

Chapter 12

Towards Ad-Hoc and Collaborative Business Intelligence

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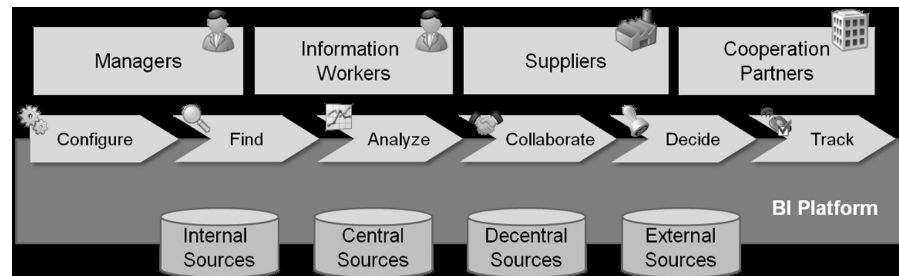
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ABSTRACT

The success of organizations and business networks depends on fast and well-founded decisions taken by the relevant people in their specific area of responsibility. To enable timely and well-founded decisions, it is often necessary to perform ad-hoc analyses in a collaborative manner involving domain experts, line-of-business managers, key suppliers, or customers. Current Business Intelligence (BI) solutions fail to meet the challenges of ad-hoc and collaborative decision support, thus slowing down and hurting organizations. To move towards ad-hoc and collaborative BI, we envision a highly scalable and flexible BI platform. The main building blocks of this platform are a flexible and efficient concept for the management of business context information, an intuitive and powerful methodology for the configuration of a BI system, a concept of an information self-service for business users over data sources within and across organizations, a collaborative decision making environment, and an architecture for the whole system that complements current BI systems.

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Figure 1. Envisioned platform



INTRODUCTION

Current Business Intelligence (BI) environments suffer from several shortcomings regarding the following characteristics:

- **Focus on individual needs:** Today, business users cannot fulfill their individual information needs but have to rely on standard reporting and predefined analytical content; they depend on either IT administration or enhanced technical skills to generate business reports.
- **Availability of business context information:** Highly relevant business context information, such as definitions, business goals and strategies that help to understand the results of an analysis are missing in current BI systems as well.
- **Support for collaboration:** Despite the fact that decisions making is a collaborative task, today's BI solutions only provide no or rather fundamental collaboration capabilities.
- **Open Business Intelligence world:** Today's BI solutions have a strong focus on structured, internal information but lack of integrating external and/or unstructured information.

Failing to meet the BI challenges described above inevitably leads to poor usage of BI systems. According to the world's largest BI study of the Business Application Research Center (BARC,

2009), in only 23% of all enterprises more than 20% of the employees use BI technologies; the overall mean ratio of employees using BI regularly is just 13.2%.

We envision a BI platform that allows business users to derive their own business information in an ad-hoc fashion, discuss the gained knowledge and shape their business strategies in a collaborative manner. This platform will reduce IT dependencies and put information acquisition directly into the business user's hands, be it managers or operative information workers, see Figure 1.

We propose techniques to significantly enhance the individual steps along the BI process. These techniques ease the business configuration and improve the capabilities to find the relevant information and to analyze the data; we make collaboration an essential part of the decision making process and enable the tracking of taken decisions. Further, the platform may utilize a variety of different data sources, which clearly positively impacts the analysis step. To accomplish these goals we need:

- **A flexible data model** to describe and adapt business relevant entities and their relationships within and across organizations. Such a data model allows to react on rapidly changing conditions by adding, removing or modifying new entities and relationships. Further, it allows to model various context information (i.e. information

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