Modelling of Information Flows in the Business Administration Realm: the Research Perspective

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Abstract: The main objective of information management is to ensure that valuable information is acquired and exploited to its fullest extent. From the research perspective, the information management constitutes currently a global and actual research topic. The main research construct of this paper is the information flow, since attention paid to understanding of information flow patterns or principles represents the area in which significant research results can be anticipated, for theoretical explanation is mostly linked to the realm of technical systems. The main objective of this discussion paper is to briefly review existing research results in this domain, identify the main gaps, and suggest project-based approach that can be discussed, scrutinised and consequently implemented. The research proposal is based on the mixed research methodology, which consists in the phenomenological research, the Grounded Theory, the replication multiple case-study, and system dynamics and multi-agent modelling.

1 INTRODUCTION

It was recognised long time ago that due to the critical dependency of organisations on information, improving its overall management can yield significant operational benefits to all areas of an organisation and importantly its overall efficiency, competitiveness and responsiveness (Hicks, 2007; Chaffey and Wood, 2004; Dietel, 2000). Simultaneously, the economic, business and social environment was strongly influenced by the emergence and consequent deployment of innovations in the field of information technologies during the last decades (Bureš et al., 2012; Mikulecký, 2011). This trend significantly shapes the way in which business is conducted and penetration of technologies is apparent in many areas such as product management (Zahay et al., 2011), knowledge management (Bureš and Brunet-Thornto, 2009), human resources management (Rodrigues and Raposo, 2011), performance evaluation (Mithas et al., 2011), or even soft disciplines such as cross-cultural management (Brunet-Thornton and Burš, 2012).

Information support of all processes and activities has its gratifying as well as seamy aspects. It is considered as beneficial for the business itself, however on the other hand it gives a rise to a phenomenon which we have been facing for several years - information overload (Tarafdar et al., 2013; van Velsen et al., 2013). This development led to the establishment of the new discipline which foundations were formed in early 1990’s – information management. There are many definitions of information management extant, originating in the academia, public administration, research institutions, or business companies. Mostly the origins the information technologies are reflected; however many of them apply generic management terms to the information domain. Nevertheless, majority of definitions, regardless their origin, considers the necessity to manage all related activities such as the creation, representation, organisation, maintenance, visualisation, reuse, sharing, communication and disposal of information (Hicks, 2007), or the planning, budgeting, manipulating, and controlling of information throughout its life cycle (OMB, 2013).
From an organisation’s perspective the objective of information management is to ensure that valuable information is acquired and exploited to its fullest extent. This objective can be ensured by the usage of several existing information management frameworks. Not surprisingly, available framework are mostly IT-oriented, e.g. Zachman’s (Frankel, 2003), or Henderson & Venkatraman’s framework (Venkatraman, 1994). However, more holistic and balanced frameworks can be found. For instance, Lindeman et al. (2005) suggest a reference model for information management to support information sharing needs. The model is based on several layers based on the core comprising information catalogues and repositories and consequent activities ranging from maintenance to security issues.

Maes (1999) in his series of working papers elaborates the Amsterdam Information Management Model. It provides a mapping of the relationships between organization and information. The Amsterdam Model can be used to support strategic discussions in three different ways:

- Descriptive, orientation – the framework offers a map of the entire information management domain, and can be used for positioning specific information management processes in the organization.
- Specification, design – the framework can be used to re-organize the information management organization, e.g. to specify the role of the Chief Information Officer (CIO) or determine the responsibilities of the retained organization in the case of outsourcing.
- Prescriptive, normative – the framework can be used as a diagnostic instrument to find gaps in an organization’s information management, and specifically aimed at identifying missing interrelationships between the various components of the framework.

On the horizontal axis, the framework distinguishes three domains of governance: a) Business – this domain comprises all standard business functions such as management, HR, resources and processes; b) Information and Communication (information domain – this domain describes how information and communication supports the business); and c) Technology (IT domain – this domain specifically describes the development and management of particular IT solutions). The vertical axis describes the three levels of governance, namely Strategy (scope, core competencies and governance), Structure (architecture and competencies), and Operations (processes and skills).

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REFERENCES


