

E-Management Portal and Organisational Behaviour

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INTRODUCTION

The exchange of knowledge has emerged in recent years as an important issue in the understanding of innovation and value creation in an organisation (Rodan & Galunic, 2004). The creation of effective processes is the fundamental objective of human and organisational performance. Action is produced by the activation of procedural knowledge. Procedural knowledge informs the actors in the organisation how to design actions that can be implemented (Argyris, 2004). One of the aims of the e-management portal is to support the creation of procedural knowledge utilizing the functionalities of the portal (Kakamanu & Mezzacca, 2005; Kim, Chaudhury, & Rao, 2002; Raol, Koong, Lui, & Yu, 2002).

The e-management portal combines different elements of the management information system (MIS). The concept of the portal refers to a single point of access to information and services in the net (Rose, 2003; Smith, 2004; White, 2000; Zhou, 2003). The portal is a communication channel, information processor, joint memory of the organisation, and management tool. The information system also connects the intelligence of managers and other employees at the different levels of the organisation. In addition, the utilisation of the portal in the different roles can also be seen as an instrument of organisational design toward to the model driven organisation (Groth, 1999).

This study describes how the academic portal is used at Turku Polytechnic. The academic portal was planned to be a management tool, which can be used by all the members of the organisation. Other stakeholders can have reports produced in the portal. The information and decision-making system with a portal was developed during the years 2004-2005. The data warehouse approach turned out to be useful in capturing data from the diverse source system and storing them in the integrated database. The new portal has been used by the management and personnel of the institution for a while, but some increments can still be made to develop the system so that it meets the needs of larger user groups.

The purpose of this article is to describe the MIS with a portal in an academic environment and how it can be used as a management tool to implement the strategic plan. The aim of the portal design is to increase the transparency of how the strategic objectives of the institution can be achieved. The study explains the user roles including the identification of users and the activities classified and distributed to them. The article describes the socio-technical aspects of the portal rather than the technical matters.

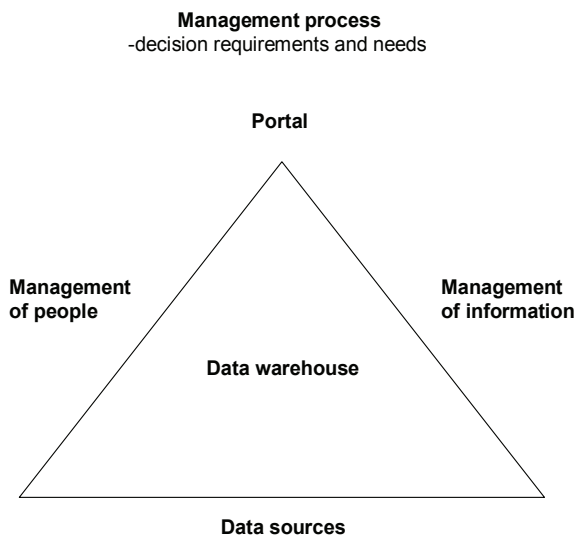
BACKGROUND

The Management Information System

The role of the MIS and decision support system is to be an administrative and technical tool whereas the user roles of the portal and the functions described by Groth (1999) represent the social and behavioural dimension. The e-management portal can be seen as an information technology (IT) solution and a platform for the management process of the higher education institution (HEI). The portal has some similar features with the virtual learning environments such as Black Board and WebCT. The main similarity is the interactivity of the system planned to have dialog in the net, which enables management to be less dependent of time and place.

Figure 1 describes how the MIS supports the management of an organisation. The e-management portal is a combining element in the management at an educational institution. The portal gathers the management of people and information, which are the elements of the knowledge management in a new way (Sveiby, 2001). Knowledge management requires both human insight and technical knowledge (Magretta, 2002). The figure is a developed version of the traditional information management system presented by Horton (1979). The main parts of the MIS are the existing operational data sources, data warehouse, and portal itself. The MIS is planned

Figure 1. The structure of the management information system



to support the management process of an organisation with the help of knowledge management.

The management system of Turku Polytechnic is based on strategic management (Kettunen, 2003). The strategic plan is implemented using the balanced scorecard approach developed by Kaplan and Norton (1996, 2001, 2004). The balanced scorecard was introduced in 2002 at Turku Polytechnic (Kettunen, 2005; Kettunen & Kantola, 2005). The measurement-based systems are easily left halfway if the information systems do not directly support them. The development project of the MIS with a portal was started at the beginning of 2004 to support the strategic planning.

The management process has needs and requirements for the decision making, which are specific to each organisation. The portal is a management tool, which aims to meet the needs and requirements of the management in an academic environment. The portal also supports the creation of procedural knowledge that informs the management and other members of the staff how to communicate and implement the strategic plans. The data architecture is designed by the development staff so that the data of the existing operational systems are collected to data warehouse.

The portal is maintained and developed by the information services staff of the institution in the partnership with the supplier company Ineo Ltd. The portal has brought new management and expert activities to the organisation. The open discussion of the managers and staff on the strategic plan takes place in the portal and makes the management more aware of the objectives of a complex organisation in a constructive way. The use of the portal also steers the managers to work with the actual issues of planning and

reporting. The portal and data warehouse support also the use of the statistical data analysis.

MANAGEMENT USING THE PORTAL

The socio-technical nature of the management portal refers to the cognitive dimension of social capital creating common context and language in an organisation (Lesser & Storck, 2001; Nahapiet & Ghoshal, 1998). A common understanding and vocabulary are essential in the construction of connections, which are necessary in the creation and fostering of social capital. This can be made by sharing common objects and artefacts including different kinds of shared documents such as strategic plans, manuals, and quality systems, which provide a shared reference point that others can quickly understand. Organisations can also share common stories that convey a sense of shared history and context of the workplace.

Regarding the users of the e-management portal, there seems to be a need to identify, define, and classify the different skills and competencies, which have a vital importance. At the management level, the most important factor appears to be the competence of strategic planning. For most staff, IT skills do not appear to be the main concern but rather the planning and management as well as interpersonal, social, and communication skills. These views are comparable with the experiences described in other European studies of public sector (cf. European Institute for Public Administration, 2005).

The basic goal in the construction of the MIS portal is the gathering the information, action, and documentation of steering to one place. This principle makes the processes of the managers and staff more efficient. Another goal of the project is to support the balanced scorecard framework by generating and merging reliable information from the separate operational data systems of the institution. This information is of great importance in future planning and gives reliable information about the achievement of the strategic objectives. The third ambitious goal of the project was to promote the transparency of management by opening the management process and documents to the personnel.

The use of the portal is based on user roles, which have been specified for the persons' organisational positions. Different roles enable users to observe different views and allow them to take care of the tasks that have been defined for the user roles in process descriptions and instructions. The system has been designed to be intelligent because it supports the users in their activities by reminding about current tasks and showing only the tasks, which need to be done.

All the organisational units of Turku Polytechnic make their strategic and action plans, budgets, and human resource plans using the portal. Each head of the organisational unit takes the responsibility to prepare the plans for the planning period. The head of the unit submits the documents through the

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