External Data Resources for Public Administration Intelligence Services

Vladimír Bureš, University of Hradec Králové, Hradec Králové, Czech Republic, vladimir.bures@uhk.cz

Abstract

Business intelligence principles and technologies are mostly deployed in the business environment. However, public administration has quite similar needs with respect to strategic analysis and relevant data processing. Therefore, this paper investigates circumstances under which public administration processes can be supported by business intelligence tools. More specifically, the paper presents analysis of external data resources and evaluates their availability, credibility, stability, update regularity and technical accessibility from the viewpoint of public administration needs and requirements. Results indicate that so called “public intelligence” is a feasible and achievable concept, however there are some specifics creating obstacles that need to be overcome. Selected attributes of external data resources represent an apt example.

Keywords: Business Intelligence; Public Administration; Czech Republic; Data Resource Evaluation.

Introduction

Decision-making in public administration is a complex process which needs to be supported by any available tool (Bureš and Čech, 2007). Modern Information and Communication Technologies (ICT) provide managers with a set of methods, techniques, tools, principles and procedures, which have already been successfully applied in various kinds of business oriented issues ranging from business process management (Slavíček, 2011), or mobile-oriented technologies (Kozel and Mohelská, 2010) to knowledge management implementation (Bureš, 2006). Nevertheless, one specific approach still lacks of attention nowadays. Bulk of available data obtainable from several resources enables the concept of Business Intelligence (BI) to be deployed. Definitions of BI vary from very general ones, such as the definition provided by Scheps, who states that BI is “any activity, tool, or process used to obtain the best information to support the process of making decisions” (Scheps, 2008:11). Nevertheless, there are also definitions dealing with specific technologies and principles. For instance, Vercelis (2009:xiv) argues that BI is a “set of mathematical models and analysis methodologies that systematically exploit the available data to retrieve information and knowledge useful in supporting complex decision-making processes”. Apparently, the necessity to work appropriately with data resources is not a priori related to business environment. General principles and methods can be applied also in environments, which main objective is not to gain profit or extend the market share. Therefore, the paper has the following goals. Firstly, the paper aims to introduce the BI methods and techniques into the public administration environment; secondly it depicts criteria that can be used for data resources evaluation; and finally it presents results of this application in the Czech Republic.
Acknowledgement

This paper was written with the support of the project 5.1 SPK01/013 “Investigation of possibilities to improvement of public administration management with the help of advanced managerial methods and business intelligence technologies” coordinated by the Hradec IT cluster, as well as the GAČR project SMEW, project num. 403/10/1310.

References


Novotný, O., Pour, J. and Slánský, D. (2005), Business Intelligence: How to Exploit Wealth in your Data, Grada Publishing, Prague, Czech Republic.

