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A PROCESS-BASED APPROACH TO KNOWLEDGE MANAGEMENT

ABSTRACT

This paper analyses the relationship between business process modelling, knowledge management and information systems development projects. The paper's main objective is to present business rules as the encoded knowledge of corporate business practices. Further, it introduces a rule-based business activity meta-model as a repository in which business knowledge can be captured and traced from their origin in the business environment through to their implementation in information systems. The case study of the Croatian Ministry of Finance is presented, discussing the practical experience in integrating business process repository and organisational knowledge as the foundation for information system development.

Keywords: *knowledge management, business process modeling, business rules, public sector, Ministry of Finance, Corporate Modeler.*

1. Introduction

The initiatives that are currently being or have been widely implemented in organizations are information systems/workflow management systems (IS/WFMS) development and knowledge management (KM) projects (Chaffey and Wood, 2005; Harmon, 2003). They are based on developing a common IT infrastructure and common business processes, emphasizing how firms can enhance competitive advantage through the more effective utilization of their information and knowledge assets. In order to continuously analyse, change and improve their business processes, companies use business process modelling techniques and tools, conducting business process change projects and developing business process repositories. Business process modelling as an approach focuses on understanding the underlying business processes where business rules are one of the most important elements for the detailed and formalised description of all facts (knowledge) which are to be implemented during IS development (Kovacic, 2004).

Usually, public sector organizations face challenges that differ from the challenges for private firms. They have to meet multiple, often conflicting goals and they are subject to constraints of a financial, legal, contractual, personnel and institutional nature. Radical process-focused change in public sector organizations can only be achieved through deep changes in their bureaucratic practices. Renovation in the public sector mostly emphasizes quality and productivity improvements, the elimination of bureaucracy, process simplification and the

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reduction of processing times. In public administrative processes ontology-based organizational memory systems are especially important: many existing sources of knowledge, laws, comments on laws, specific regulations, old similar cases, available case-specific documents and information etc., are prevalent in different places and in different forms and representations, at several degrees of formality, and are related through many links (Papavassiliou et al., 2003). In order to make informed, transparent and accountable decisions consistent with the past that are compliant with the law and consistent with similar decisions in other places, all of this knowledge should be placed within a coherent framework.

This research presents an approach to analyze and capture business knowledge by using a business rule-transformation concept. The paper is structured as follows. We first briefly introduce the aspects of knowledge management (Section 2). In Section 3 the role of business process modeling, business rules and a business rule-transformation approach are presented. This is followed by the Section 4 which describes the IS development project at the Croatian Ministry of Finance. The findings obtained from the case study are analyzed and discussed. Finally, the Section 5 outlines the conclusions and discusses some directions for further research.

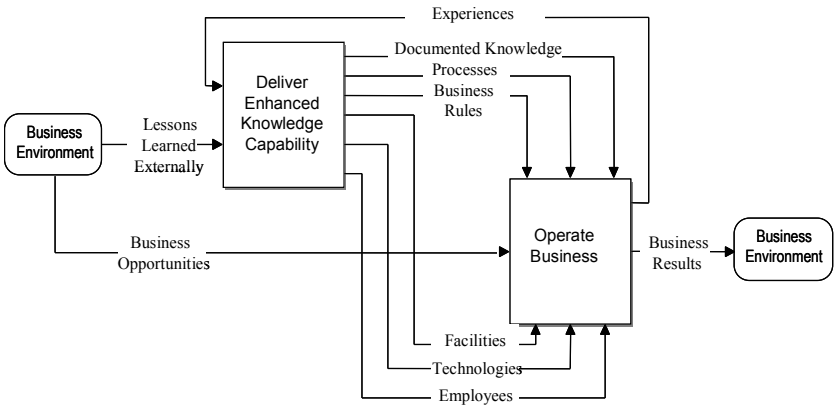
2. Knowledge management: a process-based approach

Knowledge can be defined as including all factors that have the potential to influence human thought and behavior and that sometimes allow the explanation, prediction and control of physical phenomena (Hall and Andriani, 2003). This is a very broad definition and includes factors such as skills, intuition, organizational culture, reputation, and codified theory. Knowledge could be classified into various types, but it has become an accepted convention to divide knowledge into two major types: tacit and explicit knowledge. Tacit knowledge originates and is applied in the minds of the owners of knowledge. It is the most powerful form of knowledge, grown from the employees' experience and business practice. This type of knowledge is difficult to present formally, as well as difficult to communicate and share. Explicit knowledge in organizations often becomes embedded in documents, repositories, organizational routines, processes, practices and norms. It could be articulated formally, could be shared, transmitted, processed and stored easily. Organizational knowledge is a mixture of explicit and tacit knowledge and the role of KM is to make it available as an organizational asset. Organisational knowledge as an important element of the entire business knowledge could be systemized, documented and retrieved in business process repository developed by business process modelling tools, within business process change projects. The management and processing of organizational knowledge are increasingly being viewed as critical to organizational success.

Business knowledge can be seen to have a life cycle of its own (Burlton, 2001). Knowledge can be created within or outside the organization, it must be stored somewhere, be found, acquired, put to use and learned. Knowledge must be made available in readily accessible forms such as documents, processes and business rules. These can be embedded in human resources, information technologies, or the design of facilities (Figure 1).

Figure 1.

The knowledge creation and exploitation process



(source: Burlton, 2001)

Knowledge management is the term adopted by the business community in the mid-1990s to describe a wide range of strategies, processes and disciplines that formalize and integrate an enterprise's approach to organizing and applying its knowledge assets (Waltz, 2003). KM enables the creation, communication, and application of knowledge of all kinds to achieve business goals (Tiwana, 2000). KM is a set of professional practices that improves an organization's human resource capabilities and enhances the organization's ability to share what employees know (Burlton, 2001). It is a conscious strategy of getting the right knowledge to the right people at the right time and helping people share and put information into action in ways that strive to improve organizational performance (O'Dell and Grayson, 1998). Finally, it is increasingly recognized as an integral part of an organization's strategy to improve business performance (Carillo *et al.*, 2003; Zack, 1999).

Davenport and Cronin (2000) have identified three approaches to KM: (1) KM is information management by another name since it is focused on the coding and classification of recorded data, information and knowledge; (2) KM is the management of know-how: processes and ontologies - the emphasys is on the discovery and extraction of knowledge from existing processes and resources and (3) KM optimizes the conditions for adaptive co-evolution, the key is the interplay of tacit and explicit knowledge. The key objectives and purpose of KM from the business process prospective are: (1) the externalization of knowledge of individuals or groups, and consequently the spreading, sharing and reusing of knowledge; and (2) providing access to the desired knowledge to support the productivity and competency of all employees performing business activities. Process-oriented knowledge management aims to provide employees with task-related knowledge of the organization's operative business processes. In this environment, knowledge can be offered to an employee in a much more targeted way. The process-oriented view offers several advantages for KM initiatives: a value chain orientation; context relevance; widely accepted management methods; improvement in the handing of knowledge; process benchmarking; and support for process-oriented KM (Kang et al., 2003).

3. Business process modeling as a foundation for Knowledge Management

Business process model builds up a company-wide knowledge base and is the starting point for the constant adaptation of organizational structures to the dynamic company environment; they provide a 'process' approach to knowledge management.

3.1 Business process modeling tools

Very complex and process-oriented nature of business has led organizations to use process modelling methods and tools as a means of managing the complexity of these systems, and to aid in achieving business goals. Business process modelling (BPM) has now been in the public domain for four decades, but it is only in the late 1990s that integrated business process modelling tools have been developed. Integrated process modelling tools must be capable of showing interconnections between the activities and conducting a decomposition of the processes. These tools must help users to conduct "what-if" analyses and to identify and map no-value steps, costs, and process performance (bottleneck analysis). They should be able to develop AS-IS and TO-BE models of business processes, which represent both existing and alternative processes. They can be used to predict characteristics that cannot be directly measured, and can also predict economic and performance data that would otherwise be too expensive or impossible to acquire. Each BPM software application is defined by a mix of several components. The most important components of BPM tools are: (1) process modelling and design; (2) process monitoring; (3) process operation (automation and integration); (4) technology platforms and interfaces. However, the common characteristic of BPM tools is the ability to develop, use and maintain the business process repository.

The role of BPM in Knowledge management is threefold: (1) business processes, if modelled and captured in business process repository, are a part of codified intellectual capital of the organisation; (2) knowledge processes in an organisation should be a part of business process repository; (3) business process repository could be used for knowledge creation, sharing and distribution (Kirikova and Makna, 2005; Persson and Stirna, 2002; Apshavalka and Grundspenkis, 2003; Woitsch and Karagiannis, 2002). Business process repository contains existing process knowledge documented in the form of business rules: policies and procedures, job descriptions, business forms and application code, relational data-base management system rules (tables, constraints, and triggers). Business process modelling (BPM) as an approach focuses on understanding the underlying business processes where business rules are one of the most important elements for the detailed and formalised description of all facts (knowledge) which are to be implemented during IS development (Ball, 1998, Giaglis et al., 2005).

3.2. Business rules in Knowledge management

Business rules are not a process. Burlton (2001) separates 'know from the flow'. Business rules represent the 'know' part of corporate business processes. They really mean establishing the encoded knowledge of corporate business practices as a resource in its own right (Ross, 2003). According to this definition, business rules can be seen as a subset of business knowledge. They should be described in a natural language first and the business process should be modeled only at the level of detail that is sufficient to achieve these objectives.

In order to present and discuss actual problems related to business-rules analysis and the refinement of business knowledge, some limits of the existing business process modeling methods and tools have to be exposed:

- Business-process modeling is performed using either inadequate descriptive notations from management accounting or through the poor use of graphical notations that were created for software development and do not take organizational issues into account (Valiris and Glykas, 1999).
- Native formats of process models, designed using different modeling languages, are unsuitable for distribution and review by final users (Kalpic and Bernus, 2002).
- There is no formal underpinning to ensure consistency across models. When graphical notations are used in business-process modeling and business redesign, there is no way of verifying the logical consistency of the resulting models. Semantic mistakes or the disregarding of relevant aspects may lead to some expensive misjudgments (Valiris and Glykas, 1999).
- On the other hand, some organizations formalize knowledge externalization and have a tendency to overanalyze an existing system and therefore get stuck in the business process analysis phase of the project (e.g., analysis paralysis) from which they are never able to move on (Chen, 1999).

Detailed information system modeling of the processes or workflow structures takes place at the operational level. Workflow systems are able to support business processes if the business process is clearly structured and defined (Kovacic, 2003; Kovacic, 2004). Workflows are refined and modeled at the level of particular interdependent business activities that are performed by actors (resources) in an organization in order to achieve common goals. At this level, the more exact and certain information about a workflow is the better the modeling results will be. The problem lies in the conflict of aims arising between the need for accurate information and the difficulties of obtaining it due to the often obsolete documents describing the flow structure, varying or even contradictory statements from the employees, and time constraints (Grover et al., 1995).

For many years there has been increased recognition in Information Systems (IS) modeling of the dynamic behavior of organizations (Green and Rosemann, 2000). Business process models are maps or images of the logical and temporal order of business activities performed on a process object. Business process modeling has been embraced as an appropriate way to describe business behavior. Every process is represented by its precise description, which contains both the behavior and structure of all objects that may be used during execution of the process. Business-process modeling as an approach focuses on understanding the underlying business processes where business rules are one of the most important elements for the detailed and formalized description of all facts or business knowledge, which are to be implemented during business process renovation and IS development.

The enterprise model, such as business process models, captures knowledge, which explains the motivation for the existence of rules (Bajec and Krisper, 2005). If enterprise models represent process knowledge then we must better understand the role of business rules, the process of knowledge transformation and the extent of knowledge externalization (codification of tacit knowledge) from tacit to explicit. In knowledge-intensive settings, business processes are typically complex and weakly structured and therefore incapable of being a direct basis for the development of knowledge infrastructures supportive of the business process (Strohmaier and Tochtermann, 2005). To resolve this problem of complexity, some authors propose a rule dictionary (Krallmann and Derszteler, 1996) or rule repository where business rules (Herbst, 1996; Herbst, 1997; Knolmayer et al., 2000) and business knowledge have to be represented (Haggerty, 2000). This repository where we capture, store and manage business rules is the core of a development environment providing appropriate tools for process, workflow, data and

organization modeling, process refinement, as well as import and export capabilities. A rule-repository system also provides the opportunity to put into play capabilities for analysis and simulation (Knolmayer et al., 2000). Our experience leads us to the conclusion that a rule-based methodology (as a part of process-based knowledge management) has advantages over established tool-supported Petri nets (i.e. INCOME) and EPC (i.e. ARIS) rule-refinement approaches (described in van der Aalst, 1999, and Scheer and Allweyer, 1999).

3.3 Business rules and the business-rule meta model

Business rules have grown in importance and popularity in the last few years. They have become recognized as distinct concepts that play a key role in developing applications which are flexible and amenable to change (Bajec and Krisper, 2005; Barnes and Kelly, 1997; Date, 2000; Youdeowei, 1997). While a lot of work has already been done in various fields of business-rule research, most notably in rule analysis, classification, articulation and formalization (Hay and Healy, 1997; Herbst, 1996; Herbst, 1997; Moriarty, 2000; Ross, 1997; Tanaka, 1992), a broader view is required, namely a behavioral or conceptual view of business rules. The fact is that business rules are constantly changing at the business level yet we are unable to keep up with the changes required for supporting IS. Thus, an ongoing business-rule management environment is required whereby each business-rule instance can be traced from its origin through to its implementation.

Business rules can be defined and classified in many different ways. The business rule is an atomic piece of business knowledge, specified declaratively, whose intention is to control, guide or enhance behavior. A rule may be established in order to ensure that one or more business goals are achieved, to enhance productivity in day-to-day work, to assist the business in making decisions, and/or to regulate or guide external activities (Ross, 1997). Business rules can be classified in many different ways. When examining business rules with regard to business processes, the following three relationships stand out:

- a business rule relating to the overall business process or a *Global rule*;
- a business rule relating to business process activity or an *Activity rule*; and
- a business rule relating to the IS/WF process definition or a *Structural rule*.

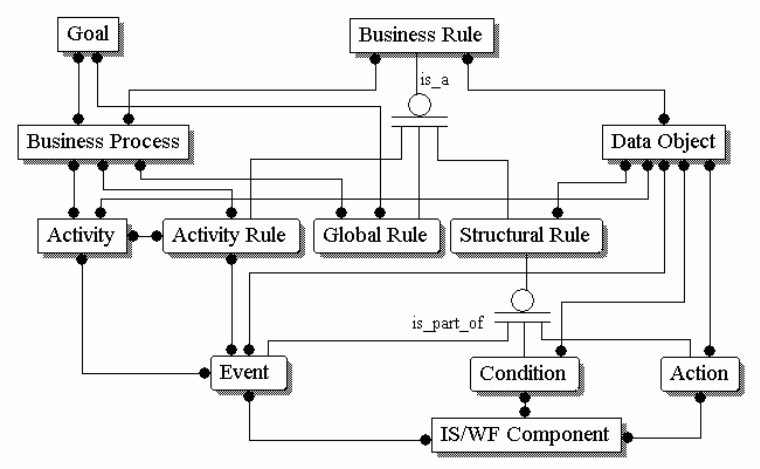
A business process is defined as a subset of business activities performed by the organization to achieve the goals for which it has been created. *Activities* correspond to different stages of process execution. In order to be initiated, some activities require particular artifacts or events as an input which may be taken directly from the environment or produced as outputs by other activities. Thus, an *Event* is a passive element of the process that reflects a signal in a business environment which triggers the execution of an activity. *Data object* is an instance containing a collection of data and methods for operating on that data.

In the *business activity meta-model* presented in Figure 2, business rules are divided into two categories: *behavioral and structural*. The categorization described here is only an example of a business-rule taxonomy that we have found useful in our research. Global rules that relate to an overall business process act as an interface between a particular business process and the goal that the process has to achieve. They define or restrict organizational behavior. Such rules should be broken down into detailed behavioral rules governing specific business process activities and further into rules that control the operations within these activities. When developing *IS/WF components* or applications in support of business processes, both business rules that apply to an overall process and the rules that apply to a specific process-activity rule have to be considered and broken down into detailed (structural) rules. A process-activity rule

or life-cycle rule is an assertion that governs or constrains changes to business objects or facts (English, 1998). Therefore, the detailed structured rules as specifications of requirements for the development of IS/WF applications are proposed.

Figure 2.

Business activity meta-model



The taxonomy of structural rules presented above is based on Martin's work (Martin and Odell, 1998) with additional classes coming from the GUIDE scheme (Hay and Healy, 1997). A list of different business rule taxonomies can be found in Gottesdiener (Gottesdiener, 2000). It was shown in the work of Herbst (Herbst, 1996) that a combination of *Events, Conditions* and *Actions* (known as an ECA extended to an ECAA structure) can be used to specify individual business rules. An IDEF1X notation convention is used to develop the meta-model. Relationships between entities have n:m cardinality. The global rule (in the centre) is an aggregation of behavioral and structural business-rule components. The first (left) part of the meta-model contains the entities and relationships related to business process and behavioral features (Entities: Goal, Business Process, Activity, Global Rule, Activity Rule, and Event), while the right part of the meta-model focuses on structural and IS/WF implementation characteristics (Entities: Data Object, IS/WF Component or module, Structural Rule, Event, Condition and Action). The business activity meta-model is proposed as an appropriate starting point for the business-rule refinement process at the activity level of the business process. The business rules that underline the business activities are first described in a natural language. In subsequent steps, these rules are refined in a structured way as a set of structured rules representing the business process at different abstraction levels. In the case of small and less complex models, a manual revision is more economical and less time-consuming. The business activity meta-model concentrates on the role business rules play with respect to IS/WF-related concepts. Its function is to describe those activities that must be undertaken to achieve an explicit goal and establish a clear link between the business and IS/WF modeling.

4. A case study of the Croatian Ministry of Finance

In order to assist candidate countries in their preparations for joining the European Union (EU), the European Community gives candidate countries financial aid through its pre-accession funds. Upon becoming an applicant country, Croatia received the possibility of participating in

the European Community's Aid Programmes. As a Central European country, Croatia was eligible to access three pre-accession funds - PHARE, ISPA and SAPARD. Financial aid provides funds for particular projects with a well-defined strategy and objectives at the national level, as well as defined key performance indicators which must be tracked and reported to the EU. A country receiving financial aid is expected to establish a tracking system for projects in order to monitor the realization and success of enforcement and efficiency of using funds. The main objective of the EU is to ensure that the funds are used towards the previously defined purpose, while also teaching future members to accept the concept of tracking results and benefits in the public sector and financing projects according to success criteria.

4.1 Case Background

Following the policy of decentralisation, the processes of project tendering, contracting as well as financial and administrative management are handled by the national implementing structures of the candidate country under supervision of the Commission and the EC Delegation. The Ministry of Finance, precisely the Department for Financing EU Assistance Programmes and Projects (i.e. the Central Financing and Contracting Unit) is responsible for financial and administrative management of EU pre-accession funds in Croatia. The Department for Financing EU Assistance Programmes and Projects is the central unit responsible for financing, procurement, payment, monitoring and execution revision of all Croatian decentralized projects financed from EU pre-accession funds.

The first step in the process of setting up the system of financial and administrative management was establishing the National Fund (NF) and the Central Financing and Contracting Unit (CFCU). The National Fund is the treasury for EU funds. The concept is the same as the state treasury, which the country organizes to manage the state budget. The main task of the National Fund is efficient financial management of EU funds assigned for approved projects. The selection and management of the appropriate contracting procedure within the project or programme cycle is also the legal responsibility of the beneficiary country. The Department for Financing EU Assistance Programmes and Projects mentioned above, acts as the Central Financing and Contracting Unit (CFCU). The main tasks and responsibilities of the CFCU are organization, selection and management of tender procedures, payment to selected contractors and monitoring the execution of the contract.

In order to achieve better and simpler financial management and control of funds, the EU requires the establishment of an information system (IS) to support the business activities of the National Fund and Central Financing and Contracting Unit. The main processes which the system has to support are: planning of fund expenses, tendering, monitoring project execution, financial management, accounting, revision and control. It is expected that the IS could give information on: the project to be financed, the best tenderer, when and how EU financial aid will participate, what is contracted, amount spent and the effectiveness and efficiency of spending. The IS must assure a very high level of quality and transparency, generating reports which confirm that the funds are used in the appropriate manner.

4.2 Discussion and analysis

Considering that the Ministry of Finance does not use an application by which the National Fund and Central Financing and Contracting Unit could govern efficiently and according to EU requests, it was necessary to implement a new application. In the public tender process for development of such an application, a contract was signed with the software company

InfoDom. InfoDom was able to offer an application supporting procurement processes according to Croatian public procurement law and containing almost all the elements defined by the EU in the request for IS support.

The customization and implementation of the application "CRO4EU" was divided into five phases. *Phase I* was the establishment of a project team which consisted of experts for application development, experts for business process management, experts for deployment and experts from the Ministry of Finance – the future end-users. In *Phase II,* business processes were modelled. The main differences between EU procurement procedures and the procurement procedures proposed by Croatian public procurement law were pointed out. According to Croatian public procurement law, public organizations and companies in Croatia are obliged to conduct procurement procedures. On the other hand, tenders conducted as part of projects financed under the EU pre-accession funds were not subject to Croatian public procurement law. Since all tender procedures are defined in detail by the EU and the Croatian Ministry of Finance lacked experience with these procedures, it was necessary to conduct a deep analysis of EU procedures and rules in order to identify and define business processes and customize the application according to the defined processes. Corporate Modeler (Casewise) was used for business process modelling. All processes, their owners, executors, preconditions and results were identified, analyzed and designed in detail. An integrated business process repository was developed and implemented. This repository integrates all known knowledge on financial management, tender processes, program control and project execution.

The repository, "rich" in knowledge, enables easier customization of the application and embedding of knowledge in *Phase III*. All processes which had clearly defined procedures or business rules were identified during Phase II and implemented in the phase of business application development and customization. Once customization was complete, *Phase IV* was started, including several activities: testing, implementation of the application and education of future users. The implementation and testing activity was finished successfully – the application was accepted by the users and just a few additional customizations were required. With completion of Phase V and the education of users, the project was closed and the application was implemented. In February 2006, the Croatian Ministry of Finance began to use the application.

Business knowledge built into the process repository in the form of business procedures and rules and transformed into program code, allows the application to "lead" end-users through the steps of the business process, depending on an entire range of business situations and pre-defined parameters. This could be explained by the case presented further. The EU defined sixteen different tender procedures depending on the value of procurement and procurement type (procurement method) – service, supplies, works or grant. When the user opens and registers a new tender, it is necessary to define the amount of procurement and the procurement method. In our case (Figure 3), the planned value is €250,000 and the procurement method is service, as the object of tender is Study of Administrative Capacity in the area of Maritime Safety. Based on the knowledge, procedures and values implemented in the business process repository, the application automatically determines the tender procedure. Comparing the list of available tender procedures (Table 1) and the tender procedure which was proposed and implemented by the software, it could be concluded that the selection made by the application was correct. This short example confirmed the successful implementation and use of knowledge in the IS.

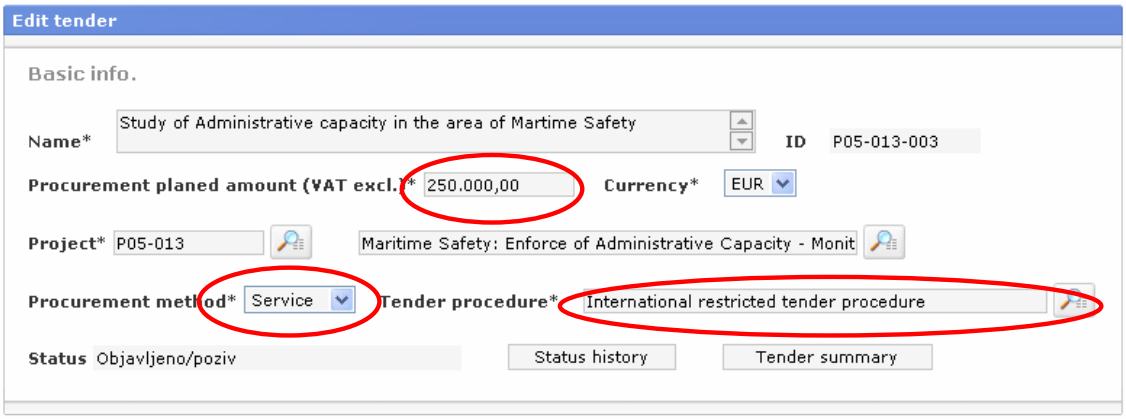
Table 1.

The list of available tender procedures

TYPE	VALUE/ PROCEDURE	VALUE/ PROCEDURE		VALUE/ PROCEDURE
SERVICES	**≥ €200,000** International restricted tender procedure	**< €200,000 but >€5,000** **1.** Framework contracts **2.** Competitive negotiated procedure		**≤ €5,000** Single tender
SUPPLIES	**≥ €150,000** International open tender procedure	**< €150,000 but ≥€30,000** Local open tender procedure	**< €30,000 but >€5,000** Competitive negotiated procedure	**≤ €5,000** Single tender
WORKS	**≥ €5,000,000** **1.** International open tender procedure **2.** International restricted tender procedure (exceptional cases)	**< €5,000,000 but ≥ €300,000** Local open tender procedure	**< €300,000 but >€5,000** Competitive negotiated procedure	**≤ €5,000** Single tender
GRANTS	*Procedure*	International Call for Proposals	Local Call for Proposals	Direct Award
	Programme amount	**≥ €2,000,000**	**< €2,000,000**	*Amount irrelevant to procedure*
	Project amount	**> €100,000**	**≤ €100,000**	*Amount irrelevant to procedure*

Figure 3.

An example of embedding knowledge into the application



Business process modelling enables the generation, documentation and reuse of a massive amount of knowledge concerning business policy, procedures and rules. In the "CRO4EU" application (described above), nearly twenty procedures are currently implemented. All procedures were designed and documented by the Casewise Corporate Modeler (http://www.casewise.com/) in the form of event-process diagrams. Owing to implemented knowledge, business processes are executed faster and more efficiently, allowing for easier

implementation of the IS for new users and significantly reducing the possibility of mistakes. All requests are fulfilled: monitoring the efficiency of programs and projects realizations, financial management, controlling all relevant transactions from project planning and registering through procurement processes, contracting and payment to account tracking. A very important feature of the Casewise Corporate Modeler is the possibility to create any type of BPMN and UML diagrams. Casewise BPMN and UML extensions are very significant and important because this set of templates bridges the gap between business processes and IT development by transforming business process diagrams into UML diagrams or BPMN diagrams, which then can be transformed in BPEL. In the case of developing the "CRO4EU" application, this possibility was not applied as the majority of the application already existed, and therefore it was not necessary to generate code from the beginning but instead only to customize the existing application.

5. Conclusion

Management of knowledge can improve business performance by extracting, sharing and reusing experience and know-how. In order to gain a sustainable competitive advantage, more and more companies are starting to organise their work around cross-functional business processes. When it comes to process support, information systems and workflow technology have been widely recognised as one of the leading process-oriented business technologies. Knowledge capturing and representation methods are crucial to manage knowledge inventory in an organization. An overview of the current state of the business process modelling tools reveals that further research is needed to transform goal-oriented business process models into models' representations the systems and software engineers are working with. It is vital that the knowledge captured in the goal-oriented business process models can be integrated with today's software development processes.

This paper has explored their combined influence on organizational efficiency and flexibility. The "CRO4EU" solution is analyzed to show the elements of a successful business process based knowledge management and its implications in the public sector. The research confirms that the analysis and modeling of business processes is indeed useful since it provides insights into the policies, practices, procedures, organization, process flows and consequently shifts people's minds from a functionally to a process-oriented organization. The proposed business process modeling approach is valuable for understanding business rules and the relationship between knowledge and the processes since the process model works as a knowledge mediator between a knowledge worker and their successor. The continued development of BPM and KM software tools should enable the transformation of the integral business processes model into the knowledge repository.

Despite the dangers of generalizing from a single case, this study can serve as useful theoretical and conceptual foundations for future research. The most critical issues of the business-rule refinement process at the activity level of the business process have been recognized, but there are still other factors to be identified and analysed. The analysis of expected changes and positive impacts will be an integral part of future research on KM as a part of business process change projects in other Croatian and Slovenian companies.

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MANAGEMENT ZNANJA TEMELJEN NA PROCESU

SAŽETAK

U ovom radu analizira se veza između modeliranja poslovnih procesa, upravljanja znanjem i razvoja informacijskih sustava. Cilj rada je opisati pristup prikazivanju znanja o poslovnoj praksi u obliku poslovnih pravila. Objašnjava se postupak pohranjivanja znanja u obliku meta-modela kao sastavnog dijela repozitorija poslovnih procesa koji omogućuje prikaz, pohranjivanje i praćenje znanja, od trenutka njegovog nastanka u poslovnom okruženju, do njegove primjene u razvoju informacijskih sustava. U radu je prikazana studija slučaja Ministarstva financija Republike Hrvatske i opisana je integracija organizacijskog znanja u repozitoriju poslovnih procesa koji je korišten kao osnova za razvoj informacijskog sustava.

Ključne riječi: *upravljanje znanjem, modeliranje poslovnih procesa, poslovna pravila, javni sektor, Ministarstvo financija, Corporate Modeler.*