

Informatisation of the Judiciary in BiH: Success Factors

Nedim Fisekovic, Meliha Handzic

International Burch University, Bosnia and Herzegovina

Abstract

Informatisation of the judicial system covers all aspects of information and communication technology (ICT), including: equipping the courts with modern information technology equipment (desktop computers, servers, and printers), setting up a local area network (LAN) and wide area network (WAN), establishing a system of electronic mail for the judicial institutions, developing a system for case management system (CMS and TCMS), developing and establishing judicial web sites (web portal), computer education of all employees in the courts and prosecution offices, internet access for all users in the judiciary and many more.

In Bosnia and Herzegovina, all of the above activities have been implemented by the HJPC (High Judicial and Prosecutorial Council) in pursuit of European standards, with donor support. Since first contributions from USAID and ICITAP, further contributions from EU, Norway, Spain, Netherlands and Sweden contributed to the project success by providing ICT solutions, staff, training and continued development.

Full informatisation of the judicial system will enable the full automation of courts and prosecutors' offices; also all employees in the courts will have direct access to relevant information, documents and services provided by the courts and prosecutors offices and citizens will have access to their personal court cases over the Internet.

Keywords: judicial system, informatisation, Bosnia and Herzegovina

1.INTRODUCTION

In the introductory section of the final project report (HJPC, 2011), its authors claim that high quality and modern judicial services, capable of answering all of society's needs, cannot be achieved without information and communication technology (ICT). They also state that Informatisation of Bosnia and Herzegovina's (BiH) judiciary has been a long process, but today, the state of the art judicial information system in BiH is the most thorough and modern of any country in the region. In the end, they conclude that the project brings immense benefits for the delivery of justice.

The report reminds us that before the introduction of ICT reform in the judicial system, courts and prosecutors' offices had very few computers that operated without licensed software. Consequently, developments in cases were logged manually and all information had to be retrieved from mountains of paper files.

The situation became even worse as a result of the 1990s conflict, with increasing number of complex court cases on one side, and with out-dated and inefficient practices on the other. Such environment threatened to exacerbate the backlog problem even further. ICT was necessary to make possible a dramatic change in the working operations of the courts.

2.INFORMATISATION PROJECT DESCRIPTION

A cutting-edge and tailor-made ICT project for the BiH judiciary was launched by the country's High Judicial and Prosecutorial Council (HJPC). The scope of the project of informatisation of the judiciary covers all aspects of the continuity of mass and systematic introduction of Information and Communication Technology (ICT) in the courts and prosecutors' offices across the country, including hardware, software, application programs, and the use of human resources, control of relevant process changes and other related business processes (ICJ, 2004).

The ultimate goal of informatisation of the judiciary in Bosnia and Herzegovina is "E-Justice". This goal corresponds to the objectives set by the European Union in terms of creating a technical platform that allows access to existing or future information systems at national and international levels in all areas of the judiciary.

The main expectation from establishing an electronic judiciary is that the use of information and communication technologies would significantly improve the efficiency of courts and prosecutors at the state level, and the courts and prosecutors in the FBiH and the RS. Thus, among other things, the current huge backlog accumulation would be significantly reduced, and new items could be processed in time.

In general, the business processes in the courts are considered suitable for intensive and effective use of ICT tools and these tools can be used to significantly enhance and improve business processes in every respect. So far, the results of the process of informatisation of judiciary include the following elements (HJPC, 2011):

HJPC established ICT (Information and communications technology) department

All courts in judiciary have employed ICT experts

WAN network connects 85 institutions in the area of the country

LAN networks in 85 institutions connects more than 100 servers and 5,000 workstations

Case Management System (CMS) enabled the complete automation of work processes in the judiciary

- Impartiality served through the assignment of cases to judges
- Transparency of the registers changes and actions
- More effective communication between the courts in the judiciary
- Prevented loss of part of the file
- Quick and easy access to information for clients and lawyers

- Web Portal of Justice of BiH provides easy access to information
- Online database of the Judicial Documentation Centre provides access to the legal practice of judges, prosecutors and associates.
- Internet access is provided for all users in judiciary

The most significant achievement is the introduction of case management in all courts and prosecutors in Bosnia and Herzegovina. Judicial institutions are linked in a common wide area network and a judicial web portal is established that contains the web pages of judicial institutions. Citizens and their legal representatives now have access to court files online (over the internet).

Thanks to the activities undertaken so far to establish an electronic justice the work processes in the courts and prosecutors' offices have been promoted, and transparency of their work increased. Applying information and communication technology has accelerated flow and exchange of information and created technical prerequisites for the exchange of information between judicial and prosecutorial registers on the one hand and electronic records kept by other state and agencies on the other.

Since the good results of this project showed the justification of investment in information communication technology strategy for justice sector reform in Bosnia and Herzegovina, continuation of the started activities is anticipated. Informatisation of Justice is included in the activities outlined in the Action Plan implementing the European Partnership with Bosnia and Herzegovina.

3.PROJECT SUCCESS FACTORS

Project management literature often reports project failures, projects completed out of budget, time or with reduced scope. For example, the controversial Standish group results and Chaos survey from 2003 revealed that only 30% of projects were delivered on the original scope and agreement (Hastie 2006). Therefore, the successful completion of the studied informatisation project makes it especially interesting case for exploration.

In general, good management of projects and people working on them is considered essential for its success (Valacich and Schneider, 2010). Most organisations appear to be well aware of these facts and tend to pay attention to necessary roles and responsibilities in development teams. However, planning is often performed and requirements defined that do not meet

stakeholders' expectations. Although various causes of project success and failure have been the subject of prior research (Haughey, 2010; Prabhakar, 2008), there has been a little attempt to define the criteria for success, report systematic research of the factors that cause project success or failure, or provide deep insights into these successes and failures (Frese and Sauter, 2003).

Therefore, this study will attempt to identify the most important factors that contributed to the success of the project of Informatisation of the judicial system in BiH. More specifically, the study examined (i) people, (ii) process and (iii) resource related aspects of the project from the perspective of IT professionals who participated in the project. With respect to people, project managers' and team members' competencies, training and mentoring were examined. Regarding process, various aspects of project planning, development and implementation were explored. Finally, the study examined the financial resources and client inputs provided to support the project.

4. RESEARCH METHOD

Descriptive survey was selected as a preferred method for the current research. This method enabled systematic gathering of quantitative data from a sample of individuals for the purposes of describing the attributes of the larger population of which the individuals were members (Glock, 1967). The survey form was designed to include a total of 22 questions. The first 4 questions were about personal information of each respondent, while the remaining 18 questions addressed various people, process and resource related aspects of the project.

The subjects were 70 IT personnel in positions of system administrators, database administrators and system developers from different regions of BiH. Most were experienced professionals. Among these, 26% were highly experienced having spent more than 5 years on the project, 63% spent between 3-5 years on the project and only 11% were novices with less than 3 years experience on the project.

The questionnaires were created and distributed using Google docs (<https://docs.google.com>). Online questionnaires represent a convenient way of conducting surveys, as they enable crossing of time and geographic barriers, and are cost effective. In addition, Google docs is an excellent online tool that helps create and manage online surveys easily. In responding to the survey, the participants rated their opinions about various project aspects on a 7-point

Likert scale. Their responses were collected, encoded and analysed using MS Excel descriptive statistics.

5.RESULTS

The results shown in Table 1 indicate that all aspects of the project were positive. This was demonstrated by all average scores greater than 4 (out of 7). Responses were negative in that they show that there is room for further improvement. This is demonstrated by all scores lesser than 7 (out of 7). These score also point to major weaknesses and obstacles.

Table 1: Mean respondents' scores of various project aspects

<i>Project aspect</i>	<i>score</i>
Testing Tools	5.03
Quality Assurance (Code inspections, design reviews, testing etc)	5.13
Training and Mentoring	5.11
Project Manager's Competence	5.44
Project Manager's authority to make decisions during the development	5.40
Team Members Competence	5.34
Team Members influence the project & the flexibility to create a good design	5.27
Postmortem Analysis (Lessons learned from previous projects)	5.19
Project Scope Definition	5.17
Support from Senior Management	5.09
Planning	5.13
Communication System and Procedures	5.31
Timeliness/Relevance of Project	5.34

Level of involvement the developers have in estimating timeliness/relevance	5.34
Progress Monitoring	5.27
Clarity of Project Objectives and Goals	4.93
Requirement Statements/Specifications	5.11
Development Methodology/Process	5.23
Development Tools	4.86
Focus on New/Evolving Technologies	5.09
Level of User/Client Involvement	4.69
Budget and Resources	4.61

Level of client input/involvement and financial resources were assessed as the least satisfying project aspects. It is therefore not surprising that one of the weakest planning aspects related to the project was "Clarity of Project Goals and Objectives". The lack of client involvement and thus the lack of clear project goals was often mentioned in the literature as the prime cause of failure. However, it appears that high level of project manager's competence and authority was crucial in overcoming such weaknesses in this project.

Indeed, a comparative analysis of people, process (planning, development, implementation) and resource related aspects of the project clearly shows that people were the most important factor contributing to the success of this project. Competent IT personnel managed to deliver successful project outcomes despite the lesser than required financial and client resources and with less than adequate supporting development tools.

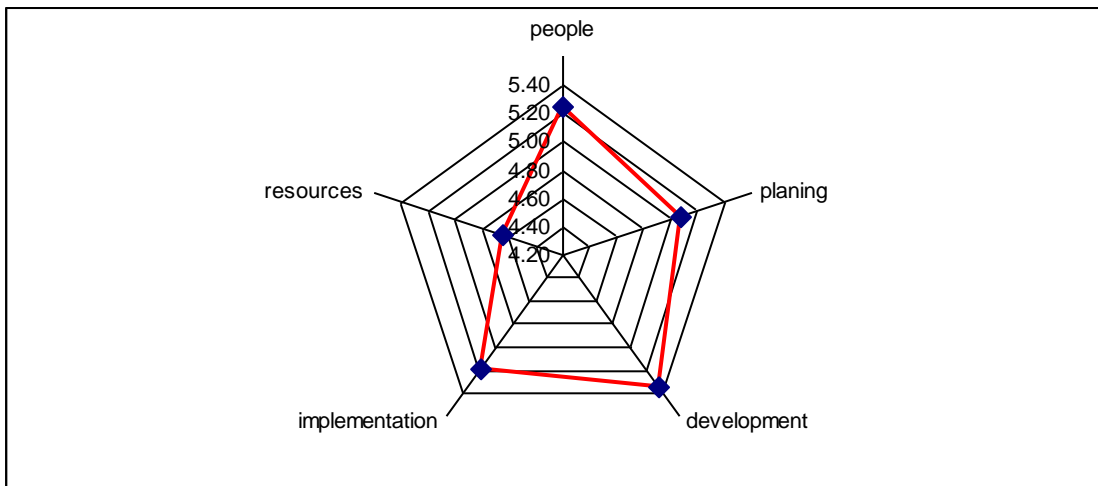


Figure 1. Comparative analysis of project success factors

6.CONCLUSIONS

In this study, we examined the main factors that contributed to the success of the judiciary informatisation project in BiH. The results suggest that human factors (particularly project manager's competency and authority) are the most important success factors, followed by process related characteristics, followed by supporting resources. These results confirm the proposition that knowledge is the most important capital for development in the knowledge economy.

However, these findings need to be interpreted with caution due to a number of limitations. The study examined success from the developers' rather than users' perspective. The measures used demonstrated good reliability, but they are not accepted published scales. Data was collected in BiH. The question is whether these results would hold in a different culture.

Therefore, further research is recommended that would replicate and extend the current investigation to other contexts, systems and subjects in order to verify and generalise these findings. Future research is also encouraged to develop new research models and variables aimed at enriching our collective understanding of the project success factors.

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