# Information and Communication Technology Driven Process Reengineering for Content Monitoring:
## A Case From the Public Sector in Macedonia

Lucija Gjurkovikj, FON University, Skopje, Macedonia

Toni Malinovski, FON University, Skopje, Macedonia

## ABSTRACT

When organizations analyze and significantly change their business processes with latest information and communication technology (ICT) in mind, they can reduce process time and cost, as well as increase efficiency and output quality. This study elaborates an ICT-enabled reengineering project in the Agency for audio and audiovisual media services in the Republic of Macedonia for the program monitoring process. It aims to investigate the motivation to use ICT as a way to shape the process redesign and find associations among ICT adaptation, process reengineering, organizational growth and efficiency. Hence, the new process structure can help the agency deliver greater public value while meeting its strategic goals to protect citizens' interests in the area of audio and audiovisual media services. It provides an example of a case study that surpasses standard industrial report to an article that contains valuable information that companies, especially in the public sector, can use in replicating experiences while undertaking similar BPR initiatives.

## KEYWORDS

Audio and Audiovisual Media Services, Business Process Reengineering, Electronic Communications, Information and Communications Technology, Public Sector

## INTRODUCTION

Companies Business process reengineering (BPR) movement that started in the last decade of the twentieth century has been adopted by organizations that undertook rapid and radical redesign of their core and value-added business processes while perusing improvements in quality, cost and decreased time to process completion (Davenport, 2013; Huang et al., 2015; Sethi and King, 1998). Having in mind that business processes often cross-functional areas, which creates difficulty during process improvements (Goksoy, Ozsoy, & Vayvay, 2012), BPR can reshape policies, systems and bridge organizational units, while reducing complexity to optimize workflows and efficiency within the organization. Hence, the significant process change empowers employees and organizations to achieve breakthrough improvements while abandoning old and unproductive ways of working.

The information and communication technology (ICT) has become one of the key enablers of business process redesign or reengineering (Aboulaid et al., 2016; Davenport, 2013; Jovanoski,

Malinovski, & Arsenovski, 2017). The ICT solutions have the ability to enable the reengineered processes, while eliminating human labor or intermediaries, capture process information and provide analysis, as well as monitor process status and objects (Harmon, 2014; Jovanoski, Malinovski, & Arsenovski, 2017). Even simple ICT implementations, when combined with corresponding changes in the business process, can result in significant advantages. The technology is a powerful tool that should be taken into account during process reengineering, so it can create process design options, rather just supporting them (Aboulaid et al., 2016; Al-Mashari & Zairi, 1999; Davenport, 2013). Therefore, organizations that understand the close connection between ICT and BPR and take appropriate steps to closely align ICT governance mechanisms with organizational strategy and corporate objectives, can increase their chances for successful BPR implementation (Davenport, 2013; Huang at al., 2015; Jovanoski, Malinovski, & Arsenovski, 2017; Wu, Straub, & Liang, 2015)

On the other hand, organizations react differently when undertake BPR initiatives and their projects may fail or not reach final objectives (Abdolvand, Albadvi, & Ferdowsi, 2008; Jovanoski, Malinovski, & Arsenovski, 2017; Khoshlafz & Hekmati, 2016). Furthermore, the public sector demonstrates significantly more obstacles and difficulties in process redesign or reengineering than the private sector (Bin Taher, Krotov, & Silva, 2015; Cordella & Bonina, 2012; Hesson, 2007). With increased practices of bureaucracies, the problems of business process efficiency are often solved through purchasing of latest ICT solutions to automate, rather than to innovate the whole process. Similarly, when the top management of an organization feels it is successful at present time, they usually reject the idea of renovating business to improve their services (Hesson, 2007).

In this article, we study an ICT driven reengineering project for one of the core business processes at Agency for Audio and Audiovisual Media Services (AAAMS) for monitoring of program services of broadcasters, retransmitted programme of operators of public electronic communications networks and content of providers of audiovisual media services on-demand in the Republic of Macedonia. Having in mind the complex duties and responsibilities of the Agency according to the Law on Audio and Audiovisual Media Services (2014), optimization and increased effectiveness of its business processes is one the strategic goals and corporate objectives. Following the conventional wisdom in ICT usage (Davenport, 2013; Jovanoski, Malinovski, & Arsenovski, 2017; Wu, Straub, & Liang, 2015) the Agency tried to strengthen its vision and restructure business processes with awareness of ICT capabilities that can influence process redesign or reengineering when needed. Hence, the program monitoring process, as one of the Agency's core processes, was identified as a target for BPR, in order to provide cost-cutting effects, decrease time to process completion, as well as increase quality output and public value. Since, reengineering is one-time initiative that can often experience failure (Al-Mashari & Zairi, 1999; Huang at al., 2015; Khoshlafz & Hekmati, 2016; Ravesteyn, & Batenburg, 2010; Sethi and King, 1998) this BPR project is a successful case study explaining importance for proper strategic dimension to BPR, ICT adaptation and coordination of reengineering efforts.

## RELATED LITERATURE

BPR was first introduced by Hammer (1990), Davenport and Short (1990), which have outlined a new approach to the management of business processes that can produce radical improvements in performance. Following, Hammer and Champy (1993) have identified three driving forces for a BPR change: (1) diversification of customers, (2) intensified competition to meet the customers' needs and (3) acceleration of changes, often pre-requisite in some business areas. In the years that followed BPR has become a popular tool that help organizations to deal with rapid technological and business change in today's competitive environment (Davenport, 2013; Hesson, 2007; Shaki & Kodua, 2017). Public companies are also sensible to BPR, since they offer service that are critical for the citizens and organizations (Hesson, 2007). Several studies have attempted to draw likenesses to BPR in the private sector and have identified a large number of complex challenges facing a radical change in the public sector (Jurisch et al., 2013; Weerakkody & Dhillon, 2008; Weerakkody, Janssen, & Dwivedi,

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/article/information-and-communication-technology-driven-process-reengineering-for-content-monitoring/218242

# Related Content

### Serious Games Effect Analysis On Player's Characteristics
Polyxeni Kaimara, Emmanuel Fokides, Antonia Plerou, Pinelopi Atsikpasiand Ioannis Deliyannis (2020). *International Journal of Smart Education and Urban Society (pp. 75-91).*
www.irma-international.org/article/serious-games-effect-analysis-on-players-characteristics/242958

### Towards a Conceptual Knowledge Management System Based on Systems Thinking and Sociotechnical Thinking
Svetlana Sajeva (2013). *Knowledge and Technological Development Effects on Organizational and Social Structures (pp. 115-130).*
www.irma-international.org/chapter/towards-conceptual-knowledge-management-system/70566

### Revealing the Socio-Technical Design of Global E-Businesses: A Case of Digital Artists Engaging in Radical Transparency
Constance E. Kampf (2012). *International Journal of Sociotechnology and Knowledge Development (pp. 18-31).*
www.irma-international.org/article/revealing-socio-technical-design-global/74847

### The Impact of Accreditation on Student Learning Outcomes
Tayeb Brahimi, Akila Sarireteand Rania Mohammed Ibrahim (2016). *International Journal of Knowledge Society Research (pp. 51-62).*
www.irma-international.org/article/the-impact-of-accreditation-on-student-learning-outcomes/174400

### The Influence of Students' Characteristics on Mobile Device Security Measures
Winfred Yaokumah (2016). *International Journal of Information Systems and Social Change (pp. 44-66).*
www.irma-international.org/article/the-influence-of-students-characteristics-on-mobile-device-security-measures/154959