

# ➤ Towards a Process Orientation in the Public Sector: Croatian and Slovenian Case Studies

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## Abstract

Interest in business process management projects in public organisations has been stimulated by the restructuring reforms that have spread across many countries in the last two decades. This paper examines process oriented projects in public sector and provides an overview of related research and experiences from practice. To illustrate the characteristics of business process-oriented projects in Croatian and Slovenian government institutions, two different real-life case studies are described and compared. The research results are analysed as to provide guidelines that can be applied in future implementation activities.

**Keywords:** process orientation, public sector, business process modelling, business process management, e-government.

## Izvleček

V mnogih deželah lahko v zadnjem obdobju strukturnih reform javnega sektorja zaznamo povečano zanimanje organizacij po projektih prenove poslovnih procesov in procesni usmerjenosti poslovanja. Članek obravnava procesno usmerjene projekte javnega sektorja in podaja pregled pomembnih ugotovitev raziskav in prakse na tem področju. Dva že izvedena procesno usmerjena projekta organizacij javnega sektorja, hrvaški in slovenski, sta predstavljena in medsebojno primerjana. Rezultati raziskave so analizirani z namenom pridobitve spoznanj, ki bi jih v prihodnosti lahko koristno uporabili pri izvedbi takšnih projektov.

**Ključne besede:** procesna usmerjenost, javni sektor, modeliranje poslovnih procesov, menedžment poslovnih procesov, e-uprava.

## 1 INTRODUCTION

**In recent years, business process reengineering (BPR), business process management (BPM) and business information technology have become dominant issues in the discussion of business performance improvement. Several methods, tools and methodologies have been developed and implemented to support process orientation (Trienkens et al., 2005, Damij et al., 2008, Footen and Faust, 2008, Dreiling et al., 2008), but the practical application of this knowledge in the domain of government has only occurred to a limited degree (Becker, et al., 2006). Since BPR methodologies are very rarely applied and verified in public administrations, there is a lack of process orientation in this sector.**

On the other hand, recent years have witnessed a rush in implementation of e-government to restructure and improve public services using IT (Kawalek and Wastell, 2005). The implementation of e-government is a widely used concept in the public sector across the globe. The term 'e-government' focuses on the use of new information and communication technologies (ICTs) by governments as applied to the full range of government functions (Kovačič, 2007). E-government means using ICT to provide citizens with improved access to information related to public administrations (Gonzales et al., 2007). In addition to the traditional approach, which sought to meet inter-

nal operation needs and solve problems associated with efficiency and costs, e-government focuses on the potential of external interactions and emphasises the importance that citizens assign to customer service, convenience and user-friendliness (Gonzalez et al., 2007). In short, e-government is the application of information technology and e-business to the processes of government. This approach has led many public institutions to undertake business process change (BPR, BPM) projects.

Multiple factors have proved to be crucial in managing such a project to ensure success. Since the critical success factor in implementation of business process change is not only the adoption of IT, but also many other important issues such as changes to the organisational structure, climate and culture, this leads to difficulties in managing business process change projects in the public sector. Therefore, many researchers are interested in examining which process-oriented methodologies are appropriate to these organisations. Besides, some authors suggest that after the completion of a project government organisations continue to use the old practices and present the new one in the emerging façade, which is their formal structure (Lapley and Pallot, 2000; Pollitt, 2002). According to Arnaboldi et al. (2004), the final question is whether the rise of numerous projects in the public sector is an answer to the reforms or whether they are elements of a failure to achieve the comprehensive change claimed by governments.

Thus, this paper examines the theoretical perspective of process-oriented projects in the public sector (Chapter 2) and examines process-oriented projects carried out in Croatian and Slovenian governmental organisations in the effort to understand practical particularities of the field (Chapter 3). Finally, the research results are analysed and compared (Chapter 4) so as to provide guidelines that can be applied in future implementation activities.

## **2 PROCESS-ORIENTED PROJECTS IN THE PUBLIC SECTOR**

Since practical experience has yielded various results of process-oriented initiatives in the public sector, numerous researchers have tried to identify the critical success factors of these projects and programmes. Based on a review of recent academic literature, several papers relevant for this research are selected and described.

According to Stemberger and Jaklic (2007), the public sector has some specifics which make renovation projects considerably different and therefore classic business process change methodologies have to be adopted. Based on a case study of a successful process change project at a Slovenian ministry, the authors propose activities, techniques and tools for each of the six traditional project stages.

Kim et al. (2007) describe and analyse a case study on managing IT-enabled transformation in the public sector in South Korea. The findings of this study include the alignment of technology and processes, integration of resources into core business activities, integrating stakeholders' trust and commitment, and better understanding of the role of organisational learning, which can enhance the adoption and institutionalisation of e-government initiatives. The main results of the analysis carried out by della Rocca (2000) reveal the weak institutionalisation of the public administration. Limited mobility and poor wage dynamics are factors most strongly affecting the public administration labour market. This makes it extremely difficult to apply private sector principles to the public administration.

The research conducted by Arnaboldi et al. (2004) presents an analysis of a reengineering project carried out in the Italian Treasury Ministry. The major theoretical findings of the paper cover three issues. The first is the enlargement of the social system governing the project. Revising a process in the public sector means revisiting a network or relations, creating possible tensions; for this reason, the involvement of all stakeholders is essential. Another important issue is the definition of constraints because in public institutions constraints are more difficult to remove. Therefore, the constraints analysis should tackle the legislative sphere, underlining possibilities or additional struggles in achieving the project's completion. The third major issue of this paper focuses on the importance of project management elements, such as: providing the proper human resource training, defining an achievable milestone, minimising the risk of people being diverted and trapped by their routine activities, the use of formal structured project groups (steering committee, project team, work groups). Groznik and Trkman (2009) discussed reasons for the somewhat unsuccessful informatisation of Slovenian public procurement. According to these authors, BPR should be applied with great care

to the public sector because public sector organisations have to meet multiple, often conflicting goals and are subject to constraints of a financial, legal, contractual, personnel and institutional nature.

Becker et al. (2006) provides guidelines in the form of a procedural model for e-government-indicated BPR projects in the public administration. The findings show that, despite some remaining developmental barriers, process management in an e-government context is a viable mechanism for advancing efforts to modernise administration. The case study shows, however, that growing demands on modelling methods arising from the distinctive features of the e-government domain are not being fully met by existing applications. One of the disadvantages of process models is their inability to stress all weaknesses. In addition, not all improvement measures are reflected in altered target process models. Process mapping allows an understanding of the structure of current and proposed processes, but only provides a static view. In order to predict certain behaviour over time in response to fluctuating demand and resource availability, a simulation modelling could be used.

The case study presented by Greasley (2006) demonstrates the use of process mapping and simulation modelling tools in a change process regarding implementation of an information system for road traffic accident reporting in a UK police force. The author examined the advantages of simulation modelling, but also stressed the need for careful planning to ensure it is able to deliver results within cost and time targets. The results of the simulation analysis must be considered within the constraints on public sector operations placed on them by internal and external stakeholders. Han et al. (2009) proposed a two-stage process analysis for process (re)design that combines the process-based performance measurement framework (PPMF) and a business process simulation (BPS). The two-stage analysis consists of macro and micro analyses of business processes. At the early stage of business process analysis (BPA), a macro process analysis is conducted to identify the influence of a business process on a target key performance indicator (KPI) or the contribution of a target KPI to other KPIs. If target business processes that need improvement are identified through the macro process analysis and to-be processes are newly designed, a micro process analysis using a simulation is

conducted to predict the performance. The proposed method is validated by its application to a real business process within the setting of a large Korean company.

The main reason for the growing interest in improving governmental business processes is to enhance performance. The assumption exists that private and public organisations are so similar that the performance identified in one sector should be expected in another. Parhizgari and Gilbert (2004) compare nine measures associated with organisational effectiveness across the two sectors. The authors conclude that these measures were significantly different. Thus, public policy initiatives like the National Performance Review (NPR) which was initiated by the Clinton Administration in order to bring the quality of the public service up to the same level as that of the private sector may be based on invalid assumptions. The study demonstrates that within each sector there are internal structures and processes that can be used to benchmark performance and identify best practices. This suggests that holding employees of public organisations accountable for attaining erroneous customer satisfaction performance standards will erode employee morale, while contributing to inappropriate decisions about the organisation's performance.

Finally, a survey (Vergidis, et al., 2008) involving the participation of respondents working in service industry sectors such as finance, the public sector and consultancy showed that, although theoretical developments are dealing with sophisticated issues around business processes, the service industry is reluctant to adopt a similar perspective and still uses simple and manual techniques in dealing with business processes. The main reason is that the service industry is not convinced that a business process approach can bring significant tangible and measurable benefits. Partially this is because much of the process management software available today does not provide a holistic approach to business process automation.

### **3 CROATIAN AND SLOVENIAN CASE STUDIES**

To illustrate the characteristics of business process-oriented projects in Croatian and Slovenian government institutions, two different real-life case studies are described and compared through three perspectives: (1) the case study background – project goals, drivers, and expectations; (2) the case study results;

and (3) the case study critical success factors (CSFs) – opportunities, obstacles and risks. From these case studies, some key factors influencing the success or failure of business process-oriented initiatives in the public sector are identified and systemised. Due to reasons of confidentiality, the authors of this paper cannot disclose any proprietary or confidential information relating to the Croatian project, the clients or the consultants. Therefore, instead of the Croatian governmental organisation's title or name, a general term 'Croatian Institute' will be used. In the Slovenian project case study the consultants' name is replaced with the acronym 'Snaga'.

### **3.1 Croatian Institute (CI) project**

The Croatian Institute (CI) has about 3,000 employees. Its organisational structure has three layers: the central office situated in Zagreb, 20 regional offices and about 90 local units in Croatian towns and communities. The main goal of the CI is to offer administrative services to Croatian citizens. The competence of an organisational unit depends on the type and service complexity required by citizens.

#### **Project Background**

For several reasons (alignment to EU requirements, organisational changes, IT implementation), the CI started a 'Business process analysis and improvement project' in 2007. *The first goal* of the project was to identify business processes, positions, human resources and their roles, data, software and IT in order to develop an AS-IS business process models repository. *Second*, the task of the consultants was to make an overall and detailed simulation-based analysis of current business processes and their parameters (time, cost, resources, process gaps and critical points) as a foundation for business process improvement and re-engineering. *Third*, the goal of the project was to create TO-BE models which could be used to improve the effectiveness and efficiency of the CI's operations, and decrease overall costs of carrying them out. *Finally*, TO-BE models were to present the guidelines for implementation of the Enterprise Resource Planning (ERP) and document management system, and the introduction of e-business and service-oriented architecture (SOA) in the CI. Consequently, very clear and precise IT requirements were defined. The consultants were asked to use the IBM WebSphere Business Process Modeller and Business Process Modelling

Notation (BPMN) specification because of its ability to support business process management by both technical (IT) users and business users. Since the business process repository was to be governed by the institute's IT experts in the future, the consultants' task was to provide their education. The project was expected to last six months. The consultants were required to deliver the operational and financial plan of implementation, although the implementation was not within the scope of this project.

#### **Project Results**

Instead of six months, the project was finished in one year. The consultants completed very exhausting work developing the AS-IS business process repository which contained 92 models of core processes and 270 models of supporting processes. A discrete event simulation was conducted in order to analyse business process duration and human resources utilisation in AS-IS processes. The simulation results were used to predict the benefits to be gained after implementation of the TO-BE processes. However, most changes were proposed on the basis of the descriptive business process analysis and were concerned with IT implementation. About 70 models of TO-BE core processes were developed. Since implementation of the ERP system had started before this project was finished, the supporting TO-BE processes were not modelled but only described in the form of a report. A catalogue of employees' knowledge and skills, as well as the list of IT requirements for the TO-BE scenario was provided. Due to the gap between the current situation and the desired condition, the consultants suggested a series of small improvements ('quick wins') which could be made in a transition period.

#### **Project Critical Success Factors**

This project was initiated by the CI's top management as a part of Croatian government strategy, **in accordance with EU recommendations**. The project goals were aligned to '**The e-Croatia 2007 programme**' (e-Hrvatska, 2007) which comprises several areas: (CapGemini, 2006): **broadband, interoperability, information security, HITRONet Network, e-Government, e-Justice, e-Education, e-Health and e-Business**. The **main objectives** of this project are:

- to provide an opportunity for citizens to receive information in a timely manner and therefore ac-

tively participate in society through a networked information system;

- to strengthen and connect business entities of Croatian economy;
- to provide a comprehensive exchange of information and experience in the business; and
- to enable the state to become a transparent, quick and efficient service to its citizens.

To achieve the goals described above, the CI conducted five projects simultaneously: Business process analysis and improvement; Human resources analysis and restructuring; ERP system implementation; Document management system development; and ICT infrastructure development project. Unfortunately, these projects were not harmonised by the project office in an adequate way. Conditions stemming from the institute's environment, such as government finances, bank loan politics and the situation in the consulting and software vendors market, influenced the dynamics of the projects' launches. The project described in this paper should have been finished first in order to become the basis for the other projects' goals and tasks. Though the project team members and business users were very motivated to participate in the project, a problem of limited human resources occurred due to many projects being conducted at the same time: IT and business experts participated as team members in several projects.

Because of the extensive project scope and technical problems in using the IBM WebSphere Business Process Modeller, the project was not finished within the schedule. The BPM tool defined by the contract requirements had not previously been implemented in Croatia. Therefore, the consultants had no experience using it and needed help from their business partners (software vendors). Consequently, all project activities were stopped immediately after the project had been launched. This caused a one month delay in the project. Another weak point of the IBM WebSphere Business Process Modeller was also the lack of methodology to guide the consultants in the enterprise architecture model development and change management activities.

Although simulation is very well supported by the IBM WebSphere Business Process Modeller, it was not an appropriate method for the business process and human resources capacities analysis in the CI. It is well known that simulation modelling is unsuitable for a high-level analysis because it is time-

consuming and requires a great quantity of input data and the use of statistical methods and tools. In this particular case, the consultants did not have enough time and capacities to collect the data needed to develop simulation models of the macro-level, cross-functional business processes and to run simulation experiments based on statistically relevant and verified data. On the other hand, it can be very useful to conduct simulation modelling of business processes on a relatively low and detailed micro-level. This approach can help consultants make a very precise refinement of model and to find the best scenario. However, the scope of this project was not to develop simulation models of the particular organisational units in order to compare and improve them, or to find the best business practice.

Besides, this project did not seek to establish a business process office, nor define business process positions or roles. The intention was to conduct business process governance by IT experts after the project had been finished. This does not seem to be a good decision since it is known that business processes should be continuously analysed, changed and governed by business users. The radical changes proposed by the consultants cannot be implemented without a transition from the traditional functional organisation towards a process-oriented organisational structure. These changes are usually related to changes in the organisational culture, organisational climate, government payment and labour regulations. Since these elements lie beyond the project scope and the CI's influence, it is hard to expect them to be realised.

### **3.2 The Snaga public company from Ljubljana – Waste and Cityclean management**

The public company Snaga (480 employees) has been cleaning Ljubljana and its surrounding municipalities for more than 80 years. Besides the collection, removal and disposal of all types of waste, it also cleans public areas, provides a placarding service, takes care of public restrooms and provides many other services (Snaga, 2009).

With the increasing standards and urbanisation of settlements, the volume of waste being produced is also rising. Snaga has adopted a comprehensive and responsible approach to resolving the waste management problem and the guideline for its operation is quality which guarantees satisfied clients and a cleaner environment.

In accordance with the quality policy, the employees of the organisation pay special attention to the satisfaction of clients, which is the primary goal. The quality policy reveals the company's vision which leads to the comprehensive integration of the notion of quality into the business process, responsibility to the environment and provides services in a reliable, timely and rational manner.

### **Background**

On the basis of its IT development strategy, the Snaga management decided that due to the obsolete technology the complete business IT system together with business operations must be renovated in 2005. The objectives of the IT system replacement were primarily oriented to enhanced company efficiency and realisation. The director wanted the company to become more competitive and customer-friendly, whilst preparing the company to be able to compete with any competitors (foreign and some domestic private municipal companies) wishing to become concessionaires performing public economic services. The director decided that the company must analyse and improve all its processes and subsequently incorporate this knowledge into the already established global foreign IT solution (ERP – Enterprise Resource Planning). This project was organised and led in line with the Project Management Body of Knowledge method. The project leader was the CIO (Chief Information Officer) who was also a member of company management in charge of the department for process, organisation and IT. The project was awarded highest priority and had strong management support. Top management wanted to renovate business processes and introduce best practices to improve business performance with the assistance of external consultants.

### **Results**

The project was successfully realized within the planned six-month timeframe. It began in June 2006 and was finalised in December, when Snaga signed a contract with the ERP local implementation company to implement a comprehensive programme solution on the basis of the prepared future business process status (status TO-BE). Snaga hired an external consulting establishment with a suitable number of relevant reference projects to model, analyse and prepare a future business process status and

help determine and implement changes within the company. The company business process renovation thus began with a motivation-building workshop in which the external partner presented the project objects and targets, how employees would participate in individual methods of business process documenting and the anticipated project results. The director nominated a 25 member team of high-ranking and leading personnel, approved a leaner project group and ensured adequate human and material resources to execute the project. The initial business process documentation was based on existing business processes determined by the ISO 9001 quality assurance system through which it was immediately ascertained that the basic processes had already been determined (though not described thoroughly and **comprehensively**), while supporting processes were not determined sufficiently or were inadequately defined. During the phase of recording and defining key processes, six supporting, five basic and two leading processes were determined. The following project phase incorporated an analysis of existing business procedures. The director wanted the actual process maturity to be determined with suggestions to improve business performance. During this phase, external consultants recognised bad and good practices, documented and discussed them with the project group and presented the analysis results to the company's management. A fundamental finding from the analysis was that there was a lack of process orientation throughout the whole process, from beginning to end (end-to-end), beginning with the customer's order, planning and organisation, work orders, service performance, charging and issuing invoices, monitoring payments and performing after sales services, all in the basic processes. Due to this, the following essential changes were recommended in the final, third phase of the project:

- The introduction of work orders to facilitate easier and more effective organisation and monitoring of the business process.
- All basic process are now responsible end-to-end for all services in process, from planning and service performance to charging and issuing invoices and payment of issued invoices from serviced customers. Before the Snaga project, financial-accounting department was responsible for charging and issuing invoices.

- The resolution of complaints was to be transferred to the call-centre (previously these processes were distributed between departments and divisions and were unorganised), the back-room system ordered the basic processes to resolve non-conformities due to customer complaints.
- At an organisational level, the introduction of process ownership and custody was suggested with greater decision authorisation in matters referring to process organisation and performance.

Company management approved all the suggested changes, organised a final meeting of all project participants including external partners on the company's premises. An informal atmosphere was encouraged at the meeting. It lasted two days, during which all the planned changes to the business processes were reviewed as a whole and the IT project was announced. Today, Snaga has four basic processes; half of the supporting processes are being transferred to

the Ljubljana Public Holding (subsequently referred to as JHL) due to reorganisation procedures of JHL and its four public companies. Human resources, accounting, finance, strategic and operative planning together with IT activities will be transferred to JHL. Snaga will be a recipient of these services in accordance with an agreement on services, hereafter referred to as the SLA (Service Level Agreement). Business process orientation will be introduced with the objective of comprehensive development, assistance and monitoring of business process operations in the company (Fig. 1). The modernisation of the business processes followed by the incorporation of information technology in the ERP system, combined with finalisation of the current introduction of Business Intelligence, will enable the director to steer the company to a breakthrough, which will elevate the process orientation maturity level and increase business efficiency and realisation with already verifiable results.

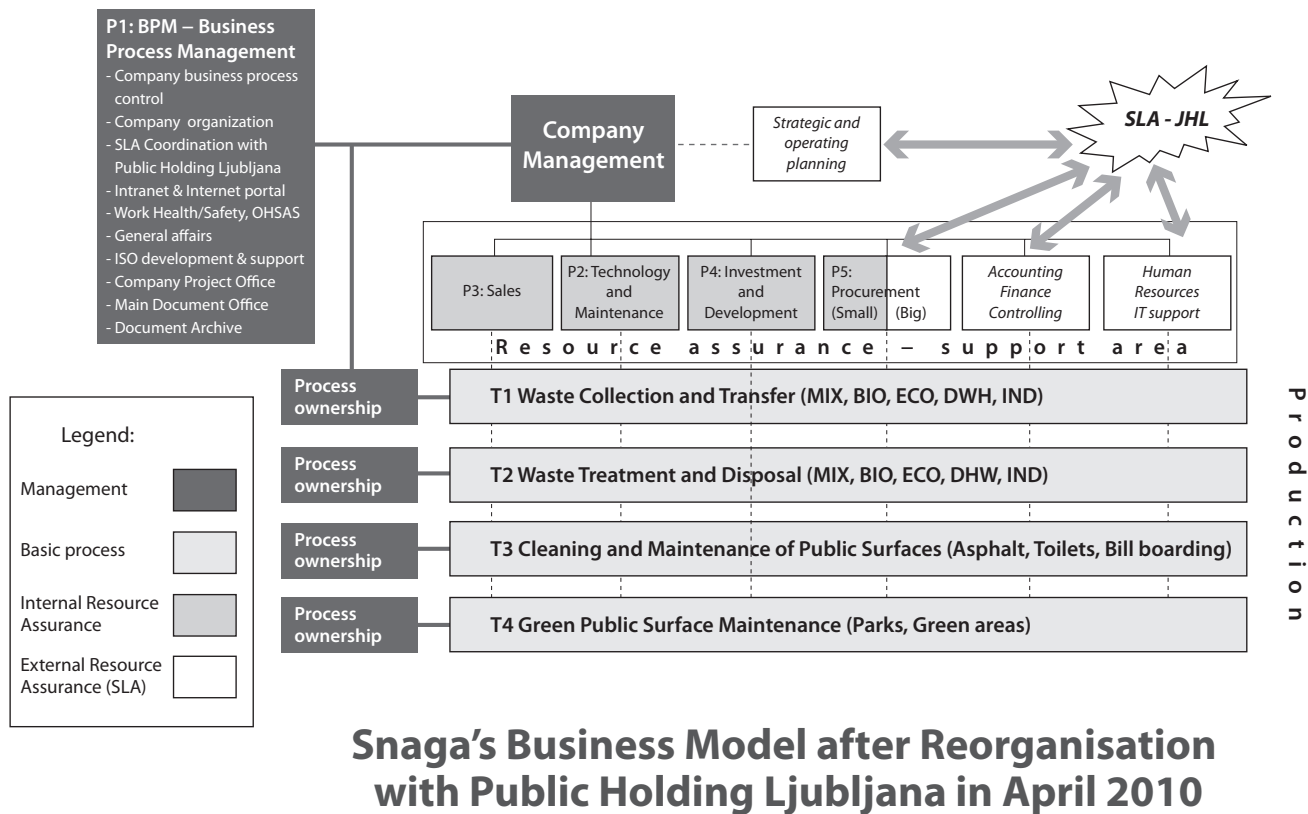


Figure 1: **Snaga's Business Model after Reorganisation**

### **Project Critical Success Factors**

In these kinds of projects the greatest critical success factor is decisive and sufficient management support, coupled with good project leadership. As Snaga fulfilled these requirements, the project was a success. The main targets of the business process renovations were to:

- improve and simplify (shorten) business processes, which should become even more customer-oriented;
- introduce work orders to enable more effective service management;
- encourage basic processes to view business end-to-end, not only up until the service has been rendered, and subsequently leave all follow-up activities to accounting and finance;
- prepare the business process so that IT may be incorporated through the ERP system.

The risk of not being successful was diminished by the company through the preparation of a detailed and professional project plan. The plan enabled the participants to recognise the project's vision and strategy beforehand, together with all the determined purpose- and objective-oriented targets, planned human resources according to weeks and fields, while not omitting external professional assistance provided by an external partner with insight into an extensive range of best practices which could be introduced into the company through a knowledge transfer.

The company was aware that other organisational projects could not be conducted during this time (i.e. simultaneous introduction of the ERP system, documentation system, HRM or CRM system introduction). All available resources had to be oriented towards the renovation of business processes, while still performing everyday work responsibilities linked to business activities to ensure the company's economic well-being.

For modelling informational support, the external partner suggested iGrafx ([www.iGrafx.com](http://www.iGrafx.com)) which later proved to be very easy and effective to use. Through the BPM (Business Process Modelling) tool the employees were able to reacquaint themselves with the existing business process organisation and how it would be improved, shortened and optimised in the future.

An important, practical decision of the external partner was that business processes in the company would be recorded and modelled only up to the

third-level process diagrams. This ensured greater transparency and easier process understanding. As the business process documenting and modelling were upgraded with the external partner's knowledge and experience of best practices, which needed to be realised after approval, this brought much added value to the company. In 2010 Snaga will make the transition from a classic functional organisation to a process organisation so as to achieve a higher maturity model and fixate business process management. Snaga will obtain evident acknowledgement as a company renovating its processes, ERP IT system; in fact, enhancing business effectiveness and realisation within the domestic business and professional community. Without the pre-renovation of business processes before the introduction of ERP, the current status would have been introduced into the IT, which would have resulted in the GIGO effect (garbage in – garbage out).

## **4 FINDINGS WHEN COMPARING THE CASE STUDIES**

The intent of this study is to summarise theoretical propositions and conduct empirical research in order to identify and describe factors influencing the success or failure of BPM projects in the public sector. Several issues have already been discussed in the literature review presented above. The case studies describing business process change projects involving Slovenian and Croatian government institutions are used to extend the research towards the practical perspective in order to prove or query a theoretical background. Based on the authors' practical experience and up-to-date literature research presented above, the CSFs influencing the success or failure of business process-oriented (BPO) projects are divided into three categories: (1) environmental CSFs; (2) internal (organisational) CSFs; and (3) organisational culture CSFs.

### **4.1 Environmental CSFs**

Since the public sector is funded by the government it has a relatively low exposure to the marketplace. Because appropriation requirements for market information (profit, prices) are relatively rare, the management of public institutions usually has no need to increase operational efficiency and improve process performance. Besides, public sector management has a reduced ability to make decisions due to



political influence and public opinion. Business process change projects are usually triggered by changes to laws, government policy and other external requirements.

Another important aspect of public sector organisations is that clients have few or no alternatives to the services they provide. Therefore, highly competitive business goals are usually not defined by the public administration. Public sector managers find long-term planning difficult because of the frequently changing political landscape and disruptive political processes. Finally, hiring competent and motivated management is a problem because financial compensation in the private sector almost always exceeds that offered by government organisations.

*The Croatian project* was initiated by the government and the project goals were aligned with the government policy and strategy. Due to the government initiative and bank loan politics, four other projects were launched at the same time. The resulting problem was two-fold: (1) the results of the BPO project should have been the input for the other four projects but the BPO project's dynamics were not adjusted to the other projects' launches; and (2) the project office was unable to cope with the limited human resources and to harmonise the different projects' objectives and goals.

*The Slovenian project* was conducted by top management in order to improve the current market position and to become a leader in the context of future, more competitive conditions. The project's goals and objectives were defined clearly and precisely, without government influence or co-ordination. In such circumstances, Snaga had highly motivated and experienced management who were determined to offer support through all project phases.

## **4.2 Internal (organisational) CSFs**

Public sector organisations usually have scarce competing objectives and ill-defined measurement criteria to measure the achievement of goals. Therefore, public organisations managers and employees have no motivation to conduct business process change projects; they are less innovative when it comes to change; moreover, a resistance to change spreads. A problem with the team members' selection and lack of dedicated team members very often occurs. Business process management brings the strengths of modern technologies and management disciplines

together – both technical and business expertise is needed, which is very rare in public organisations.

Since there is no continuity in business process improvement, public organisations have no data about processes, processes are not standardised, and many exceptions in business process execution are noticed. There is also a lack of knowledge about BPM methods and tools. Capturing and assessing organisational knowledge has a low priority among public sector employees. As a result, BPO projects usually start from scratch. In the phase of business process redesign innovative/radical proposals are not accepted. The significance of the project is very often minimised, influencing a negative atmosphere within the organisation and in the public. The commitment is limited to small improvements, significant changes are rejected or postponed, and there is a willingness to settle for minor results. Finally, the solutions become outdated.

An important obstacle to change is the functional organisational structure of public institutions and working positions catalogue which is defined by law. Once a project is finished, the process management office, process positions and roles fail to be established.

All CFSs presented above characterised the *Croatian project*, although that was not the case in the *Slovenian project*. The Slovenian project leader was an IT expert with great business knowledge and experience in organisational restructuring. Therefore, problems with the selection of consultants, project team members and business process modelling methods and tools were avoided. At the moment the project started, top management already had 'a big picture' of AS-IS business processes and weak points. Hence, the project goals and management expectations were very clear and realistic. Snaga conducted the project according to the schedule and implemented the changes according to the project's final reports. The business partners' perspective, customer management orientation, implementation of a business process organisational structure, operational and decision-making improvement supported by IT were the most important long-term results recognised and stressed in the Slovenian case study. Unfortunately, the shortage of such results was obvious in the Croatian project.

## **4.3 Organisational culture CSFs**

Social sensibility is an important obstacle to change management in the public sector. It is well known

that hiring and retaining qualified personnel is a persistent problem in the government. Since public sector managers lack the ability to provide monetary rewards, they try to motivate employees with other factors like job security. However, public sector employees tend to be less satisfied and less committed to their work and organisation. In many cases, a lack of continuous training and education has a bad influence on employee satisfaction and organisational culture.

However, the employees of the CI and Snaga were highly motivated to participate in the projects. They were aware of the problems (e.g. process gaps, bottlenecks, a lot of paperwork) and were prepared to accept the changes in order to improve their way of working, especially by using IT. Due to the monopolistic position in the market, which is an external CSF, and given the social sensibility and governmental framework defining working positions and salaries, the *Croatian Institute's* top management only decided to implement the minor changes proposed by the consultants. On the contrary, top management and employees of *Snaga* were aware of their market position and the acceptance of organisational change as a precondition for the company's future survival.

## 5 CONCLUSION

While each BPO project is different, depending upon the governmental strategy and public institutions involved, the CSFs found in the literature and the practical experience relating to previous implementation activities are all worthy of consideration when conducting new initiatives. This paper describes two projects which had the same basic goal: to improve business process performance by using IT. However, the projects differ strongly in how they were carried out and the results achieved. While the Slovenian project was very successful, the Croatian project only gained minor positive results. The CSFs of both case studies have been defined and compared in order to present the most important opportunities, risks and obstacles of BPO projects in the public sector.

However, no assumptions can be made as to which CSFs influence a project more profoundly, of how the critical issues interrelate with one another, or which factor has a direct or stronger impact on a

project's success or failure. A deeper understanding of all aspects of business process orientation in the public sector is needed. Therefore, these issues will be investigated by the authors in future research.

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