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Ahmed Sanad

*Kind Saud University, aasanad@gmail.com*

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# IDENTIFYING THE INTERRELATIONSHIPS of CRITICAL SUCCESS FACTORS FOR CUSTOMER RELATIONSHIP MANAGEMENT

Ahmed Sanad

*Information Systems Department, College of Computer & Information Science, King Saud University, Riyadh, Saudi Arabia.*

Email: aasanad@ksu.edu.sa

## Abstract

*An effective Customer Relationships Management (CRM) implementation benefits firms to achieve competitive advantages over others by enhancing customer retention, loyalty, satisfaction, and growing. A successful CRM implementation has become essential owing to the massive percentage of failures that occur. This year, firms are expected to spend more than \$27 billion on implementing CRM. While a significant amount of study has been conducted into CRM implementations, particularly with respect to Critical Success Factors (CSFs), only a minority of the implementations have been successful. It is argued that one of the reasons for this is the improper assessment of interrelationships of CSFs prior starting the CRM implementation. CSFs are interlinked. They represent factors at nodes in a network of influences, which need to be examined together in order to determine best practice, identify study issues and reflect on strategy. Therefore, the aim of this study is to determine the interrelationships between the identified CSFs associated with CRM implementation, which revealed the important of these relationships for the success of the implementation. The study involves practical work based on one particular national context; the Kingdom of Saudi Arabia (KSA).*

**Keywords:** CRM, interrelationships of critical success factors, successful CRM implementations

## 1.0 Introduction

The growing demands in Commercial Off The Shelf (COTS) solutions, especially Customer Relationships Management (CRM) applications put pressure on the firms to investigate more the success of implementation. Parvatiyar & Sheth (2001, p. 5) defines CRM as: “A comprehensive strategy and process of acquiring, retaining and partnering with selective customers to create superior value for the company and the customer. It involves the integration of marketing, sales, customer service and the supply-chain functions of the firm to achieve greater efficiencies and effectiveness in delivering customer value.” From this definition, it can be seen that a CRM initiative requires a holistic view that combine strategy, process, technology and people (Zablah et al., 2004; Seeman and O' Hara, 2006; Amiri et al., 2010). COTS solutions revenue forecast from Gartner reveals CRM growing to \$36.5 Billion worldwide revenue by 2017 compared with nearly 13 billion in 2012, leading COTS solution in estimated

growth. This indicates a dramatic growth in demand for CRM solutions (Gartner, 2011, 2013). According to a survey achieved in 2012 by Gartner (2012) for Chief Executive Officers (CEOs) revealed that CEOs considered CRM as their most substantial area of investment to enhance their businesses within the coming five years. In spite of this outcome, however, the majority of studies revealed that nearly 70% of CRM projects have not achieved the success (Giga, 2001; Corner and Hinton, 2002; Adebajo, 2003; Chen and Popovich, 2003; Bull, 2003; Zablah et al., 2004; Al-Ajlan and Zairi, 2005; Chan, 2005; Heinrich, 2005; Missi et al., 2005; Gartner, 2006; Gefen and Ridings, 2007; Osarenkhoe and Bennani, 2007; Shum et al., 2008; Sanad *et al.*, 2010). It is argued that one of the reasons for this is the improper assessment of interrelationships of CSFs prior starting the CRM implementation. CSFs are interlinked. They represent factors at nodes in a network of influences, which need to be examined together in order to determine best practice, identify study issues and reflect on strategy. In a project, CSFs need to be adopted in a certain network during life cycle of the project to achieve the purpose of adopting them. Therefore, the aim of this study is to determine the interrelationships between the identified CSFs associated with CRM implementation, which revealed the importance of these relationships for the success of the implementation. The study involves practical work based on one particular national context; the Kingdom of Saudi Arabia (KSA).

## **2.0 Critical Success Factors**

In the early 1960s, the concept of CSFs was used and discussed by Daniel, a decade later, Rockart (1979) developed the concept of determining CSFs requirements of top executives. He defined them as “The limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organisation” (1979, p. 85). Sanad *et al.* (2010) point out that CSFs are interlinked. They represent factors at nodes in a network of influences, which need to be examined together in order to determine best practice, identify study issues and reflect on strategy. CSFs may indicate a causal mechanism. This may involve a direct cause where a CSF results in a particular outcome and an indirect cause where a CSF is part of a chain of causality. In a project, CSFs need to be adopted in a certain network during life cycle of the project to achieve the purpose of adopting them. In terms of CRM

implementation, CSFs can be understood as those tasks that require to be dealt with to guarantee a successful implementation.

### **3.0 Study Strategy**

Practical study had been completed to determine the interrelationships between the identified CSFs of CRM implementations. The national context for this study was the KSA, as it is a country that has numerous CRM implementations with private sector firms which were readily reachable to the researchers. The researchers adopt an integrated mix of case study and Grounded Theory as a study strategy. Data was collected through semi-structured interviews and documentation, which was then analysed using Grounded Theory data analysis.

Six firms, which were known to have applied CRM systems and where the perspectives of CRM adoption aspects could be gained from different stakeholders, were selected as possible case studies to represent a diversity of private sectors of KSA (i.e. telecom, automotive, banking, , and transportation). Gathering data from numerous stakeholders, both internal and external to the case study firms, was essential to helping the researcher in understand the situation in depth and to obtain the main goal of the study. Three employees per firm, each representing a different project stockholders group (i.e. the project management team, the business staff and the IT staff) were originally chosen, using purposeful sampling to contribute in individual, semi-structure interviews. In addition, 20 customers of the six firms, representing various ages, sex, marital status, parents for children and educational level were initially chosen for interviews. In accordance with Grounded theory as qualitative data analysis method, theoretical sampling had to be adopted by continuing to interview more people with aim to achieve data saturation. Only when data saturation is reached can the principal goal of this study be deemed to have been addressed. The unit of analysis in each case was the firm. The main sources were the perceptions and perspectives of the participants that have a relationship within the firm such as employees and customers. In order to identify the interrelationship between the CSF of CRM, the researcher applied most of the CRM CSFs that identified in the literature (Bose, 2002; Al-Ajlan and Zairi, 2005; Gartner, 2006; Forrester, 2007; Nguyen, 2007; Foss *et al.*, 2008; Tsao and Hsin, 2004; Sanad, 2013). These CSFs (cf. Table 1.0) examined by applying grounded theory data analysis

process 'axial coding' where the researcher strived to identify the relationships between the categories. For instance, the 'data privacy' category was found to have an impact on the identified 'data quality' category. This relationship was identified when a participant said: *“I am not confident; in order to increase trust, the bank should have a clear procedure for data privacy. Otherwise, it is very difficult for females in our society to give their personal data.”* The above example shows that female customers set 'data privacy' as a condition for sharing their personal data, thus affecting the 'data quality' category. This relationship was highlighted by many of the customers. Linking the relationships between categories was a continuous process until all the possible relationships were identified. The researcher continued to use constant comparison while, at the same time, developing relationships between concepts in order to allow data to emerge continuously during the analysis.

The majority of the answers were consistent; however, there were a few differing opinions which led the researcher to ask more people and take the most frequent answers.

Seq	CSFs
1.	Data Quality
2.	End User Involvement
3.	Customers' Awareness
4.	End User Training and Awareness
5.	CRM Champion
6.	CRM Vision
7.	Building a business case
8.	Business Sponsorship
9.	Set Business Priorities
10.	Business Needs
11.	Team Qualifications and Skills
12.	Collaboration
13.	Integration
14.	Project Plan
15.	Minimise customisation
16.	Phased Approach
17.	CRM Success Measurement
18.	Customers' Segmentation
19.	Customers' Involvement
20.	Organisational Change
21.	CRM Strategy
22.	Developing Customer-Centric Strategy
23.	Budget allocation
24.	Receiving the needed Supports
25.	Assigning the right Resources
26.	Software Selection
27.	Vendor Experts
28.	External Consultants
29.	Systems Integrator Selection
30.	Data Privacy
31.	Customer Culture
32.	Policies and Procedures

**Table 1.0: CSFs of CRM**

#### **4.0 Study Discussion and Findings**

The main goal of this study is to discover the connection between the identified CSFs of CRM and their interrelationships. As previously mentioned by Sanad *et al.* (2010, p. 1), CSFs are, “Interlinked, they represent factors at nodes in a network of influences, which need to be examined together in order to determine best practice, identify study issues and reflect on strategy.” CSFs are interdependent and influence each other. The resultant cause-effect network needs to be holistically examined to identify how interlinks between CSFs actually affect the success of CRM implementation. Thirty-one cause-effect relationships between CSFs were extracted as presented in Figure 1. Symbols (R1...R31) were given for each relationship. These relationships are deemed important and they need to occur in a dependency mode. For

instance if Y and X are considered as two factors and depend on each other, Y can be achieved successfully only if X exists and supports Y. For example, successful budget allocation is based on building a quality business case (firms that had no clear business case for approving the benefits of implementing CRM faced difficulty in defending the allocation of sufficient budgets, required resources and needed support, which will affect the success of CRM implementation).

It is important to note that the 31 cause-effect relationships were the only ones identified by the researcher from the practical work. There are might be extra cause-effect relationships between CRM's CSFs, but have not been identified within this study or were simply not an issue within the five firms and their customers within the private sector of the KSA. However, because of its inductive nature, the study did not ask questions that related to specific relationships that could be considered present based on other literature and common sense. Looking for entire interrelationships between the CSFs of CRM implementation should form part of further study and investigation.

To simplify presentation and understanding, the thirty-one interrelationships were grouped under twelve relationships based on how these factors interlinked to each other in a way that affected the success of CRM implementation. This is explained in the following manner.

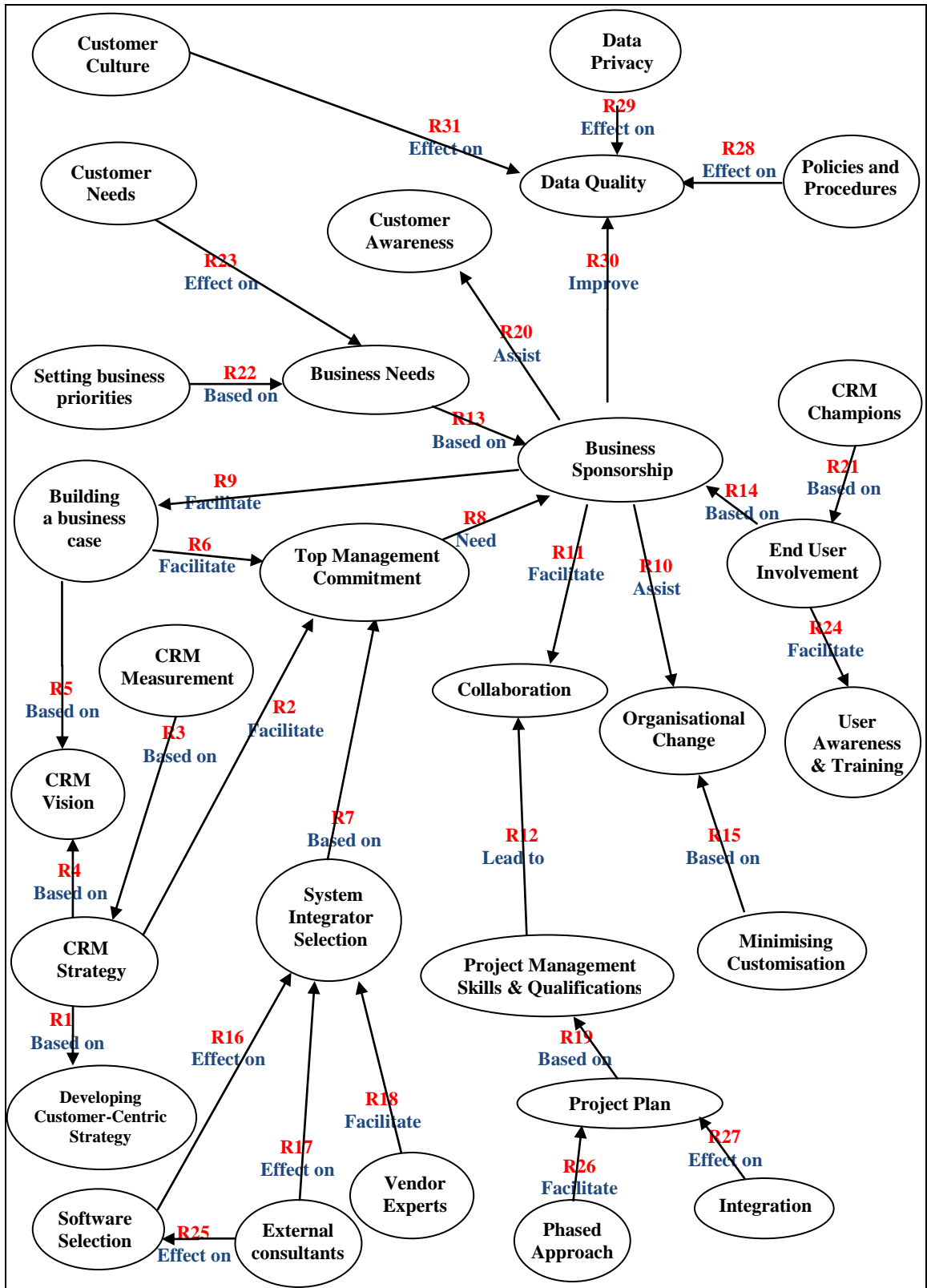


Figure 1: Interrelationships Between Factors from Customer and Firm Perspectives



#### 4.1 CRM Strategy Relationships

Four relationships were involved with CRM strategy (See Figure 2); R1: the relationship with the customer-centric strategy factor, R2: the relationship with top management commitment factors, R3: the relationships with CRM measurement factor, and R4: the relationship with the CRM vision factor. These relationships revealed how CRM strategy was important for the success of above the CSFs and any failure to achieve the CRM strategy factor would have a negative impact on the success of CRM implementation. The relationships between these factors are explained below.

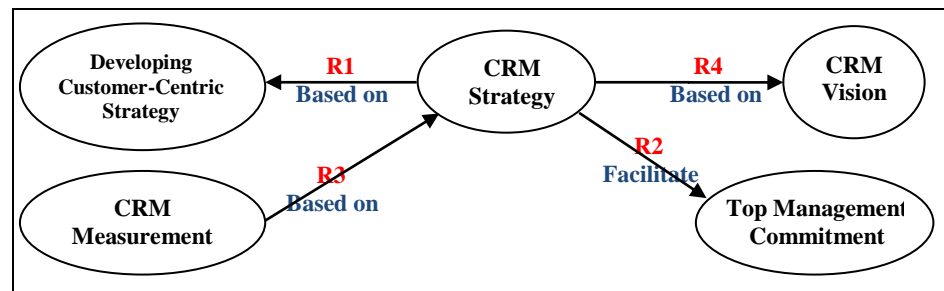


Figure 2: CRM Strategy Relationships

R1: Before starting the CRM project, the firm needs to develop a CRM strategy based on a customer-centric strategy of the entire firm. The CRM strategy should be aligned with the customer-centric strategy to develop clear initiatives for moving the firm's processes from product-centric to customer-centric as exemplified by the case of Toyota when they aligned their CRM strategy with that of a customer-centric strategy. It is, therefore, important to align both strategies to achieve the CRM's project vision.

R2: In order to secure the required support, resources and budget the CRM strategy needs to provide a clear picture of the whole CRM adoption process to top management.

R3: The CRM measurement factor would be based on CRM strategy and how this strategy defined the measurement for the success of the CRM project.

R4: The CRM strategy would ultimately be finalised based upon the CRM vision. This is achieved by setting up a clear and attainable vision, and aligning CRM strategy with it in order to influence the success of the CRM project.

## 4.2 CRM Vision Relationships

The findings of the study revealed that CRM vision relationships (See Figure 3) were necessary for a successful CRM implementation. These relationships were composed of R4: the relationship with the CRM strategy (cf. Section 4.1), and R5: the relationship with building the business case. Given that R4 was explained in Section 4.1, this section focuses only on R5.

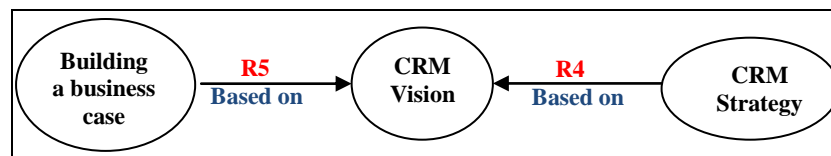
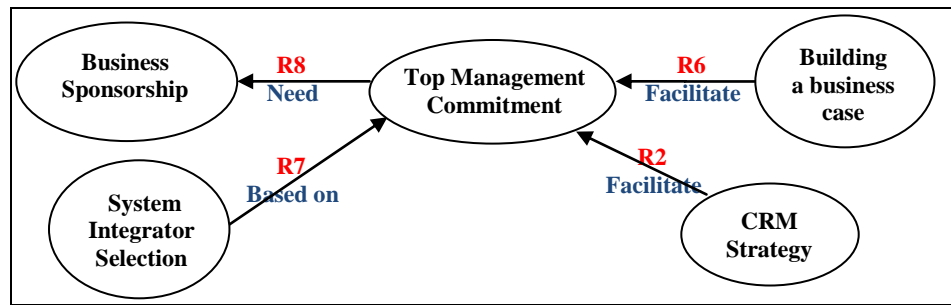


Figure 3: CRM Vision Relationships

R5: The business case required alignment with the CRM vision. It is deemed essential to develop a clear business case, which is aligned with CRM vision to convince top management that the case is part of what has been agreed in the vision.

## 4.3 Relationships for Top Management

Four relationships were revealed that pertain to top management factors (See Figure 4); R2: the relationship with CRM strategy (cf. Section 4.1), R6: the relationship with the business case, R7: the relationship with a selection of the systems' integrators, and R8: the relationship with business sponsorship. These relationships were essential to obtain the needed support, resources and budget from top management. These relationships and their roles are described as follows, with the exception of R2, which was explained in Section 4.1.



**Figure 4: Top Management Relationships**

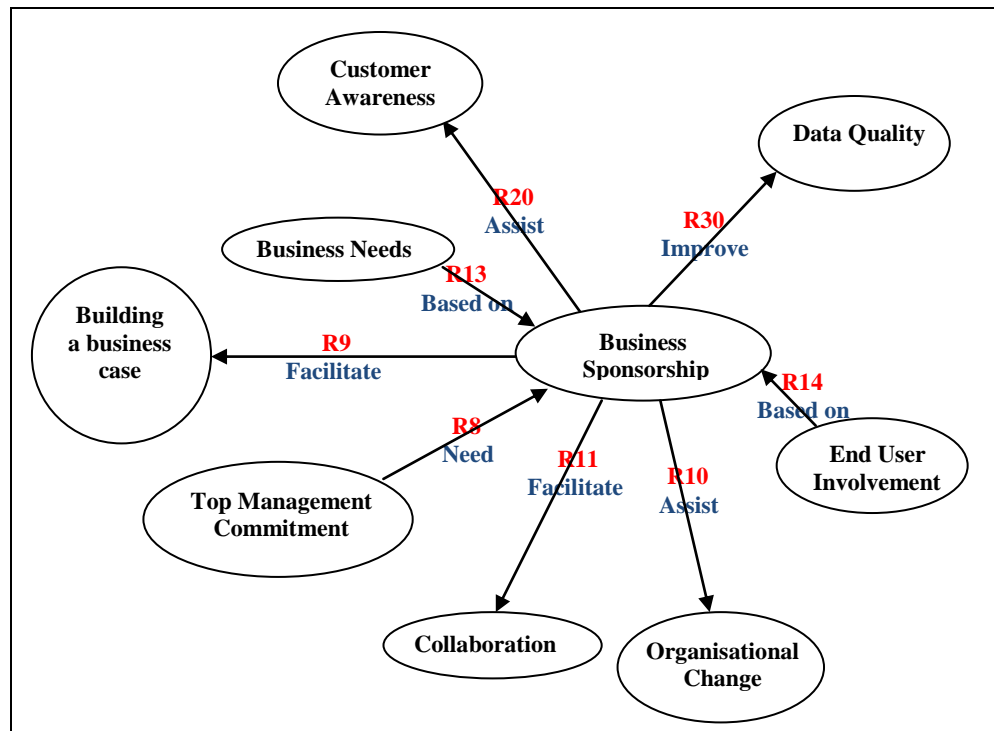
R6: The building of a business case is deemed necessary to obtain top management commitment for allocating sufficient budget, the required resources and needed support.

R7: Top management support played a major role in the selection of the system's integrator via how much budget, support and resources were allocated to the project. Any limitation in the budget would affect the ability to select the right integrator. It is considered, therefore, extremely important to allocate the required budget to avoid the selection of the cheapest product/commodity, which could have a major negative impact on the success of the CRM project.

R8: Business sponsorship is deemed important since it has a positive impact on the success of the CRM project. To obtain full business sponsorship for the project, support and commitment from top management is needed.

#### **4.4 Business Sponsorship Relationships**

Eight relationships were revealed for business sponsorship factors (See Figure 5). These are R8: the relationship with top management commitment (cf. Section 4.3), R9: the relationship with building a business case, R10: the relationship with organisational change, R11: the relationship with collaboration, R13: the relationship with business needs, R14: the relationship with end user involvement, R20: the relationship with customer awareness, and R30: the relationship with data quality. These relationships and their impact are examined as follows, with exception of R8 as it was explained previously (cf. Section 4.3).



**Figure 5: Business Sponsorship Relationships**

R9: Building a clear business case requires business sponsorship. Since the business is the main user of CRM application, sponsoring the project by them would help to identify a clear business case.

R10: Since most changes occur within the business's functions, departments and people, self-sponsoring the project by the business would assist organisational change.

R11: Having the business lead the project will facilitate collaboration between business employees. This is considered very important as business personnel are the users of the CRM application.

R13: Identifying the needs and the requirements by the business people will be easier and more accurate if they were the sponsor of the project.

R14: If the business is responsible for the CRM project it will facilitate the involvement of the end user in all its stages as business personnel are the users of the CRM application.

R20: Since the business's employees comprise the interface with their customers, having them sponsor the project would help to achieve better CRM awareness for customers. Businesses interact with customers through different channels on a daily bases, which allows them to measure the level of customer awareness and provide the required actions to raise their awareness.

R30: Since the business has data ownership, sponsoring the project can ultimately help to improve the quality of the data. Businesses have the authority and the channels for contacting customers for cleansing and completing their data.

#### 4.5 System Integrator Selection Relationships

Four relationships were revealed for system integrator relationships (See Figure 6); R7: the relationship with top management commitment (cf. Section 4.3), R16: the relationship with software selection, R17: the relationship with external consultants, and R18: the relationship with vendor experts. These relationships and their roles are described as follows, with exception of R7, which was explained earlier (cf. Section 4.3).

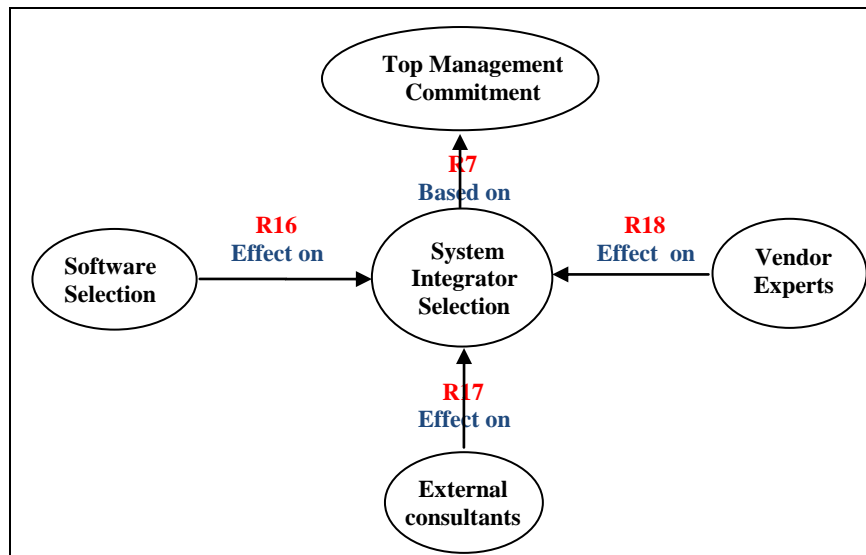


Figure 6: System Integrator Selection Relationships

R16: Selecting the CRM product would have an effect on the most suitable integrator capable of implementing the CRM product i.e. integrator capabilities and experiences are based on the type of CRM product.

R17: The involvement of an external consultants would ultimately affect the selection of the right system integrator i.e. the input and feedback of the consultant should help in selecting the best and most capable integrator.

R18: The involvement of product experts would ultimately have an effect on assuring the system integrator's capability i.e. involving the experts who work with the product owner would help in reviewing and comparing the integrator's work with the best practice.

#### 4.6 Project Management Skills and Qualifications Relationships

Two relationships were identified for the project management skills and qualifications factor (See Figure 7); R12: the relationship with collaborations, and R19: the relationship with the project plan. These relationships were essential for improving teamwork among the project's stakeholders and enhancement of the estimation for the project's plan. These relationships and their impact are explained in the following sections.

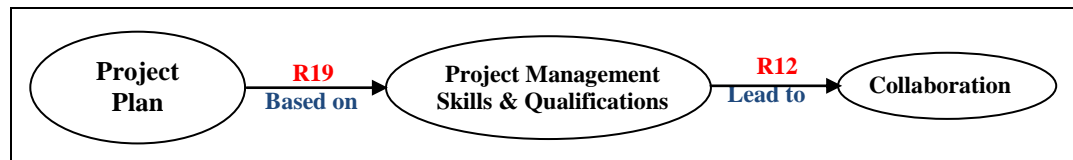


Figure 7: Project Management Skills and Qualifications Relationships

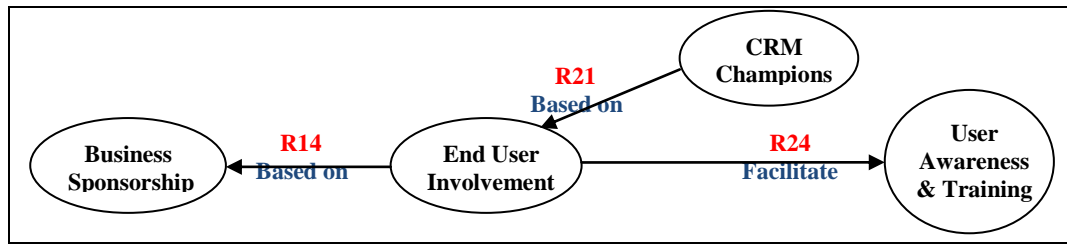
R12: A qualified project management team would lead to better communication and collaboration between the project's stakeholders. As the qualified team should have experience in handling one or more similar project.

R19: An estimation of the project plan is deemed important; however, this needs an experienced and qualified project management team.

#### 4.7 End User Involvement Relationships

The findings of the study were revealed that three relationships pertain to end user involvement (See Figure 8); R14: the relationship with business sponsorship (cf. Section 4.4), R21: the relationship with the CRM champion, and R24: the relationship with the awareness and training for the end users. These relationships and their role

are described as follows with exception of R14 as it was explained previously (cf. Section 4.4).



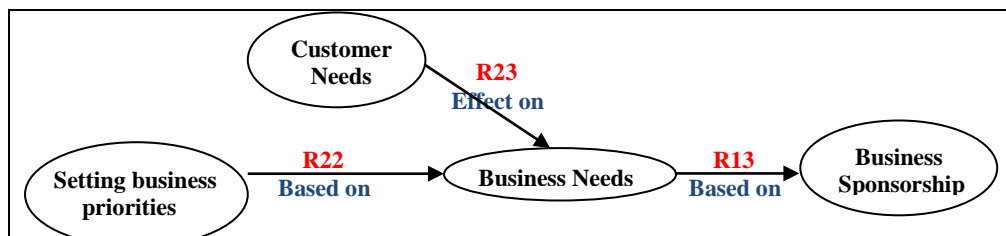
**Figure 8: End User Involvement Relationships**

R21: Having a CRM champion is based on the early involvement of the end users i.e. it is important to involve the end user in the early stage to use them as a champion for the project. The champion team should be well trained and aware so it is important to selecting them from the end user who involved earlier in the implementation.

R24: Early end user involvement in the project would facilitate the awareness and training of the end users. This will provide adequate time for the end user to be familiar with the CRM concept and application.

#### 4.8 Business Needs Relationships

Three relationships were revealed from the factor associated with business needs (See Figure 9); R13: the relationship with business sponsorship (cf. Section 4.4), R22: the relationship with setting business priorities, and R23: the relationship with customer needs. These relationships and their role are examined in the following sections, with exception of R13 which has been explained previously (cf. Section 4.4).



**Figure 9: Business Needs Relationships**

R22: Setting the priority for the business would be reliant on the finalising of the business needs and requirements. It is important that the business needs are fully identified and completed to get a full picture for prioritising these needs.

R23: The main aim of CRM implementation is to fulfil customers' needs. Any needs and requirements that are gathered should be built on the needs of customers. Thus, customer needs would ultimately have an effect on business needs.

#### 4.9 Project Plan Relationships

The findings of the study revealed three relationships that pertain to the project plan factor (See Figure 10); R19: the relationship with project management skills and qualifications (cf. Section 4.6), R26: the relationship with the phased approach, and R27: the relationship with other system integration. These relationships and their impact are explained as follows, with exception of R19, which has been explained earlier (cf. Section 4.6).

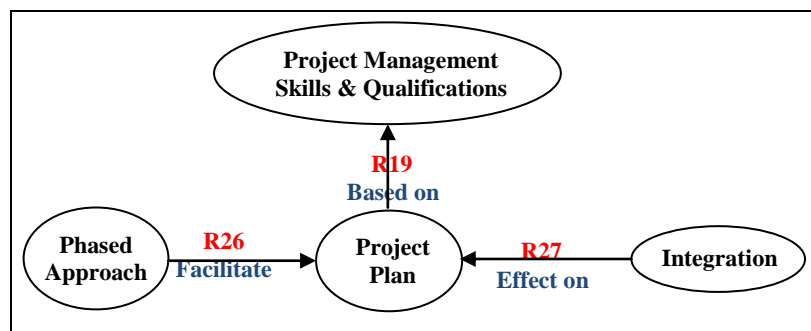


Figure 10: Project Plan Relationships

R26: The phased approach for CRM implementation would have a positive effect on the project plan as it reduces workload, the risk of overlapping tasks and activities, and provides more time for the project's stakeholders.

R27: The integration between the CRM application and other ones would have an effect on the finalisation of the project's plan since every application has its own plan and it is difficult to align both plans.



#### 4.10 Data Quality Relationships

Four relationships were identified with respect to the data quality factor (See Figure 11); R28: the relationship with policies and procedures, R29: the relationship with data privacy, R30: the relationship with business sponsorship (cf. Section 4.4), and R31: the relationship with customer culture. In order to improve the quality of data, it is crucial to adapt both country and company procedures, which encourage customers to provide their data. In addition, data privacy rules are considered essential to increase the confidence of customers to provide their data. Cultural factors need to be taken in consideration in order to avoid any barriers that prevent customers from providing their data. These relationships and their role are further described as follows, with exception of R30, which was explained previously (cf. Section 4.4).

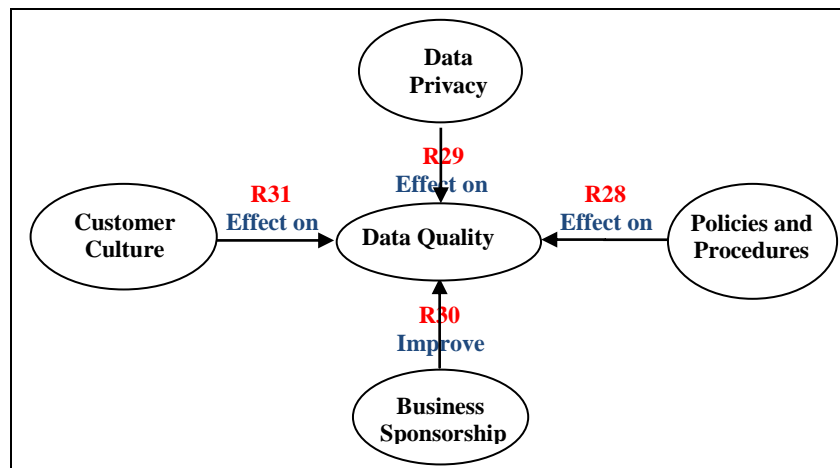


Figure 11: Data Quality Relationships

R28: Country and company policies and procedures have an effect on the quality of data i.e. lack of service offices for females, such as police and insurance companies, will discourage female customers from creating their accounts under their own names.

R29: Data privacy has an impact on the quality of data i.e. data privacy rules are extremely important for customers for increasing their confidence to provide data. Thus, if these rules are omitted this can negatively affect providing and sharing data with firms.

R31: Customer cultural factors, such as religion, social norms' aspects and the accessing of female data by men, could impact upon the quality of data (these cultural factors were the major reason for preventing some customers, especially female ones, from providing their data to firms).

#### 4.11 Organisational Change Relationships

Two relationships were revealed that pertain to the organisational change factor (See Figure 12); R10: the relationship with business sponsorship (cf. Section 4.4) and R15: the relationship with minimising customisation. The relationship with minimising customisation and its impact are described as follows with the exception of R10, which was explained previously (cf. Section 4.4).

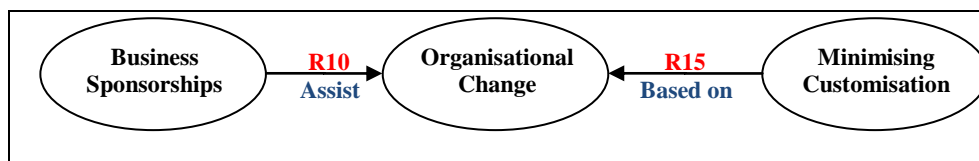


Figure 12: Organisational Change Relationships

R15: Reducing the percentage of product customisation would depend on organisational change i.e. changing the business process to fit the CRM product and thus reduce the percentage of customisation.

#### 4.12 Software Selection Relationships

The findings of the study exposed two relationships related to software selection (See Figure 13); R25: the relationship with external consultants, and R16: the relationship with system integrator selection (cf. Section 4.5). The relationship with external consultants and its impact are described as follows with the exception of R16, which was explained previously (cf. Section 4.5).

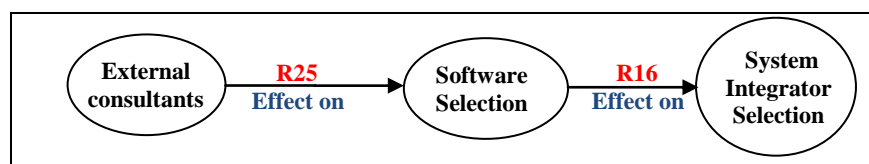


Figure 13: Software Selection Relationships

R25: The external consultants' involvement would have an effect on CRM product selection i.e. the external consultants experience should help in selecting the most appropriate CRM product.

## **5.0 Conclusion**

An important contribution made by this study is that it has identified thirty-one cause-effect relationships between CSFs as presented in Figure 1. As CSFs are both interdependent and influence each other, these relationships are deemed important and they need to occur in a dependency mode. For instance if Y and X are two factors that depend on each other, then Y can be achieved successfully only if X exists and supports Y. For example, successful budget allocation is based on building a quality business case. Firms that have no clear business case that demonstrates the benefits of implementing CRM will face difficulty in defending the allocation of the required resources and support. This will affect the success of CRM implementation.

However, this a step forward to overcome the gap more successful CRM implementations; and applicable for generalising beyond the KSA context. For further work, two topics can be suggested for study. Firstly, interpretations of CSFs will be different from individual to individual of CRM implementation. Thus, prioritise different CSFs, measure them differently and monitor them differently. Secondly, CRM implementation can be better examined by applying one of the IS theory such as institutional theory. This should provide a better explanation for the aspects that might impact the success of CRM implementation.

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