

Critical Success factors in EDRMS implementation in a developing country: Case of Botswana

By

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Introduction

- Public sector organizations across the globe have implemented EDRMS solutions to improve organizational records management and consequently, compliance with legislative and regulatory requirements (Williams, 2005; Nguyen et al., 2008).
- Modern ICTs are adopted by most governments to provide effective and efficient services to citizens (Mnjama & Wamukoya, 2007).

Introduction cont...

- Ministries and Departments within Botswana Government have implemented ICTs in public service delivery as part of its wider e-Government Agenda
- The implementation of an EDRMS dubbed the Document Management Workflow System (DWMS) at the Ministry of Trade and Industry (MTI) is one such example (Government of Botswana, 2011).
- The National ICT Policy provides a policy framework for the delivery of government services using ICTs (Government of Botswana, 2007).

Study Location

- Ministry of Trade and Industry (MTI)
- It was established in 2002. Its mandate is to attract investment and diversify the economy. It carries its mandate through;
- Department of Corporate Services (DCS)
- Department of Consumer Affairs (DCA)
- Department of Industrial Affairs (DIA)
- Registrar of Companies and Business Name
- Department of Cooperative Development (DCD)
- Department of International Trade (DIT)
- **This study was conducted at DCS**

Critical Success Factors (CSFs) in EDRMS Implementation

- CSFs are the key areas where “things must go right” for the organization to prosper (Rockart, 1979). CSFs have become popular in determining the essential factors that an organization must have in order to attain organizational goals.
- Several authors have discussed CSFs for Enterprise Resource Planning (ERP) projects (Bingi, Sharma et al. 1999; Shanks, Parr et al. 2000; Nah and Lau 2001; Al-Mashari, Al- Mudimigh et al. 2003; Bradford 2003; Umble, Haft et al. 2003)
- CSFs for ERP projects are generally similar to CSFs for EDRMS Implementation (Spong, 2002; Nguyen et al., 2008; Nguyen et al., 2009; Northumbria University 2010; Commonwealth of Australia, 2011; Yin, 2014).

Objectives of the study

- This study investigated factors that influenced the adoption and use of DWMS by action officers and records officers at MTI. Specific objectives were:
- To determine the status of regulatory, institutional and legal frameworks for the adoption and use of DWMS by action officers and records officers at MTI.
- To investigate the extent to which Action Officers and Records Officers at MTI view DWMS to be easy to use.
- To assess the extent to which Action Officers and Records Officers observe DMWS as useful for their job performance.
- To find out the role played by the current organizational and infrastructural environment towards the adoption of DWMS by Action Officers and Records Officers at MTI.
- To establish the impact of the influence of workmates and management in the adoption of DWMS by Action Officers and Records Officers at MTI.
- To find out change management strategies put in place to encourage the adoption of DWMS by Action Officers and Records Officers at MTI.
- **To investigate any other factors that influenced adoption and usage of DWMS by Action Officers and Records Officers at MTI.**

Methodology

- **Theory used:** Modified Unified Theory of Acceptance and use of Technology (UTAUT) (Venkatesh et al., 2003).
- **Paradigm:** Positivist and supplemented by interpretive paradigm,
- **Research design:** Census survey (Yount, 2006).
- **Data Collection Instruments:** Documentary review, interviews and questionnaires.
- Questionnaires were distributed to 61 Action Officers and Records Officers from MTI and 53 (86.89%) responded. The response rate was highly acceptable as literature shows that response rates above 50% are adequate (Babbie & Mouton, 2001; Johnson & Owens, 2003)
- Interviews conducted with IT Manager; Legal Services Manager; Deputy Manager-HRM; Chief Administration-Office Operations; Assistant Director – Administration); Deputy Director of BNARS and 1 Records Management Expert (Former Head of Records Management Division at BNARS)
- This study reports on the findings from interviews and documentary reviews.

Findings of the study

- The following were revealed by the study as the CSFs for the implementation of Document Workflow Management System (DWMS - an EDRMS) at MTI

- **Top management support:**

- When one interviewee was asked about the challenges of EDRMS implementation, they said:

“Some Senior Officers seem reluctant to use DWMS. They prefer to use the manual system. If more leaders used the system, then everyone else will follow suit”

- The assertion by the interviewee was consistent with findings in several other studies (Williams, 2005; Gregory, 2005; Smyth 2005; Koga, 2007, Nguyen et al. 2008). Management controls resources and give direction in an organization, no wonder users of DWMS expected to be led in the usage of the system so that they could follow suit.

Findings cont...

- **Compatibility of the new information system with existing ones**
- DWMS was incompatible with existing information systems, current working values, practices and culture. Compatibility of an information system determines its adoption (Rogers, 2003; Olatokun & Igbinedion, 2009).
- One interviewee said:

“DWMS is a new system which is completely new to me. A file has to be requested from the RMU through the system and passed on to another officer, also through the system. I have never done this before.”

- Compatibility brings less uncertainty to a potential adopter. EDRMS implementation demands some degree of departure from the old ways of doing things (Jones, 2008).
- New work practices clash with current values, practices and experiences (Johnston & Bowen (2005)), leading to resistance to user resistance. It is often imperative that a newly deployed system does not require wholesale changes to current work practices, values and experiences.

Findings cont...

- **Attitudes to computers**
- Negative attitudes towards DWMS by some Action Officers and Records Officers also impeded its uptake.
- Attitudes to computers have been long known to influence intentions to use it (Agarwal & Prasad, 1999; Al – Ghatanni & King, 1999; Chau & Hu, 2002; Morris et al., 2005) and Kim et al., (2010).
- Bhattacherjee and Premkumar (2004) observe that increased experiences in using computers together with training on system use have helped to overcome negative attitudes to computers.

Findings cont...

- **End User Support**
- User support was made available in order to assist DWMS users when the need arose (IT Consult, 2012). Unfortunately, such support was eroded when some users who knew the system left the ministry for greener pastures.
- Technical support for EDRMS end users critical to its adoption (Di Biagio & Ibiricu, 2008; Mosweu, 2012).
- End User Support proved crucial of the implementation of an electronic Court Records Management System (CRMS) implemented at Gaborone Magisterial District in Botswana (Mosweu, 2012).
- System end user support helps end users to prevail over feelings of uncertainty over new work practices brought by the new system ((Di Biagio & Ibiricu, 2008)).

Findings cont...

- **Project management methodology**
- The assessment of DWMS usage found that the system had been piloted for five years and full implementation had not commenced (IT Consult, 2012).
- IT Consult (2012) acknowledged the importance of phased implementation of projects which was the original plan with the implementation of DWMS.
- The assessment revealed that the project governance structure collapsed and this led poor ownership of the project by the executive.

Findings cont...

- **Technophobia**
- A perusal of the DWMS System Assessment Report (SAR) (IT Consult, 2012) revealed that there was a general phobia across MTI for all automated systems.
- Many people experience some kind of computer anxiety in using new technology, leading to user resistance and rejection by potential users (Goldsborough, 2003)
- The slow uptake of DWMS was attributed to technophobia (IT Consult, 2012 ;Brosnan, 1998). Feelings of fear related to using computers cannot be wished away (Scull, 1999).

Findings cont...

• Change management

- Inadequate change management negatively affected the adoption of DWMS at MTI (IT Consult, 2012).
- The assessment Report (SAR) showed that DWMS suffered from underutilization (IT Consult, 2012). The Consultants suggested a generic change management approach to be executed in order to promote uptake of DWMS.
- Transition from manual records to electronic records systems affected procedures for creation, preservation, disposal and accessibility of information (Meijer, 2001). Such change should be managed (Fraser & Daniels-Lewis, 2012).
- Poorly managed change negatively affected the implementation of EDRMS projects in the Botswana and South African public sector ((Kwatsha, 2010; Mosweu, 2012).
- Change management reduces EDRMS user resistance (Kwatsha, 2010). Elsewhere, lack of change management in information systems implementation has also been reported in technology adoption literature (Nguyen et al., 2008; Cric, 2010).

Conclusion

- This paper has discussed success factors in EDRMS implementation and reached the conclusion that such factors are critical if public sector bodies are to enjoy a return on investment.
- EDRMS implementation is a complex undertaking and can suffer from slow uptake if a number of CSFs such as top management, change management, education and training, attitudes to computers and technophobia are not considered before implementation.
- Experiences in both developed and developing countries show that such factors need to be considered otherwise projects become white elephants and get abandoned and become wasted money from public coffers.

The end

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