CRITICAL SUCCESS FACTORS OF CITIZEN RELATIONSHIP MANAGEMENT: HIGHER EDUCATION ADMISSION CENTER IN OMAN, A CASE STUDY

Shafiq Darwish AlAbri[1],
Suzilawati Kamarudin[1,2],
Adriana Mohd Rizal1 [2,]
Maizaitulaidawati Md Husin[1,2,]
& Adil Mohamed Al Kindy[1,3]

[1] Universiti Teknologi Malaysia UTM, Kuala Lumpur, Malaysia
[2] Senior Lecturer
[3] Royal Court Affairs, Muscat, Sultanate of Oman

Correspondence: Shafiq Darwish AlAbri, Muscat, Sultanate of Oman. Tel: 968-99474265.

Abstract
The motivation behind this study is the growing trend in the government of Oman to invest in the Citizen Relationship Management (CzRM) systems. However, with the high rates of failure in the implementation of these systems at the global level, it is necessary to identify the critical success factors (CSFs) that contribute to the success of the implementation process. Moreover, CzRM is one of the new research topics in Oman. Very little effort was made to explore the CSFs for the implementation of CzRM systems. To bridge this gap, the Higher Education Admission Center (HEAC) of the Omani Ministry of Higher Education (MoHE) was selected as a case study. Based on qualitative approach, five managers and specialist contributed to reply to the semi-structured interviews. This study revealed the existence of seven CSFs to implement CzRM projects successfully in the governmental sector. These are respectively: Leadership, IT infrastructure, Change Management, Strategy Build up, Project Management, Training, and Organizational Culture. In addition, it revealed the importance of the integration between these factors and the importance of their combined operation due to the interrelation between them. The outcome of this study added knowledge in this area of research generally and specifically presented the level of CzRM systems in Oman. This study recommends the need for future research on other similar systems that have been successfully implemented in different countries due to the different environments in which these systems operate. It also stresses the importance of studying the interrelations between the CSFs in order to examine their combined impact on the success of CzRM.

Keywords: Citizen Relationship Management (CzRM), Customer Relationship Management (CRM), E-government, Higher Education Admission Center (HEAC), Ministry of Higher Education - Oman (MoHE-Oman).

Introduction

The rapid global development of information and communication technologies (ICT) has made significant contributions to increase organisational productivity, effectiveness and efficiency, and has enabled organisations in different sectors to make decisions that are based on accurate and timely data (Al-Hassan, Lu, & Lu, 2009; Esichaikul & Komolrit, 2005; Macueve & Sciences, 2008; Venturini, 2007). This development was accompanied by the emergence of a number of technical terms (practices/processes) that all serve the objectives of the organizations and enable them to build strong relationships with all parties. Citizen Relationship Management (CzRM) is one of the terms brought about by the development in ICT, and this term was widely used in the private sector under the name of Customer Relationship Management (CRM) (Andrade & Camacho, 2014; Duque, Varajão, Vitor, & Dominguez, 2013; Keramati, Saremi, & Mofrad, 2011; Larsen & Milakovich, 2005; Mohamed, Shahriza, Karim, Jalaldeen, & Razi, 2013; Saremi, 2009).

Schellong (2005) defines CzRM as a strategy for government institutions that is enabled by the use of technology. This strategy aims to maintain and strengthen the relationship with the citizen, and also it encourages participation and consolidates the citizenship principles. Governments around the world have recognized the importance of citizens as the basis of strategic thinking and planning. They have sought to build strong relationships with citizens and provide them with electronic services around the clock (Kannabiran, Xavier, & Anantharaaj, 2005; Marc & Moez, 2011). For the Arab countries, there is a shift in government thinking to reformulate the mechanism of providing services through multiple outlets, and to focus on the involvement of the community and individuals to contribute in improving the quality of these services (A. M. Al-Khouri, 2012). He also emphasized the importance and propriety of CzRM for governments to achieve their governmental goals in building a citizen-centric culture capable of meeting the requirements of citizens and providing high quality and efficient services that are more responsive and easy to use.

CzRM comprises three components: People, Process, and Technology. It is important to focus on these three factors during the implementation process. Based on the experience gained from the private sector about the implementation of CRM as revealed in different countries, the previous studies revealed that focusing on technology factor only and ignoring other factors has led to the failure of many CRM projects (I. Chen & Popovich, 2003; Jayashree, Shojaee, & Pahlavanzadeh, 2011).

Since CRM projects have many dimensions and complexities, ignoring these dimensions and complexities will lead to the failure of those projects. According to Bahari (2012), King & Burgess (2008) and Sohrabi, Haghigh, & Khanlari (2010) emphasized that CRM and CzRM, like other technological projects, encountered failures during their implementation in many organizations. Further, Keramati et al. (2011) showed that 35%-75% of CRM projects faced failure and 80%-90% of IT projects in e-government have not achieved their expected performance. They also asserted that CzRM in the government sector, like other technologies faced many failures in the implementation process. Furthermore, Muscalu (2015) notes that the success rate of implementing CzRM systems does not exceed 30%. Moreover, Rahimi & Gunlu

(2016) emphasized that despite the benefits of CRM projects, the rate of failure of these projects reached 65%. Based on Simmons (2015), the prediction of the investment in CRM projects reached $ 22 billion by 2017.

Many scholars have highlighted the reasons behind these high failure rates of CRM. For example, Foss, Stone, & Ekinci (2008) argued that poor planning, blurred objectives, and a lack of awareness of the importance of change in the business environment are main reasons that lead to CRM projects failure. Another reason, is dealing with CRM as merely a technology (Kangal, 2010). This was supported by Dhaka & Nahar (2014) when their emphasized that CRM is an organization strategy to serve customers, not just technology. Other scholars such as Gutiérrez, Sigala, & Sandoval (2009) highlighted more reason that lead to the failure of CRM projects examples as follow: lack of senior management support and commitment, the absence of change management, the inefficiency of reengineering process, the difficulties of systems integration and communication channels. Further, Bahari (2012) added other reason for CzRM project failure, that is the failure of CzRM project to address the requirements of the end users, and in addition the weak investment in training on the new systems. Furthermore, Andrade & Camacho (2014) stated that ,the failure of CzRM projects is due to the inability of some government institutions to satisfy the citizens' needs through the provided services. Above are examples of the researcher's findings on the reasons that contribute to the failure of CzRM and CRM projects.

According to Hannola (2016), despite the failure of many of CRM projects, their implementation is still increasing. Therefore, it has become essential for many researchers to find out the causes of CRM project failure, and also to identify the critical factors that lead to their success (Elkadi, 2013; Ramadhan, Sensuse, Muladno, & Arymurthy, 2013). Further, Gichoya (2005) asserts that the failure of ICT projects is mainly due to the absence of success factors, which if identified and focused on it will higher the success rates. To avoid the negative impacts of CRM projects or to avoid the failure of these projects, it became necessary to pay attention to critical success factors (CSFs). Moreover, Sanad, Fidler, & McBride (2010) confirmed that knowing and understanding CSFs is the basis for successful implementation of CRM projects. CSFs have direct and indirect impacts on the implementation of a CRM strategy (Mendoza, Marius, Perez, & Griman, 2007). CSFs include elements such as activities, events, and circumstances that require special attention to achieve desired success (Kamalian, Ya'ghoubi, & Baharvand, 2013). These scholars considered CSFs as essential to implement CRM strategy. Clearly, there is a positive relationship between CSFs and the successful implementation of CRM projects (Foss et al., 2008). In addition, Dhaka & Nahar (2014) emphasized that CRM projects are complicated and complex tasks, and accordingly, to succeed on them requires the identification of all associated CSFs. In summary, the impeding factors for the implementation of CzRM and their associated CSFs are highlighted based on different contexts as emphasized by these above-mentioned researchers. However, it's important to identify these factors for the Omani context and that is the center of this study.

 To highlight the success factors associated with the implementation of CzRM projects in government institutions in Oman, the context of this study, this paper will highlight the most important CSFs that may contribute to the success of CzRM in Oman. This process will be

accomplished by reviewing the pilot experience of the Higher Education Admission Center (HEAC), one of the biggest electronic systems in the Ministry of Higher Education (MoHE) in Oman. The electronic system of HEAC will be taken as a case study due to the achievements it made by HEAC since its establishment in 2006. The HEAC's system achieved outstanding success in managing the relationship with citizens and the completion of transactions easily and efficiently. The Center has won numerous local and international awards in the field of advanced electronic services (Al-mamari, 2013).

In this paper, we will firstly give a general picture of CzRM in terms of its definition, benefits, failure rates and the reasons for failure of CzRM projects. Secondly, we will review the previous studies to identify the CSFs associated with the implementation of the CRM, e-government and CzRM projects and summarize the most effective factors in the implementation of these projects. Thirdly, we will explain the research methodology used in this study and clarify the data collection mechanism. We will also provide a background review about HEAC, which represents the case study of this paper. Fourthly, we will present the study findings and discussion. Finally, it will include the conclusion and a proposal for future studies.

Literature Review

Omani government interest in information and communication technology (ICT) dated back to 1998 through its establishment of the National Committee for Information Technology, which oversees the IT sector in Oman (Al-mamari, 2013). In 2006, the Information Technology Authority (ITA) was established to prepare the infrastructure of e-government and to provide consultation to all government institutions (Alkindi, 2016). Government institutions in Oman have paid a great attention to the citizens. This high level of attention is reflected in their great effort to provide electronic services to facilitate and accelerate the completion of citizens' governmental transactions. In April 2011, Council of Ministers pointed to the need for establishing departments in all government institutions catering for clients' needs. In line with this service provision approach, MoHE started to offer many of its services electronically. In 2006, MoHE established HEAC's system, the largest electronic system at MoHE, directed to serve students who graduate form General Education Diploma (Higher Secondary School). The HEAC system is Government-to-Citizens (G2C) approach (Al-mamari, 2013). HEAC is a full e-government system to serve the community. The system has won a number of local and international awards (Al-mamari, 2013).

Citizen Relationship Management (CzRM) Definition

The development of the relationship between customers and companies in the private sector has been reflected in the citizens' expectation to get the same level of services from the government institutions. It is therefore imperative that governments adopt a new management approach to build a stronger relationship with clients through the implementation of CzRM (Muscalu, 2015b, 2015a). Further, Y. Chen, Huang, & Yu 2017) emphasized that CzRM is a means to strengthen the relationship between governments and citizens and it also helps e-governments to improve its services oriented to citizens. CzRM consists of three main components: People, Process, and Technology.

According to Silva & Batista (2007), despite the slight differences between CRM and CzRM in some objectives, the common focus of both is the customer. Schellong (2005) suggests that CzRM is a strategy for government institutions that focuses on citizens to maintain and strengthen the relationship with them, encourage participation and establish citizenship which enabled by technology. Further, Larsen & Milakovich (2005) defined CzRM as a strategy to strengthen the links and cooperation between government and citizens, focusing on providing timely, integrated services to citizens and enabling them to access to the information and services using any channels favored by the citizens. CzRM increases financial and operations efficiency, and it helps to build an organizational environment that encourages creativity and innovation. Also, CzRM was defined by Latha, Madhuri, Rao, & Bharathi (2013) and Fiľa, Schwarczová, & Mura (2015) as a strategy that is broadly focuses on citizens and it is enabled through technology to sustain, maintain, enhance and improve that relationship and encourage citizen participation.

It can be concluded from the above definitions that CzRM revolves around three important points: (1) it is an organizational strategy and not just a technology, (2) CzRM focuses on creating a strong relationship with citizens, and (3) CzRM helps to achieve a high level of efficiency and effectiveness in the administration processes and the completion of transactions. Generally, it can be confidently said that most of the definitions revolve around the three components of CzRM.

Failure of CzRM

Failure Rate of CRM / CzRM

In the new millennium, there is an increase in the investment rate of CRM projects, but this is offset by an increase in the failure rate of those projects, while the success rate is very low (Dhaka & Nahar, 2014; Foss et al., 2008). CRM implementation process is complex and encountered by many challenges and obstacles because it changes all processes, the way of doing business, and the relationships with the customers. These complications resulted in the failure of implementing many CRM projects by an estimated rate of 65% (Dhaka & Nahar, 2014). According to a study conducted by Merkle Group Inc., it showed that the failure rate of CRM projects reached to 63% (Prezant, 2013). In addition, studies conducted during the period 2001 to 2009 showed that the average failure rate of CRM projects was 46.3% (Krigsman, 2009). Another study conducted by Gartner Group found that more than 50% of CRM projects failed (King & Burgess, 2008). Moreover, Kangal (2010) showed that the CRM failure rate ranges from 55% to 75%. In contrast, according to Gartner Group, the success rate of CRM projects is less than 30%, offset by unexpected losses and costs (Gutiérrez et al., 2009). Scholars such as Lawson-Body, Willoughby, Mukankusi, & Logossah (2011) argue that CRM projects in the public sector are also prone to failure, in the same way as it is happening in the private sector. Researchers such as Keramati et al. (2011) pointed that CzRM projects faced problems in the implementation process, and 80% to 90% of e-government IT projects couldn't achieve their objectives.

Reasons of CRM / CzRM Failure

As it's clear from above, CRM and CzRM like other technological projects, faced failure when implemented in many organizations (Bahari, 2012; King & Burgess, 2008; Sohrabi et al., 2010).

There are many reasons that caused the failure of CRM projects. Example of these reasons that attributed to these failures are; the projects view was limited to the technological part and overlooked the other aspects (Foss et al., 2008; Kangal, 2010), lack of customer-centric culture and poor focus on long-term relationships with customers (Muscalu, 2015b). Further, researchers such as Gutiérrez et al. (2009), Raman, Wittmann, & Rauseo (2006) and Foss et al. (2008) emphasized that the absence of strategic planning which precedes the implementation process is a reason for the inability of those projects to achieve their objectives. Furthermore, Kangal (2010) noted that the failure of CRM projects was due to the implementation of CRM before building a customer-centric strategy, start using systems without changing the organization's culture, and following the assumption that the more technology used in CRM projects, the better these projects will be.

In addition to the above, other causes of the failure of these projects are problems during the technology implementation, weak organizational integration, lack of client orientation, inadequate organizational leadership support, lack of change management, inefficiencies in process re-engineering, and weak assessment of the difficulties of the integration between the systems and data warehouses (Gutiérrez et al., 2009). Moreover, Dhaka & Nahar (2014) confirmed that CRM projects face failure if they are to be kept only in the hands of IT departments. Also, they added that the lack of familiarity with the CRM concept, its scope and the associated technology are also reasons leading to the failure in the implementation process. Further, Bahari (2012) noted that one of the reasons for the failure of CzRM projects are that they do not take into account the requirements of end-users, and weak investment is made in training on new systems. Furthermore, Andrade & Camacho (2014) noted that the failure of some CzRM projects is due to the inability of some government institutions to deliver the necessary benefits and to satisfy the citizens through the provided services. Other reasons leading to the risk of failure of these projects and thus causes that governments to incurred financial losses is governmental challenges related to limited resources and budgets (Lawson-Body et al., 2011). So, based on the above, Table 1 summarizes the reasons behind the CRM / CzRM Failure.

Table 1. Summarized the Reasons of CRM / CzRM Failure

No.	The reasons	The Reference
1.	Those projects viewed as merely a technology and overlooked the other aspects	(Foss et al., 2008; Kangal, 2010)
2.	Lack of customer-centric culture	(Kangal, 2010; Muscalu, 2015b)
3.	Poor focus on long-term relationships with customers	(Muscalu, 2015b)

4.	The absence of strategic planning	(Foss et al., 2008; Gutiérrez et al., 2009; Kangal, 2010; Raman et al., 2006)
5.	Problems during the technology implementation	(Gutiérrez et al., 2009)
6.	Weak organizational integration	(Gutiérrez et al., 2009)
7.	Inadequate organizational leadership support	(Gutiérrez et al., 2009)
8.	Lack of change management	(Gutiérrez et al., 2009)
9.	Inefficiencies in process re-engineering	(Gutiérrez et al., 2009)
10.	Weak assessment of the difficulties of the integration between the systems and data warehouses	(Gutiérrez et al., 2009)
11.	If these projects kept only in the hands of IT departments	(Dhaka & Nahar, 2014)
12.	The lack of familiarity with the CRM concept, its scope and the associated technology	(Dhaka & Nahar, 2014)
13.	Do not take into account the end-users' requirements	(Bahari, 2012)
14.	The weak investment made in training on new systems	(Bahari, 2012)
15.	Limited resources and budgets	(Lawson-Body et al., 2011)

Critical Success Factors

Introduction to Critical Success Factors

According to Bullen & Rockart (1981), critical success factors (CSFs) are factors that, if focused and satisfied, will enable the organization to compete. Any CRM success factor can be considered "critical" if it contributes to the success of a CRM strategy. Further, Kamalian et al. (2013) pointed out that the factors are associated with the CRM components (people, processes, and technology) have an impact on the success of the implementation process of CRM projects.

Furthermore, Foss et al. (2008) confirmed that there is a positive relationship between CSFs and the success of CRM implementation. The correlation between the outcomes and benefits of the CRM implementation and CSFs was further confirmed by Rahimi & Gunlu (2016). According to Badpa & Bakhshayesh (2015) and A. Al-Khouri (2013), the CSFs are fundamental to the success of a CRM strategy. In general, the success and failure of CRM projects depends on the extent to which the CSFs are identified. The achievement of the organization's goals is linked to the CSFs. Focusing on CSFs contributes to the organization's prosperity and enables it to achieve its objectives and vision. The omission of those factors leads to the failure of the organization's projects (Napitupulu & Sensuse, 2014). Moreover, Badpa & Bakhshayesh (2015) emphasized that it has become an essential requirement to have a clear knowledge of the CRM CSFs, which in turn will lead to the success in the implementation of CRM projects.

Previous Studies

According to Keramati et al. (2011), CSFs are similar in the literature of Information System (IS), CRM, e-government, and CzRM. It is important to identify CSFs so that the organizations can achieve its objectives and reach the expected outcomes. This paper will review a number of studies conducted previously in Oman and other countries to explore the most influential factors on the implementation of CRM, e-government and CzRM projects. The researchers will use the results of these studies to determine the factors associated with the HEAC case study related to this research paper.

CSFs have received extensive attention in previous studies and can be categorized into organizational, technological and individual factors (Lawson-Body & Willoughby, 2011). According to Foss et al. (2008), change management, project management and employees' engagement are factors related to the successful implementation of CRM. Further, Rahimi & Gunlu (2016) asserts that the support and commitment of senior management, the alignment of the CRM strategy with the strategy of the organization, the presence of multi-functional task teams, the availability of capabilities for systems and communication channels integration are all factors for the successful implementation of the CRM strategy.

A study conducted by Al-azri et al. (2010) to determine the success factors associated with the implementation of e-government in Oman. The study was conducted at the Ministry of Higher Education (MoHE). The HEAC in MoHE was selected as a case study because of its sophisticated electronic system. These researchers, reviewed the previous conducted studies in Oman and other countries to determine the factors influencing the implementation of e-government, and they concluded a number of (11) factors, which are the most frequent in those studies, classified into three groups: (organizational factors, system factors, and the end-user factors) as shown in Table 2.

Table 2. The CSFs summarized by Al-azri et al. (2010)

The Categories	Organizational Factors	Systems Factors	Users Factors

The Factors	- Vision - Leadership - Top Management Support - Organizational culture	- User-Friendly - Flexibility - Security - Accessibility	- User Computer Efficacy - Training - Awareness

A conclusion made by Al-azri et al. (2010) stated that the most influential factor in the implementation of e-government in Oman is: vision, leadership, top management support and commitment, training, organizational culture, and awareness.

In another study conducted by Altameem (2007) on the government sector in Saudi Arabia, the researcher reviewed several previous studies to explore the CSFs related to the adoption of e-government. The researcher extracted from the previous studies a number of (24) factor which classified into three groups as shown in the Table 3.

Table 3. The CSFs summarized, (Source: Adapted from Altameem (2007))

Governing Factors	Technical Factors	Organizational Factors
- Vision - Strategy - Top Management Support - Leadership - Citizen-Centric - Funding	- IT Infrastructure - IT Standard - National Information Infrastructure (NII) - Collaboration - Security - Relative Advantage - Citizen Relationship Management	- Change Management - Training - Implementation - Quality - Organization Culture - Technical Staff - Policy and Legal Issues - Reward System - Business Process Re-Engineering (BPR) - Awareness - Organization Structure

The researcher concluded that security; IT Infrastructure and Top Management Support were the most influential factors in the government sector in Saudi Arabia. Reward System was at the end of the list.

Further study by Al-Hudhaif (2011), on the Saudi banking sector to identify the CSFs that affect the implementation of CRM. The researcher concluded that the support and commitment of senior management, building a clear strategy for CRM and selecting suitable electronic systems has a positive impact on the implementation of CRM projects.

A study conducted by Badpa & Bakhshayesh (2015) on the banking sector in Tehran, Iran. The researcher's highlighted 13 factors affect the success of CRM implementation in the context of

Iran. These factors are related to the three components of CRM. The study revealed that the management of CRM projects and IT are the most influential factor in the implementation of CRM in Iranian banks.

Another study by Keramati et al. (2011) identified (7) factors affecting the implementation of CzRM. They examined the extent to which these factors were related to the successful implementation of CzRM on the Tehran municipality. They concluded that the following factors are strongly related to the successful implementation of the CzRM in the Tehran municipality, these factors are: top management support, knowledge management, IT, processes, change management, organization, and citizen concerns. From the findings of the above mentioned studies, the factors that have a significant impact on the success of the implementation process of CRM, e-government, and CzRM are summarized in Table 4.

Table 4. Summary of CSFs

The Factors	The Reference
Vision	(Al-azri et al., 2010)
Leadership	(Al-azri et al., 2010; Al-Hudhaif, 2011)
Top management support and commitment	(Al-azri et al., 2010; Altameem, 2007; Keramati et al., 2011)
Training	(Al-azri et al., 2010)
Organizational culture	(Al-azri et al., 2010; Keramati et al., 2011)
Awareness	(Al-azri et al., 2010)
Security	(Altameem, 2007)
IT infrastructure	(Altameem, 2007; Badpa & Bakhshayesh, 2015; Keramati et al., 2011)
Building a clear strategy	(Al-Hudhaif, 2011)
Selecting a suitable electronic system	(Al-Hudhaif, 2011)
The management of the project	(Badpa & Bakhshayesh, 2015; Keramati et al., 2011)

Change management	(Keramati et al., 2011)
Process	(Keramati et al., 2011)
Citizen concern	(Keramati et al., 2011)

Methodology

Case Study

This study focuses on one electronic system of the Ministry of Higher Education (MoHE) in Oman, which play a crucial role in managing the relationship between MoHE and citizens (the graduation from the General Education Diploma and their parents). Therefore, the use of the case study methodology is best suited to achieve the objectives of this paper. According to Yin (2006), case study is one of the methods used in humanities research. Further, Jenkins (1985) asserts that the case study is an attempt to study the reality of a specific environment or subject determined by the researcher. For the variables, the researcher does not control or manipulate the independent variables and there are no dependent variables to be measured. Furthermore, Neuman (2003) noted that the case study enables the researcher to observe the characteristics of one unit as an organization, project or other. The main objective of that observation is to deeply investigate into the details of a particular phenomenon to produce broader and more comprehensive results, which will be used in other projects or organizations. The case study follows the qualitative approach. The semi-structured interviews are selected and used for their strength and flexibility in the discussion with the interviewees (Neuman, 2003).

The case study helps to explore and understand a case that has not been studied before and has not received prior attention from researchers. The focus of research area of this paper has received a little attention form the researcher in Oman and accordingly, the case study is a suitable approach method to conduct a further investigation in the context of this study. The success of the HEAC's system, which has won numerous local, regional and international awards, and the strong bond of its services with citizens, has encouraged the researchers of this paper to conduct this study. The HEAC center has received a great recognitions and acceptance and satisfaction among its users. An electronic survey (questionnaires) was conducted in the academic year 2016/2017 for the system's users to discover its ease of use. The results indicated that it was easy to use the system by more than 83.1% in some elements and up to 95.3% in other elements. In addition, students who took a place in higher education institutions in Oman or overseas indicated that the level of justice and equality was more than 66.2%. The periodic reports confirmed that the HEAC center continuous advancing to achieve the highest citizens' satisfaction on its provided services. This advancement is due to the center contentious process of raising its electronic services, the implementation of the latest technology and enhance the level of communication with citizens. There are ongoing studies by HEAC to discover and follow the suggestions of the system's users to reach the highest levels of satisfaction among them.

By taking the HEAC as a case study, the researchers will be able to identify the factors that lead to the success of implementing the CzRM projects at the level of the Ministry of Higher Education or even other governmental institutions that have relations with citizens in Oman. Gaining the knowledge of the CSFs that have brought the HEAC to be successful will help other projects to benchmark HEAC experience and use its practical experience as ground rules of CzRM implementation. In addition, the governmental organizations in Oman may take into consideration the factors that will be revealed in this paper as recommendations for CzRM project implementation.

HEAC: Overview

Since the case study of this paper will be conducted in HEAC, it is essential to give a brief of HEAC in order to gain the insights of this center and its great role in providing the governmental services to the citizens of Oman. The HEAC's system is an integrated system that provides services to Graduates of General Education Diploma (The High Secondary School Students). HEAC allows students to compete for scholarships through an electronic system that is characterized by ease of use, high transparency and the services can be get through different communication channels. MoHE has invested heavily in the HEAC System in order to make it possible for students to obtain admission in higher education institutions by an electronically instead of the traditional methods that require the students and their parents to move from one institution to another which consuming time, effort and money and exposes them to many risks. The HEAC system integrates different electronic services and it linked to all relevant parties (HEAC, 2018).

The HEAC system, with its links, relations, storage repositories and multiple communication channels, is similar to CzRM framework. The CzRM framework, as demonstrated by Schellong (2007), consists of a set of key elements such as; communication channels, front-office, back-office, data warehouse and the integration with the other agencies in order to reach the highest level of customer satisfaction, as shown in Figure 1. The system integrates a number of elements, communication channels, and external and internal parties.
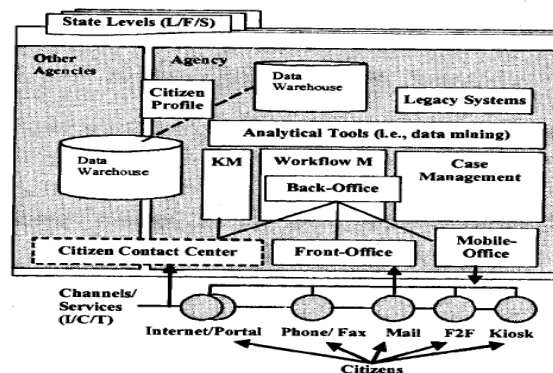

Figure 1. CzRM Framework (Source: Adapted from Schellong (2007))

The Center offers its services through various channels such as the website, SMS, e-mail, smart phone applications and telephone. The Center's system is characterized by transparency, fairness

and equality. The statistics of HEAC showed that the number of students enrolled in the electronic system during the academic year 2017/2018 is (38973) students. The number of students enrolled and registered in the system reached (262175) students since the establishment of the system in the academic year 2006/2007 until the academic year 2017/2018. The Center annually seeks to develop the system in order to continue innovation in services to achieve the highest levels of satisfaction among the beneficiaries of its services (HEAC, 2018). The Center take the feedback from the users about the provided services through the distribution of the annual electronic questionnaires in order to ensure continuity improvement of the system and keep pace with all developments. The Center has won a number of awards, examples of these awards are as follow (HEAC, 2018):

• The Best Electronic Product: The World Summit Award (WSA) awarded the Best Electronic Product Award to the HEAC in Austria and it was ranked among the top five electronic products in terms of the electronic content in 2007.

• Award for the best e-portal in the field of development sectors: The Center received the award at the second Gulf Conference of e-government in Kuwait, in 2011. The Center competed with 85 projects.

• Golden Excellence Award for Intelligent Applications: The Center received this award in 2016. The Center was honored with this award for electronic application, which is one of the channels of communication and delivery of services related to the Center's system as mentioned above.

The Center has received many other awards, which attest to the outstanding level achieved by the Center. The center is characterized by creativity, innovation, continuous development and change for the better.

Data Collection

As indicated in Section 3.1, the methodology followed is semi-structured interviews. This methodology is based on open questions, and this type of interview is used in exploratory studies. Interviews are conducted between two or more persons (Saunders, Lewis, & Thornhill, 2009). Further, Bryman & Bell (2003) indicated that during the interview, the interviewer could make appropriate adjustments in asking some questions in order to conduct a more in-depth investigation to obtain more details about a specific part. A flexible methodology for data collection helps to expose more and more unexpected details related to the subject of the study (Saunders et al., 2009). In this study, the researchers prepared a number of questions that are expected to give sufficient flexibility to those interviewed to obtain adequate and in-depth answers.

To collect data in order to reply to the research questions and achieve the study's objectives, a number of five interviews were conducted with HEAC specialists and senior managers. The interviewees were suggested by them boss due to the long and sufficient experience and the significant role they played during the implementation of the HEAC's CzRM system. The choice of the interviewees had an important role in collecting accurate and sufficient data on the success

factors that helped to implement HEAC system successfully. The researchers were able to analyze the responses of those interviewed and to infer the underlying factors that contributed to the success of the HEAC's CzRM system. The interviews were recorded through an electronic application on the mobile phone in order to collect a comprehensive and accurate data, without losing or forgetting any information.

Findings and Discussion

As discussed above, previous studies have revealed that the implementation of CzRM systems in many government organizations faced a high rate of failure, resulting in no improvement in doing the business within the organizations or with the beneficiaries of its services (Al Dhabbah, 2017). However, for the Higher Education Admission Center (HEAC), it has had a successful experience in managing an effective relationship with citizens. Researchers have not only judged the success of HEAC's CzRM system through the many awards received by the Center, but also they asked the interviewees to assess the degree of which the HEAC electronic system was successful in serving its customers (citizens). The responses indicated that the level of success reached to more than 96% which is a confirmation of the success of the system. The interviewees justified this high rate because the center has achieved its objectives and has established a strong business base based on the principles of justice, transparency, equality, clarity and accuracy in dealing with citizens, which raised the level of citizens' satisfaction. Another reason for this success is that, the Center has identified from the beginning the relevant stakeholders and worked with them closely to achieve the objectives of the Center. This has contributed to overcoming the challenges that may impede the implementation of the system. The Center has also created a direct relationship and communication channels with the beneficiaries of its services to understand and identify their needs and to take their views and suggestions which contributed to the advancement of the system.

There is considerable agreement among those interviewees that the Center has been developing continuously since its inception and puts citizens and their needs as the cornerstone of system development. This continuous development is driven by citizens' needs and feedback obtained through the annual assessment questionnaires that are distributed to beneficiaries. The interviewees confirmed that the Center services keep abreast of the modern technologies and meet the citizens' requirements. The Center's services are offered through various communication channels. The center strives to raise the level of citizens' confidence and satisfaction of the provided services. The Center focuses on information security as one of the most important requirements to increase the citizens' confidence on the offered services.

In order for the researcher to ascertain the compatibility of the Center's CzRM System with the theoretical framework of CzRM (Figure 1), the interviewees asserted that the Center operates in a way consistent with the framework of CzRM. The Center's system of managing the relationship with citizens includes the following elements: citizens as beneficiaries of the center's services, different communication channels (social media, text messages, call, e-mail, website, applications, face-to-face meetings, etc.), front office, back office, databases, and other agencies (partners). These elements have been integrated and then contributed to the success of the

Center's CzRM system. The interviewees added that during the implementation process, the Center takes into account the three components of CzRM systems (People, Process, and Technology).

In order to achieve the objectives of this study, and based on the following results gained from the interviewees: (1) the high evaluation of the success of the Center in managing its relationship with the citizens, (2) the compatibility of the Center's system with the CzRM framework, and (3) the high level of citizens' satisfaction on the electronic services provided by the Center, the researchers asked the interviewed to identify the most influential CSFs that contributed to the Center's success in implementing CzRM system. The researchers presented 14 CSFs derived from previous studies (see section: 2.4.2, Table 4) to the interviewed to find out their opinion about the importance of these CSFs to the success of the Center's CzRM system. The interviewees agreed on the overall importance of all of those factors, which their role cannot be overlooked. They are collectively lead to the successful implementation of the CzRM system. Below are the seven most important factors from the interviewees' point of view, organized based on their level of importance?

• Leadership

100% of respondents agreed on the importance of leadership in the implementation of CzRM projects. Interviewees believe that leadership is the key motivational factor for success. Because leadership is the source of inspiration and guidance that encourages all employees to work with a clear vision that is essential for continuous development. Continued follow-up and support from the leader has a role in achieving success. Leaders have a role in motivating staff and encouraging them to give more. Leaders are also those who adopt staff proposals and ideas. Leaders must be characterized by inspiration, cooperation, commitment and initiative. The importance of the leader is supported by previous studies. The leaders have an influence that extends to all managerial levels, which is reflected positively on the level of employees' performance in the organization and thus leads to successful implementation of the projects (Yeh & Walter, 2016). According to Al-Busaidy (2011), achieving successful implementation of the electronic initiatives at the governmental level requires strong support from the leadership. They are playing an influential political role that is vital to achieve the desired changes. Further, Andrade & Camacho (2014) assured that the government institutions must have a person who has the broad and powerful vision that drives the organization to succeed in the process of change.

• IT infrastructure

According to the interviewees, the IT infrastructure is critical to the successful implementation of CzRM systems at 98%. Whatever efforts have been made to build an effective relationship with the citizens, if the IT infrastructure is overlooked, it will lead to the failure of the implementation of CzRM projects. Interviewees confirmed that the infrastructure that is related to the availability of IT networks and the Internet, the speed, efficiency and effectiveness of the systems, and the ability to quickly retrieve the data stored in the databases are fundamental reasons contributing to the success of CzRM systems. This findings is in consistent with what was confirmed by Andrade & Camacho (2014), that CzRM system's success is based on advanced IT infrastructure,

and this factor cannot be overlooked. The infrastructure is what enables citizens to access e-government services in an easy and reliable way (Ebrahim & Irani, 2005). The availability of IT infrastructure enables the organization to collect and analyze customer data for continued system development (Vazifehdust, Shahnavazi, Reza, Jourshari, & Sharifi, 2012). This importance of the IT infrastructure in enhancing business processes was strongly emphasized by scholars such as Badwan, Al Shobaki, Abu Naser, & Abu Amuna (2017).

• Change management

The interviewees confirmed that change management is a critical factor, with a significance rating of 97%. They recognize that moving from the present situation to the future situation is complex, is associated with many components that should be integrated in order to succeed in the transformation process. For this reason, the interviewees stressed the importance of change management and that it must have a strong support from senior management. Also, they believe that the process of change must be carried out in accordance with a clear vision and strategy. They also stressed that all parties must be prepared for the inevitability, significance and expected results of change. They stressed the importance of creating a direct communication channel with all parties in order to answer their inquiries and overcome the challenges facing them. All above findings are in line with previous studies, which highlight the importance of change management to reduce staff resistance, bring about the desired change within the organization and with its related parties, and this factor will be successful if supported by the senior leadership (Alfarraj, 2012). Previous studies also confirmed that change management is important to reduce the negative effects that may lead to the failure of CzRM systems. These negative effects appears due to the movement of staff from doing the business by following the way they are accustomed to work using a new methods that is completely different from the previous one (Mendoza et al., 2007). Therefore, Marc & Moez (2011) emphasizes on the importance of the change management and the employees' understanding of the changes that will occur as a result of the implementation of CRM systems.

• Building a clear strategy

From the respondents' point of view, the strategy factor is of high importance by 96% because of its place in drawing up a clear road map for the implementation process. The interviewees pointed out that building a clear strategy is important because it facilitates the organization's transition from the current situation to the future situation in a deliberate and planned manner. This strategy must include the vision, objectives and actions that must be taken to successfully complete the project. The interviewees realized that preparing the strategy is not an easy process and that it must go through many steps. It starts with the analyzing of the current situation and ending with implementing the strategy. The next stage is the evaluation of the strategy in order to continue its development and progress. This is in line with what previous studies have emphasized on the importance of the strategy to achieve the organization's objectives and bring about the desired change (Alfarraj, 2012). Further, Al-Busaidy (2011) confirmed that one of the challenges facing the implementation of e-government projects in Oman is the lack of strategies that lead to the successful implementation of these projects. Moreover, Bahari (2012) believes

that good planning for CzRM projects leads the organization to success in the implementation process and the achievement of citizens' satisfaction by providing high quality services.

• Project management

This factor, from the interviewees' point of view has a great importance at 95%. They noted that the existence of a time-frame and framework for the completion of projects is an important factor in completing the project on time and meet the expected results. The interviewees confirmed that project management required the formation of a working group of individuals from different backgrounds. Respondents believe that the project management must be flexible in order to respond to any new order that may occur during the implementation process. This finding was confirmed by previous studies that stated the importance of proper project management leads to the successful implementation process of CzRM projects (Liagkouras & Metaxiotis, 2014). The formation of a specialized project management team leads to successful implementation (Foss et al., 2008). The aim of project management is to implement projects according to available resources (money, people, and time) (Chinje, 2013).

• Training

The training factor has the importance level of 93%, according to interviewees. Since this factor has a role in the development of the employees' knowledge and capabilities. In addition, the interviewed indicated that training plays an important role in reducing end-users' resistance, (employees or citizens), because, lack of training increases the resistance that creates a challenge to implement the system and thus leads to failure. Training is also of great importance to technicians, because training will keep them updated with latest innovations in the field of technology. The interviewees confirmed that training is important in order to provide the technical staff with the necessary technical skills and competencies required to replace expensive contracted technician in the governmental institutions. The replacement of Temporary Contracted Technicians with specialized staff would solve one of the challenges faced by government institutions, which is the large financial cost that the government spends on those contracts. This corresponds to what Hannola (2016) pointed that training has a role in building positive ideas and beliefs that facilitate the implementation process. Training has a role in providing employees with knowledge and skills (Migdadi, Awartany, & Khayata, 2010). This training is not limited to the employees, but it includes all end users of the systems (Mehta, 2013).

• Organizational culture

This factor is not less important than the previous factors. Interviewed believe that this factor is very important for the implementation of CzRM systems estimated by 92%. The interviewees pointed out that when paying a high level of attention to the organizational internal culture, it will reflect positively on the successful implementation of CzRM projects. The appropriate setting for the organization's internal environment is the starting point for achieving the organization's objectives of implementing any electronic initiative. Attention to the organization's culture and internal environment reduces staff resistance to change. In addition, the organization must provide an appropriate environment for the exchange of knowledge,

expertise and skills required for the completion of electronic projects. The interviewees affirm that the organization must create a stimulating environment to enable employees' creativity, innovation and allowing the introduction of the new ideas. The interviewees are aware that the culture of citizen-centric work must be spread throughout the organization. This finding is in line with what Al-azri et al. (2010) have confirmed on the importance of disseminating the culture associated with the e-government implementation because of its role in guiding the organization towards the successful implementation of such initiatives. In order for the organization to achieve its objectives of CRM systems, it is required to provide its employees with knowledge on new working mechanisms by providing a stimulating and encouraging environment for knowledge acquisition (Almotairi, 2008; Arab, Selamat, Ibrahim, & Zamani, 2010). A customer-centric culture must be deployed in the organization's environment, which will contribute significantly to the success of CRM systems (Dhman, 2011).

In a question on whether the HEAC shall focuses on each of these factors independently or whether it is necessary to integrate them to achieve successful implementation of CzRM projects. All respondents were in agreement on the need to integrate all CSFs and be linked to achieve the desired success of CzRM projects. The interviewees' responses were consistent with what (Boon, Corbitt, & Coulthard, 2005; Sanad, 2015; Sanad et al., 2010) had produced on the importance of studying the impact of the these factors collectively because, there is overlap and correlation between them. Also the focus on the impact of each factor separately induced no change or improvement on the failure rates in CRM projects.

Conclusion and Recommendation

The study followed a case study methodology, focusing on the HEAC electronic system, which links MoHE in Oman with the citizens (students of the General Education Diploma).The case study methodology is used in humanitarian studies to deepen understanding of a particular subject or environment that has not studied previously. This study is the first of its kind to address the CSFs for successful implementation of the HEAC's CzRM system in Oman. As mentioned previously that, this system has won many local and international awards, which was an indication of the success of the system in managing the relationship with citizens. The interviewees also stressed the high level of success achieved by HEAC in building an effective relationship with the citizens. Thus, this study was conducted to look for the CSFs that contributed to the success of the HEAC's CzRM system in order to benefit from these factors in the implementation of similar projects in MoHE or other governmental institutions.

While previous studies have shown high failure rates in CRM systems in the government agencies, however, there are governmental systems that have successfully managed the relationship with citizens, including the HEAC's CzRM system. The study sought to identify the CSFs that have played a role in the success of the HEAC's CzRM system to be the basis for other electronic systems in MoHE or other governmental institutions to succeed in the implementation process. The identification and understanding of CSFs helps to avoid the risk of failure for government institutions. The study revealed a set of CSFs, which contributed to the success of the HEAC's CzRM system. These CSFs namely: Leadership, IT infrastructure, change

management, building a clear strategy, project management, training, and organizational culture. The results of this study also confirmed that the other factors reviewed in section 2.4.2 – Table 4 also contributed to the success of the system. This study has gone further, where it revealed that it is not enough to deal with each factor independently, but must all factors be treated collectively and be integrated. The focus on the interdependence and overlapping between these factors leads to higher the success level.

The results of this study revealed the factors that enabled HEAC to succeed in implementing CzRM system. These factors can have the same impact on the success of other similar systems, both at MoHE and other government institutions. This study lays the foundation for future studies of CzRM in the governmental sector in Oman. This study provides in-depth research on the CSFs and relationship between them and the impact of each factor on the other in this area of research. It is not enough to just list the CSFs but to go further by looking at the relationships between them, because these CSFs work together and simultaneously to reach the highest levels of success. Therefore, the researchers emphasize the importance of conducting similar studies to identify CSFs for other CzRM projects. It is not enough to conduct such studies in Oman context only, but the requirement is to conduct similar studies in different countries because of the different cultures and environments in which these systems operate. It is also necessary the future studies to use a mixed-method to understand these systems and the associated success factors. The researchers also stress on the importance of studying the relationship between the factors and the common links between them to determine the extent of their combined impact on the success of the implementation process.

References

Al-azri, A., Al-salti, Z., & Al-karaghouli, W. (2010). The Successful Implementation of E-Government Transformation: a Case Study in Oman. European, Mediterranean & Middle Eastern Conference on Information Systems, 2010, 1–11.

Al-Busaidy, M. (2011). Evaluating The Institutional Factors Affecting E-Government Implemention. Phd Thesis.

Al-Hassan, M., Lu, H., & Lu, J. (2009). A framework for delivering personalized e-government services from a citizen-centric approach. Proceedings of the 11th International Conference on Information Integration and Web-Based Applications & Services - IiWAS '09, 436. https://doi.org/10.1145/1806338.1806419

Al-Hudhaif, S. (2011). The Critical Success Factors for Implementation of Customer Relationship Management in the Banking Sector of Saudi Arabia. Journal of Global Business Management, 7(1), 1–7. Retrieved from http://search.proquest.com/docview/896551796?accountid=10297%5Cnhttp://sfx.cranfield.ac.uk/cranfield?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ:abiglobal&atitle=The+Critical+Success+Factors+for+Implementation+

Al-Khouri, A. (2013). Critical Thoughts from a Government Mindset.

Al-Khouri, A. M. (2012). Customer Relationship Management: Proposed Framework from a Government Perspective Times. Journal of Management and Strategy, 3(4), 34–55. https://doi.org/10.5430/jms.v3n4p34

Al-mamari, Q. (2013). E-Government Adoption and Implementation in Oman : A Government Perspective. Phd Thesis, (March).

Al Dhabbah, M. (2017). Seven Public-Government Relationship Typologies Apply CRM in United Arab Emirates (UAE) Government. Phd Thesis. Retrieved from https://vtechworks.lib.vt.edu/bitstream/handle/10919/81091/Al_Dhabbah_M_D_2017.pdf?sequence=1&isAllowed=y

Alfarraj, O. (2012). Factors Influencing the Development of eGovernment in Saudi Arabia : A Qualitative Investigation of the Developers ' Perspectives. Phd Thesis, (September).

Alkindi, S. Y. (2016). Backend Challenges and Issues for Electronic Government. Master Thesis.

Almotairi, M. (2008). CRM success factors taxonomy. European and Mediterranean Conference on Information Systems, 25–26.

Altameem, T. (2007). The Critical Factors of E-Government Adoption An Empirical Study in the Saudi Arabia Public Sectors. Phd thesis. Brunel University.

Andrade, V., & Camacho, P. (2014). Citizen Relationship Management: What are the determinants that influence the implementation of Citizen Relationship Management in governments? IEEE Conferences, 97–102. https://doi.org/10.4018/978-1-59140-789-8

Arab, F., Selamat, H., Ibrahim, S., & Zamani, M. (2010). Relationship marketing for competitive advantagewinning and keeping customers. Proceedings of the World Congress on Engineering and Computer Science 2010, II, 1121–1125. Retrieved from http://www.iaeng.org/publication/WCECS2010/WCECS2010_pp1121-1125.pdf

Badpa, A., & Bakhshayesh, A. Y. (2015). Prioritization and Assessment of the Relationship of Factors Affecting Customer Relationship Management in the Banking Sector of Iran (A Study with DEMATEL Approach). European Online Journal of Natural and Social Sciences Special Issue on New Dimensions in Economics, 4(1), 409–418.

Badwan, J., Al Shobaki, M., Abu Naser, S., & Abu Amuna, Y. (2017). Adopting Technology for Customer Relationship Management in Higher Educational Institutions. International Journal of Engineering and Information Systems (IJEAIS), 1(1), 20–28.

Bahari, M. (2012). Citizen Relationship Management Implementation in Local Government – Towards a Theoretical Research Framework. JOURNAL OF INFORMATION SYSTEMS RESEARCH AND INNOVATION, 51–61.

Boon, O., Corbitt, B., & Coulthard, D. (2005). A Customer Relationship Management Case Study – Critical Success Factors in Action. PACIS 2005 Proceedings: Pacific Asia Conference on Information Systems (PACIS), 794–807.

Bryman, A., & Bell, E. (2003). Business Research Methods. Oxford University Press.

Bullen, C. V., & Rockart, J. F. (1981). A primer on critical success factors. Sloan, (69), 1–64. https://doi.org/10.1088/0305-4470/10/3/014

Chen, I., & Popovich, K. (2003). Understanding customer relationship management (CRM) People, process and technology. Business Process Management Journal, 9(2), 672–688. https://doi.org/10.1108/14637150310496758

Chen, Y., Huang, C., & Yu, H. (2017). Combining the Features of ICT and Citizen Relationship Management to Enhance the Governmental Administration : An I-Kenting System as a Practice, 7(8), 559–563. https://doi.org/10.18178/ijssh.2017.7.8.884

Chinje, N. (2013). Customer Relationship Management (CRM) Implementation within the Banking and Mobile Telephony Sectors of Nigeria and South. Phd Thesis, (September).

Dhaka, V., & Nahar, P. (2014). A Review : Benefits and Critical Factors of Customer Relationship Management. Int. J. Advanced Networking and Applications, 6(1), 2191–2194.

Dhman, Z. (2011). The Effect of Customer Relationship Management (CRM) Concept Adoption on Customer Satisfaction – Customers Perspective. Master Thesis.

Duque, J., Varajão, J., Vitor, F., & Dominguez, C. (2013). Implementation of CRM systems in Portuguese Municipalities. Local Government Studies. https://doi.org/10.1080/03003930.2012.755464

Ebrahim, Z., & Irani, Z. (2005). E-government adoption: architecture and barriers. Business Process Management Journal, 11(5), 589–611. https://doi.org/10.1108/14637150510619902

Elkadi, H. (2013). Success and failure factors for e-government projects: A case from Egypt. Egyptian Informatics Journal, 14(2), 165–173. https://doi.org/10.1016/j.eij.2013.06.002

Esichaikul, V., & Komolrit, V. (2005). Citizen participation through e-forum: A case of wastewater issues. Proceedings of the 2nd Communities and Technologies Conference, C and T 2005, 321–339. https://doi.org/10.1007/1-4020-3591-8-17

Fiľa, M., Schwarczová, L., & Mura, L. (2015). Citizen satisfaction survey as a tool of citizen relationship management of local government in Slovakia. Serbian Journal of Management, 10(1), 117–129. https://doi.org/10.5937/sjm10-7147

Foss, B., Stone, M., & Ekinci, Y. (2008). What makes for CRM system success —or failure? Journal of Database Marketing & Customer Strategy Management, 15(2), 68–78. https://doi.org/10.1057/dbm.2008.5

Gichoya, D. (2005). Factors Affecting the Successful Implementation of ICT Projects in Government, 3(4), 175–184.

Gutiérrez, J., Sigala, D., & Sandoval, C. (2009). Customer Relationship Management (CRM) linking with Marketing Knowledge (MK) in the electronic sector in Guadalajara, Jalisco, Mexico, 20(10), 107–122.

Hannola, M. (2016). Critical Factors in Customer Relationship Management. University of Tampere, School of Management. https://doi.org/10.1007/

HEAC. (2018). Higher Education Admission Center. Retrieved December 26, 2018, from http://heac.gov.om/index.php/en/

Jayashree, S., Shojaee, S., & Pahlavanzadeh, S. (2011). A Critical Analysis of Customer Relationship Management from Strategic Perspective. International Conference on E-Business, Management and Economics, 3, 340–345. Retrieved from http://www.ipedr.com/vol3/69-M10082.pdf%5Cnhttp://connection.ebscohost.com/c/articles/74272187/critical-analysis-customer-relationship-management-from-strategic-perspective%5Cnhttp://www.etlibrary.org/?m=fbook&a=details&aid=759

Jenkins, A. M. (1985). Research Methdologies and MIS Research. Research Methods in Information Systems, 97–103. Retrieved from http://tricycle.csisdmz.ul.ie/staff/BF/phd-seminar-series/Jenkins.pdf

Kamalian, A. R., Ya'ghoubi, N., & Baharvand, F. (2013). Explaining Critical Success Factors for CRM Strategy (Case Study: SMEs in Zahedan Industrial City) Noormohammad Ya'ghoubi. International Journal of Academic Research in Business and Social Sciences, 3(5), 2222–6990.

Kangal, A. (2010). Identifying the dominant perspective on customer relationship management in the last decade 2000 – 2010. Journal of Business Research - Turk, 4, 45–61.

Kannabiran, G., Xavier, M. J., & Anantharaaj, A. (2005). Enabling E-Governance Through Citizen Relationship Management-Concept, Model and Applications. Journal of Services Research, Institute for International Management and Technology, 4(2), 223–240. Retrieved from http://search.proquest.com/docview/195553990?accountid=17193%5Cnhttp://sfx.brad.ac.uk/sfx_local?url_ver=Z39.882004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ:abiglobal&atitle=ENABLING+EGOVERNANCE+THROUGH+CITIZEN+RELATIONSHIP+MA

Keramati, A., Saremi, M. S., & Mofrad, M. A. (2011). Citizen Relationship Management Critical Success Factors: an empirical study of Municipality of Tehran. International Journal of Electronic Governance, 4(4), 322. https://doi.org/10.1504/IJEG.2011.046007

King, S. F., & Burgess, T. F. (2008). Understanding success and failure in customer relationship management. Industrial Marketing Management. https://doi.org/10.1016/j.indmarman.2007.02.005

Krigsman, M. (2009). CRM failure rates: 2001-2009. Retrieved March 14, 2018, from http://www.zdnet.com/blog/projectfailures/crm-failure-rates-2001-2009/4967

Larsen, B., & Milakovich, M. (2005). Citizen Relationship Management and E-Government. Springer-Verlag Berlin Heidelberg, 3591, 57–68. https://doi.org/10.1007/11545156_6

Latha, P. P., Madhuri, R., Rao, K. P., & Bharathi, M. V. (2013). Effectual Citizen Relationship Management With Data Mining Techniques, 158–161.

Lawson-Body, A., & Willoughby, L. (2011). The critical success factors for public sector crm implementation. The Journal of Computer Information Systems, 52(2), 42–50.

Lawson-Body, A., Willoughby, L., Mukankusi, L., & Logossah, K. (2011). The critical success factors for public sector CRM implementation. Journal of Computer Information Systems, 52(2), 42–50. https://doi.org/10.1080/08874417.2011.11645539

Liagkouras, K., & Metaxiotis, K. (2014). Application of Customer Relationship Management Systems in Business: Challenges and Opportunities. International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering, 8(6), 1642–1647.

Macueve, G. A., & Sciences, N. (2008). Analyzing Challenges and Opportunities of the Implementation of e-Government Initiatives for Development through the Lens of the Capability Approach : Case Studies from Mozambique.

Marc, C., & Moez, O. (2011). Citizen Relationship Management (CzRM) Evolution, drawbacks and how to resolve them. Seminar, University of Fribourg, Switzerland Department.

Mehta, A. (2013). Critical Success Factors for the Successful Customer Relationship Management: A Conceptual Case Study. International Journal of Business Trends and Technology, 3(1), 1–24. Retrieved from http://www.ijbttjournal.org/volume-3/issue-1/IJBTT-V3I1P1.pdf

Mendoza, L. E., Marius, A., Perez, M., & Griman, A. C. (2007). Critical success factors for a customer relationship management strategy. Information and Software Technology, 1–33. https://doi.org/10.1016/j.infsof.2006.10.003

Migdadi, M., Awartany, A., & Khayata, M. (2010). An Empirical Study of the Role of CRM Critical Success Factors in the Successful Implementation of CRM. Scientific Journal of King Faisal University (Humanities and Management Sciences), 11(2), 383–420.

Mohamed, N., Shahriza, N., Karim, A., Jalaldeen, M., & Razi, M. (2013). a Knowledge Management Approach To Citizen Relationship Management in E-Government Context. INTERNATIONAL JOURNAL OF EBUSINESS AND EGOVERNMENT STUDIESOnline) INTERNATIONAL JOURNAL OF EBUSINESS AND EGOVERNMENT STUDIES, 5(1), 2146–744.

Muscalu, E. (2015a). Communication: A Determinant Element Of Customer Relationship Management (CRM) And Citizen Relationship Management (CIRM). USV Annals Of Economics & Public Administration, 15(2), 140–147. Retrieved from http://web.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=21&sid=b9cbec4d-ab5b-4091-a5de-cd1008374dc2%40sessionmgr114&hid=102

Muscalu, E. (2015b). Current Remarks Regarding The Success Determinants Of The Citizens Relationship Management (CiRM) As A Specific Form Of Customer Relationship

Management (CRM). Proceedings Of The 9th International Management Conference, 990–998.

Napitupulu, D., & Sensuse, D. I. (2014). The Critical Success Factors Study for e-Government Implementation. Intrnational Journal of Computer Application (0975-8887), 89(16), 23–32. https://doi.org/10.5120/15716-4588

Neuman, W. L. (2003). Research Methodology. Social Research Methods Qualitative and Quantitative Approaches, 174(1990), 67–87. https://doi.org/10.1080/03050068.2013.803783

Prezant, J. (2013). 63% of CRM Initiatives Fail. Retrieved March 14, 2018, from http://www.dmnews.com/63-of-crm-initiatives-fail/article/303470/

Rahimi, R., & Gunlu, E. (2016). Implementing customer relationship management (CRM) in hotel industry: Case of a Chain hotel in the UK. International Journal of Contemporary Hospitality Management, 28(1), 89–112. https://doi.org/10.1108/IJCHM-04-2014-0176

Ramadhan, A., Sensuse, D. I., Muladno, & Arymurthy, A. M. (2013). Synthesizing success factors for e-government initiative. Research Journal of Applied Sciences, Engineering and Technology, 6(9), 1685–1702.

Raman, P., Wittmann, C. M., & Rauseo, N. A. (2006). Leveraging CRM for Sales : The Role of Organizational Capabilities in Successful CRM Implementation. Taylor & Francis, Ltd. -The Journal of Personal Selling and Sales Management, 26(1), 39–53.

Sanad, A. (2015). Identifying the Interrelationships of Critical Success Factors for Customer Relationship Management. UK Academy for Information Systems.

Sanad, A., Fidler, C., & McBride, N. (2010). Critical Success Factors for Customer Relationship Management Implementations. UK Academy for Information Systems Conference Proceedings.

Saremi, M. S. (2009). Critical Success Factors in Citizen Relationship Management. Master Thesis.

Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for business students (Fifth edit). England: Pearson Education Limited.

Schellong, A. (2005). CRM in the public sector: towards a conceptual research framework. Proceedings of the 2005 National Conference on Digital Government Research, (January 2005), 326–332. https://doi.org/10.1145/1065226.1065342

Schellong, A. (2007). Citizen Relationship Management. Encyclopedia of Digital Government. https://doi.org/10.4018/978-1-59140-789-8

Silva, da R., & Batista, L. (2007). Boosting government reputation through CRM. International Journal of Public Sector Management, Emerald Group Publishing Limited, 20(7), 588–607. https://doi.org/10.1108/09513550710823506

Simmons, R. (2015). The Relationship Between Customer Relationship Management Usage, Customer Satisfaction, and Revenue. Simmons, Robert. Walden University. Retrieved from http://scholarworks.waldenu.edu/dissertations/1451

Sohrabi, B., Haghigh, M., & Khanlari, A. (2010). Customer relationship management maturity model: A model for stepwise implementation. International Journal of Human Sciences, 7(1), 1–20.

Vazifehdust, H., Shahnavazi, A., Reza, M., Jourshari, T., & Sharifi, F. (2012). Investigation Critical Success Factors of Customer Relationship Management Implementation. World Applied Sciences Journal, 18(8), 1052–1064. https://doi.org/10.5829/idosi.wasj.2012.18.08.3751

Venturini, F. (2007). ICT and Productivity Resurgence: A Growth Model for the Information Age. The B.E. Journal of Macroeconomics, 7(1), 1–26. https://doi.org/10.2202/1935-1690.1470

Yeh, S.-T., & Walter, Z. (2016). Critical Success Factors for Integrated Library System Implementation in Academic Libraries: A Qualitative Study. Information Technology & Libraries, 35(3), 27–42. https://doi.org/10.6017/ital.v35i2.9255

Yin, R. K. (2006). Case Study Reserach - Design and Methods. Clinical Research, 2, 8–13. https://doi.org/10.1016/j.jada.2010.09.005