Chapter 5

Expanding the Strategic Role of Information Interactions in the Enterprise Environment:
Developing an Integrated Model

Judit Olah
University of Wisconsin, Madison, USA

Ole Axvig
Consultant, USA

ABSTRACT

In a modern enterprise environment, many information resources are available to people working to produce valuable output. Due to technology proliferation, remote work access, and multiple geographical locations generating their own solutions for local infrastructure challenges, as well as the fact that modern professionals are tasked to make decisions autonomously, it is not self-evident what types of information resources could or should be accessed in what order in order to move processes towards the desired product outcome. Our integrated model was developed using the results of an empirical study. The model puts a user-centered focus on business process model building by mapping all information interactions surrounding the business processes (i.e. creation, storage, management, retrieval of documents/contents as well as information and data). The model characterizes the business processes by types of information interaction, analyzes process phases by those interactions and evaluates actual locations of information content extractions.

INTRODUCTION

Enterprise information management research has long wrestled with the problems of optimizing information usage and of describing and leveraging enterprise knowledge. Earlier research in this area placed a strong emphasis on various aspects of access/retrieval efficiencies, as well as injecting rigor into enterprise content and document management policies as required by regulatory and enterprise policy frameworks. Business process management research has turned renewed attention on the information assets facilitating organizational business processes, attempting to ground the organizational
decision-making processes into the larger context of the organizational information environment.

Our approach, presented in the chapter, examines the historic research trends of these two connecting areas, pushing their boundaries towards an interdisciplinary solution.

This is not a philosophical overview of theoretical works, but a pragmatic and operational discussion of our empirical experience and the model that was developed and tested in an organization environment. Our model offers a comprehensive interpretation of efficiency measures, much needed in today’s business environments, by offering a method of evaluation of information management and process management components. The model bridges a gap between management and information interactions that are traditionally examined in isolation. While focusing on the process efficiencies that became a regularly assumed path to address enterprise efficiency issues in the 1990s, information management is typically looked at from a software application management point of view.

Recently, an increasing body of literature examined the cost-benefit approach to various IT and IS functions, as those ameliorate or prohibit effective communication of information. We strongly feel that looking beyond information technology will be a critical element in contemporary enterprise management for evaluating how information is captured, managed, stored, retrieved, validated, authenticated, confirmed and delivered to the most relevant and efficient point of organizational use, as identified by business process analysis. The model presented here was developed on empirical data and has been tested on internal and outside projects.

INFORMATION MANAGEMENT IN ENTERPRISE MANAGEMENT

During the 1990s organizational management and the surrounding research have witnessed two key areas of revolutionary change: the realization of the central role of enterprise information asset management, and the renewed appreciation of the benefits of business process analysis (Teng, 1995). During the course of the last decade, there has been a dramatically marked shift in recognizing the importance of information sources and valuing those for their strategic role in enterprise management.

There has been much debate and discussion in the professional literature amongst theoreticians as well as practicing professionals as to what constitutes corporate information assets, how best to define those, and what are the direct and indirect values that can be attributed to those assets. These discussions inherently convey an important shift in perspective, and demarcate a new era of enterprise research; by stating that there is a critical relationship between information asset management and the overall success of enterprise management. While in the past most authors might have implied that any improvement in the efficiency of corporate information asset management could have resulted in improved overall corporate performance, the new research would draw a closer and more direct causal relationship between the two. Yet attaching values to these assets has appeared to be challenging and often cumbersome. Financial planning, prompted by increased attention to information assets as part of the enterprise, often continues to rely on technical measures of asset management such as data storage capacity and network throughput. Potential financial gains to be made through the improved efficiency of quick, reliable access to correct information remain elusive because they are hard to measure and report. Our model was developed in part to offer a way of measuring the use of information as an integral part of business processes.

Theoreticians and professionals alike continue to wrestle with how best to define the relationship between the fundamental elements of information assets: data, information, and knowledge,