measurement is possible through maturity models.

The scenario, presented above, is a common reality in several organizations. The locus of study of this research, the Municipal Institute of Public Administration (IMAP), presents these characteristics. The organization supplies technological solutions for management and, within these solutions, BI modules are offered to city halls, to assist public managers in the decision-making process.

The starting point of this research is based on the fact that IMAP’s IT industry supplies and supports BI solutions for these customers and some internal industries; however, IT managers themselves do not make use of these solutions in their management work. Faced with this prerogative, some assumptions were raised through literature consulted and expert assessment, such as: lack of investments; culture in decision-making; lack of training of professionals in the sector; insufficient time to plan their decisions / actions; IT managers evaluate which BI tools are targeted to both lay and end users.

The general objective of this study is to understand the main reasons why IMAP IT managers do not use BI in their management practices after their implementation. Together with the central aim, the specific objectives are: to propose a model of BI maturity focused specifically on the IT area; measure the BI maturity level of the IT industry of IMAP; to raise the possible reasons why IMAP IT managers do not use BI in their management practices.