

A FRAMEWORK FOR SUCCESSFUL CRM IMPLEMENTATION

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Abstract

Although the promising potentials of CRM as a way of capturing comparative advantages in the face of the growing competition, the failure percentage of its implementations is still relatively high which causes increasing concerns for business organisations. Many studies have addressed the problem of the high rate of CRM failure from different perspectives such as strategy development and success factors implementation. The aim of this paper is to extend the line of knowledge about realizing the promising outcomes of CRM implementations. To do so, the paper is proposing a conceptual framework for successful implementation of CRM based on integrating CRM implementation phases, CRM components, and CRM success factors. The paper will assess the feasibility and usefulness of the framework by evaluating it through a real life case study in Saudi Arabia.

Key words: Customer Relationship Management (CRM), success factors, CRM components, CRM phases, framework, case study.

1 INTRODUCTION

The concentration on building beneficial relations with customers is not a new approach in the field of business. The increasing competition and decreasing customer loyalty have shaped the need for implementing new tools to help companies to succeed the competition and win customers' loyalty by providing more customized products and services. Rapid growth in information systems applications that enable business-customer interaction and the boom of internet technology have provided business organizations with more capabilities to cope with increasing knowledge acquired by customers and the changing nature of their demands for products and services. While the majority of business firms strive to implement CRM systems, they face the disappointing reality of the significant percentage of failure within their CRM projects implementations. As reported by the Gartner Group, around 50 % of all CRM projects failed to meet their expectations (Coltman, 2006). As a response to the need of addressing the problem of the high failure percentage of CRM projects, many researchers have developed a variety of frameworks for CRM implementation. The importance of these frameworks is generated from the fact that the absence of developing strategic CRM frameworks, in which to define success, could contribute to the disappointing outcomes of CRM implementations (Grabner-Kraeuter and Moedritscher 2002). Therefore, CRM frameworks could serve as a guide for enhancing the potential of implementing CRM successfully. Taking to consideration the importance of developing CRM frameworks, this paper will develop an integrative framework that combines three important dimensions of CRM. The paper will start by defining CRM as a start point for shaping the focus of the research. Hence the area of CRM failure will be explored to point out major obstacles in the way of CRM implementation. After that, the studies in the field of CRM success factors will be organised to identify the most common success factors for CRM implementation. Then, CRM components will be defined. Consequently, the framework will be developed based on the integration of the previous dimensions and based on some previously existed framework. Finally, the framework will be evaluated based on a case study of two telecommunication companies in Saudi Arabia.

2 DEFINING THE SCOPE OF CRM

Defining CRM is required for developing a clear understanding of what CRM means to an organisation especially when lacking of such clear understanding is considered as a barrier to successfully implement CRM (Nguyen et al, 2007). Such a fact is significantly important when considering the wide range of CRM definitions in which CRM is understood differently by different people (Richard et al, 2007; Sathish et al, 2002; Winer, 2001). Although the view of possible convergence toward common definition for CRM (Peelen et al, 2006; Boulding et al. 2005), different approaches are carried out to define CRM ranging from narrow definitions (technical) to broad definitions (strategic) (Payne and Frow, 2006). However, this broadness in defining CRM could be a result of the new emergence of the concept into two fields of study, Marketing and Information Technology (Da Silva and Rahimi, 2007). From a technical point of view CRM, Chen and Chin (2004) defined as CRM as a methodology that heavily employs certain information technology such as database and internet to leverage the effectiveness of relationship marketing process. On the other hand, the wider definition of CRM concentrates on strategic orientation of CRM. For instance, Gray and Byun (2001) have defined CRM as a primarily strategic business process issue rather than technology which consists of the following components: Customer, Relationship, and Management.

For the scope of this research, CRM definition should cover major aspects of CRM and should focus on its objectives as the capability of CRM to achieve its objectives is highly dependent on its clear definition. Based on Payne (2004), Payne and Frow (2005) and Shang and Lin (2005), CRM definition for this research is: a strategic approach that integrates Process, People, and Technology cross functionally to understands organisation's customers, improve stakeholder value, and deliver profitable and long term relationships with the customers. Therefore, success factors for CRM lie in the scope of managing, integrating, and controlling CRM components.

3 CRM COMPONENTS

Although researchers have developed different detentions for CRM, these definitions are closely related. There is a general acceptance among researchers of the categorization of CRM components. CRM consists of three major components: Technology, people, business culture and relationship, and Process (Ali and Alshawi, 2003). The contribution to each component varies according to the level of CRM implementation.

3.1 TECHNOLOGY

Technology refers to computing capabilities that allow a company to collect, organise, save, and use data about its customer. Technology is the enabler for CRM systems to achieve their objectives of collecting, classifying, and saving valuable data on customers. Integration technology allows organizations to develop better relationship with customers by providing a wider view of the customer behaviour (Thompson et al., 2006). Thus, organizations are required to integrate IT to improve the capabilities of understanding customer behaviour, develop predictive models, build effective communications with customers and respond to those customers with real time and accurate information (Chen and Popovich, 2003). For an organization to integrate IT, concepts such as data warehouse, software customization, process automation, help desk and call centres, and internet influence should be addressed (Mendoza et al. 2007).

3.2 People

Employs and customers are a key factor for successful CRM projects. CRM is built around customers to manage beneficial relationships through acquiring information on different aspects of customers. The main objective of CRM is to translate the customer information into customized products and services that meet the changing needs of customers in order to gain their loyalty. Nevertheless, a full commitment of the organization's staff and management is essential for an effective CRM implementation to best serve customers and satisfy their needs.

3.3 Business process

CRM is a business strategy that has its philosophical basis in relationship marketing (Chen and Popovich, 2003). CRM success requires a change of business processes towards customer – centric approach. As such, all business processes that involve both direct and indirect interaction with customers should be analyzed and assessed (Mendoza et al. 2007). Although CRM has an organization-wide impact, process that has direct interaction with customers should be dealt with as a priority when integrating and automating business processes. According to (Mendoza et al. 2007) the main business processes that should be addressed in CRM implementation are: marketing, sales, and services.

4 EXPLORING CRM IMPLEMENTATIONS' FAILURES

The challenge of researching the causes of the problem of CRM failure has motivated many researchers and practitioners to contribute to the literature on CRM failure and its causes (Wisktron, 2004; Rigby et al. 2002). Different reasons cause the failure of CRM to meet its objectives. While some of these reasons are inevitable, many can be avoided (Payne, 2004). In general, CRM failure is caused by the complexity of technical and organisational issues that are associated with CRM implementation (Goodhue et al, 2002). The field of CRM failure studies have provided a wide range for possible causes for CRM failure leading to identify some roots for the problem that prevent high number of implementations to realise their objectives.

According to Nguyen et al, (2007), the lack of factors such as top management support, aligning internal processes, linking CRM project to organisation's higher-level strategies, focus on ROI (Return on Investment), achieving success early in the project. Chalmeta (2006) has supported some of the previous failure causes as he pointed out the following factors as causes for CRM failure: 1. Thinking of CRM as a pure technology; 2. Lack of management support; 3. Lack of customer-centric culture; 4. Lack of readiness process; 5. Poor quality data; 6. Lack of change management; 7. Lack of vision and strategy; 8. Lack of involving the final user in designing CRM solutions. Other evidences supporting previous factors is found in the work of Kale (2004) where the author has named seven reasons (sins) for CRM failure as the following: 1. Viewing CRM as a technology; 2. Lack of customer-centric vision; 3. Insufficient appreciation for customer life time value; 4. Inadequate support by top management; 5. Underestimating the importance of change management; 6. Failing in re-engineering business processes; 7. Underestimating difficulties related to data mining and data integration. Other studies have focused on more general factors as possible causes for the CRM failure. For example, in a study that involved 700 companies, Forsyth (2001) has argued that the causes of the CRM failure are: Organizational change (29%), Company policies/inertia (22%), little understanding of CRM (20%), and Poor CRM skills (6%). In addition, lacking of creating proper CRM strategy was mentioned as main reason by Rigby (2002). The researcher has highlighted four perils for CRM implementation that are to be overcome: implementing CRM before customer strategy, rolling out CRM before changing an organisation to match, assuming that more CRM technology is better, and stalking, not wooing customers. However, other factors such as lack

of focus on human/social factor (employee and customers) were the main problem behind the failure of CRM implementations (Plakoyiannaki et al, 2008; McCalla et al, 2003; Bohling et al, 2006; King and Burgess, 2007). Nevertheless, misconceptions such as assuming that CRM is equal to customer acquisition and customer satisfaction is equal to customer loyalty or focusing only on profitable customers could contribute significantly to increasing CRM implementation failure (Verhoef and Langerak, 2002).

5 CRM SUCCESS FACTORS

Success factors have received increasing attention within the literature of CRM. Many publications of researchers and practitioners have addressed the area of CRM success factors (Pan et al. 2007). Table (1) and (2) are a summary for the previous studies on the CRM success factors.

King and Burgess (2007)	Chalmers (2005)	Da Silva and Rahimi (2007)	Pan and et al. (2007)	Alt and Puschmann (2007)	Saloman et al (2005)	Mendoza et al (2006)
Top management support	Awareness among management	CRM philosophy	Evolution path	Evolution Path	Top management commitment	Senior management commitment
Communication of CRM strategy	Defining vision and objectives	Project mission	Timeframe	Timeframe	Change in corporate culture	Creating of multi disciplinary team
KM capabilities	Creation of committee	Top management commitment	Reorganization	Organizational redesign	Significant customer data	Objective definition
Willingness to share data	Official appointment of coordinates	Project schedule and plan	Minimize customization	System architecture	Clearly defined CRM processes	Inter-departmental integration
Willingness to change process	Development and approval of the project plan	Client consultation	Time and budget management	Change management	Sufficient resources	Communication the CRM strategy to the staff
Technological readiness	Monitoring to control time slippage	Connectivity	Customer involvement	Top management support	Understanding of customer behaviour	Staff commitment
Cultural change / customer orientation	Prevent resistance to change	Skillful personnel	No culture conflict		Extensive IT support	Customer information management
Process change capabilities	Motivate staff	Technical tasks	Use of the CRM system managers			Customer service
System integration capabilities	Measure the degree of participation/Assess the results	Client acceptance	Measurement			Sales automation
		Monitoring and feedback	Management involvement			Marketing automation
		Communication				Support for operational management
		Troubleshooting				Customer contact management
		BPS and software configuration				Information systems integration

Table 1: CRM success factors

Mankoff (2001)	Eid (2007)	Wilson et al (2002)	Goodhue et al. (2002)	Croteau and Li (2003)	Siebel (2004)	Chen and Chen (2004)	Roh et al. (2005)
Establish measurable business goals	Top management support	Gain champion/sponsor	Top Management Support	Top Management Support	Clear communication of Strategy	Champion leadership and internal marketing	Process fit
Align business and IT operations	Organizational culture	Ensure market orientation	Vision	Technological Readiness	Back-office integration	Business-IT alignment	Customer information quality
Get executive support up front	Developing a clear CRM strategy	Define approval procedures which allow for uncertainty	Willingness to change process	KM capabilities	Software customization	System integration	System support
Let business goals drive functionality	Clear project vision/scope	Gain board awareness of strategic potential of IT	Willingness to share data			KM	Efficiency
Minimize customization by leveraging out-of-the-box functionality	Benchmarking	Identify need for business system convergence				Culture/structure change	Customer satisfaction
Use trained, experienced consultants	Employees acceptance	Organise around customer					Profitability
Actively involve end users in solution design	CRM software selection	Address culture change					
Invest in training to empower end users	Integration with other systems	Involve users in system design					
Use a phased rollout schedule	Training	Manage IT infrastructure					
Measure, monitor, and track	Realistic CRM implementation schedule	Leverage models of best practice					
	Enterprise performance metrics for CRM	Rapid strategy/action loop to experiment					
	Personalization	Prototype new processes					
	Customer orientation	Manage for delivery of benefits					
	Data mining	Design for flexibility					

Table 2: CRM success factors

6 THE SELECTION OF CRM SUCCESS FACTORS

The selection of CRM success factors for the scope of this research was based on two criteria: 1. the degree of acceptance for the factor by the literature which will be reflected in the percentage of the factor occurrence in the literature; 2. the linking between the success factor and the CRM failure causes as described in table 3.

Success Factor	Percentage in the Literature	Reason for Selection
1. Top Management Commitment	80%	<ul style="list-style-type: none"> Received wide acceptance by literature Associated with CRM failure causes: Lack of top management commitment (Sherif and Newby, 2007; Chalmeta, 2006)
2. CRM strategy (clear development/communication)	47%	<ul style="list-style-type: none"> Received a relatively common acceptance by the literature Associated with CRM failure causes: Lack of clear CRM strategy and vision (Sherif and Newby, 2007; Chalmeta, 2006)
3. Data management (quality / share)	40%	<ul style="list-style-type: none"> Received a relatively common acceptance by the literature Associated with CRM failure causes: Poor data quality, management, and integration: (Chalmeta, 2006); Kale, 2004; Missi et al, 2005)
4. Culture change	47%	<ul style="list-style-type: none"> Received a relatively common acceptance by the literature Associate with CRM failure causes: lack of managing culture change(Chalmeta, 2006; King and Burgess, 2007)
5. Process change/structure redesign	27%	<ul style="list-style-type: none"> Received acceptable acceptance by the literature due to the wide spread of CRM success factors Associate with CRM failure causes: lack of managing (poor) structure change and re-design(Kale, 2004; Forsyth, 2001)
6. IT systems (management/integration)	67%	<ul style="list-style-type: none"> Received wide acceptance by literature Associated with CRM failure causes: Poor IT management/integration (Brink, 2005 ; Meyer and Kolbe,2005)
7. Skilful, Motivated, and trained staff	40%	<ul style="list-style-type: none"> Received a relatively common acceptance by the literature Associated with CRM failure causes: Lack of skilful employees (Forsyth, 2001; (Bohling et al, 2006)
8. Customer involvement/consultation	27%	<ul style="list-style-type: none"> Received acceptable acceptance by the literature due to the wide spread of CRM success factors Associate with CRM failure causes: Lack of customer's involvement Plakoyiannaki et al, 2008 ; McCalla et al, 2003)
9. Monitoring, controlling, measuring, and feedback	33%	<ul style="list-style-type: none"> Received acceptable acceptance by the literature due to the wide spread of CRM success factors Associated with CRM failure causes: Lack/poor of CRM measures (Mendoza et al, 2007)
10. Inter-departmental integration	33%	<ul style="list-style-type: none"> Received acceptable acceptance by the literature due to the wide spread of CRM success factors Associated with CRM failure causes: Lack of cross-functional/inter-departmental integration (Sherif and Newby, 2007; Mayer, 2005)

Table 3: justifying the selection of CRM success factors

7 METHODOLOGY

In order to develop the framework, the research has conducted an extensive review of the literature in the field of CRM and specifically in the field of CRM success and failure within the domains of Marketing and Information Technology. Based on the literature, the framework components have been identified and justified for the framework. Therefore, the selection for CRM success factors will be identified and justified for this paper. Then, the linkage between the success factors and CRM components will be developed. On the other hand, the evaluation of the framework will be conducted based on using a case study methodology. The selection for case study as a methodology was based on the following reasons: the ability of this methodology to help the researcher to study the problem within its real environment, the extent of control an investigator has over actual behaviour and the degree of focus on contemporary as opposed to historical events (Yin, 2003). Additionally, the case study design is based on embedded single case study using two telecommunication companies in Riyadh city in Saudi Arabia. To ensure the quality of managing the case study and the collection of required information, a case study protocol will be

developed combining the following sections: Aim of the study, the study objectives, Issues to be addressed, case study cites, source of information, categories of questions, potential source of information, and format of the narrative. The information will be collected using interviews, observations, and documentations and archival records. Eight people will be interviewed, four from each company. The selection of interviewees is based on their involvement in the CRM implementation process as the following: one top management member, one CRM committee / teamwork member, Marketing manager, and IT manager from each of the two companies. The interviews are organised as semi-structured and the questions are divided into four categories: A. Questions on CRM implementation process; B. Questions on CRM components; C. Questions on CRM success factors; D. Questions on CRM measurements.

7.1 linking CRM success factors to crm components

As identified earlier, the main components of CRM are People, Technology, and process. The CRM success factors are embedded within these factors (shang and Lin, 2005). The aim of linking the proposed success factors to the identified components of CRM is to ensure that each success factor is related genuinely to the CRM. It also aims to provide a clear path for managers from different levels for adopting and maintaining these factors within their range of existence and their scope of responsibility as there is no evidence among the studies of success factors relating to operationalisation and management of these factors (Esteves and Pastor, 2001). Nevertheless, it aims to help managers to control such factors with a clear vision. Table 4 shows the linkage between CRM success factors and the major components of CRM.

CRM success factors are by nature related to its components either directly or indirectly (Mendoza et al, 2007). To relate CRM success factors to its components, each factor should be defined to identify the nature of the factor in terms of its relation to CRM components taking into consideration that more than one component could dominate one factor.

- Top management commitment

This factor focuses on the willingness of the top level management to provide sufficient and necessary resources needed to the implementation process.

- CRM strategy

This factor focuses on the clear definition of CRM strategy and its alignment to the organisation's general strategy.

- Data management

This factor focuses on acquiring and analyzing the right quantity and quality of information on customers to help to meet customer's needs.

- Culture change

The ability of the organisation to transform into customer-oriented and to consider CRM as an organisation philosophy that is shared organisation-wide.

- Process change/structure redesign

This factor focuses on developing necessary changes in the organisation's structure and the related process to fit CRM compatibility including the hierarchy and reporting relations

- IT systems

This factor focuses on the availability and management of technological resources including data warehouse management, ERP capabilities, internet facilities, and software selection and configuration.

- Skilful, Motivated, and trained staff

This factor focuses on the availability of experienced and qualified personnel and the ability of providing training programs.

- Customer involvement/consultation

This factor focuses on consultation, interaction, and communication with customer through enhancing interaction between the organisation and the customers.

- Monitoring, controlling, measuring, and feedback

This factor focuses on creating and implementing measurements for CRM implementation and CRM impact on the organisation's performance as well as developing appropriate channels to gain feedback for enhancing the learning process of CRM implementation for required improvements

- Inter-departmental integration

This factor focuses on the integration of different departments and areas of the organisation to meet the general objectives of CRM and the main company's objectives as well as the objectives of these departments.

Success factor	People	Technology	Process
Top Management Commitment	x		
CRM strategy (clear development/ communication)	x		X
Data management (quality / share)		x	X
Culture change	x		X
Process change/structure redesign			X
IT systems (management/integration)		x	
Skilful, Motivated, and trained staff	x		
Customer involvement/consultation	x	x	x
Monitoring, controlling, measuring, and feedback			x
Inter-departmental integration	x		x

Table 4: linking CRM success factors to its components

7.2 The proposed framework

This research is proposing a conceptual framework that aims to contribute to implement CRM successfully based on common sense, previous studies, and experience (Payne and Frow, 2005). The framework integrates three major constructs; CRM implementation phases, CRM major components, and CRM success factors. The framework starts by a pre-implementation phase where the organization has to gain the support of top management for implementing CRM before involving in the actual implementation process. Based on gaining sufficient commitment by top management the process could proceed to assessing the readiness of the organization in terms of its human, technological, and organizational (process) capabilities to implement CRM. Therefore, the CRM strategy should be developed, aligned, and communicated to staff. The arrows reflect the flow of the process implementation. Hence, the CRM strategy should be put into action by implementing CRM project focusing on the success factors within each component of CRM. Consequently, implementing each success factors should be measured to ensure successful implementation of CRM project. The final step of the framework focuses on measuring the impact of CRM implementation financially and on marketing performance to ensure realising the objectives of CRM strategy and to assess the effect of other possible external factors. The ascending arrows reflect the process of feedback and learning process of the implementation which is based on measuring implementing CRM success factors and measuring the performance of CRM project after it is fully implemented as a continues process. The organisation could use the feedback to re-design and re-assess its implementation process. Figure1 shows the proposed conceptual framework.

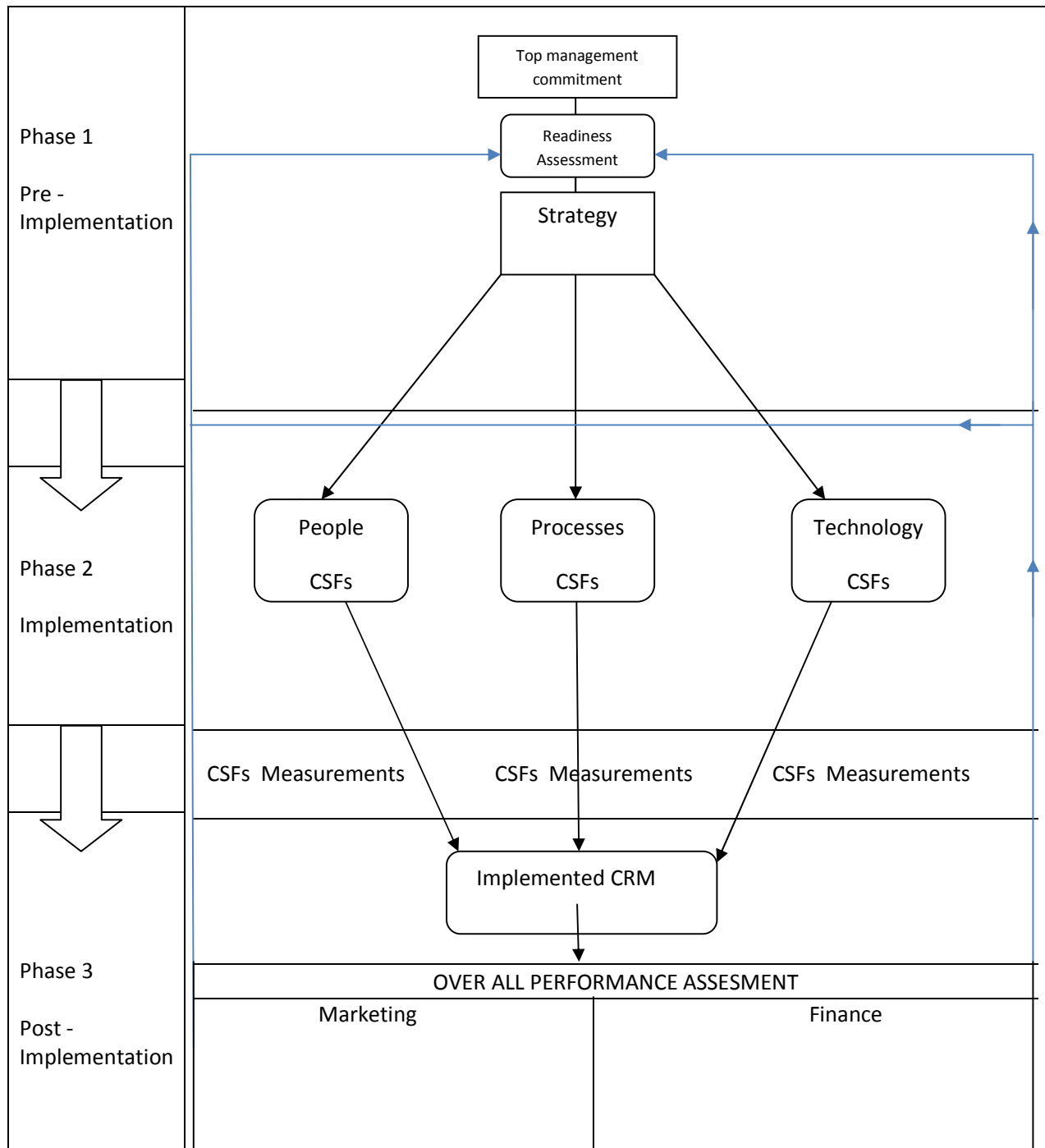


Figure1: the proposed framework.

8 CONCLUSION

The framework was evaluated based on the case study companies; 1 and 2. The selection for the two companies was based on their characteristics, as they both have implemented CRM, and for their dominance of the telecommunication market (100%). The company1 launched its CRM project in 2004

but it failed to realise its objectives due to the poor assessment of CRM requirements which an evidence that supports the need for the pre-implementation phase. In the second attempt, company1 started its CRM implementation in 2006. The company conducted a careful assessment for CRM requirements by consulting an experienced company that suggested a structure redesign and a strategy formulation. Hence, the company started the implementation process by gaining the top management commitment through establishing a CRM committee under the direct supervision of the company's CEO. Therefore, the company developed a strategy for shifting to customer-oriented company and aligned the CRM strategy to the organisation's general strategy. On the other hand, as a subsidiary for a larger company, company2 followed a plan for implementing CRM as a part of its general strategy. Both companies provided a significant support for the importance of pre-implementation phase.

Regarding the implementation phases, both companies realise the three phases of the implementation process(pre-, actual, and post-implementation) as a plan for implementing CRM especially as a guide for their implementation time frame. Furthermore, the results support the existence of CRM components even though there was an overlapping between these components. A clear vision of defining CRM components was highly appreciated as a need for managing CRM implementation in terms of specifying responsibilities. Nevertheless, the importance of the components varies between the two companies.

Success factors existence and management for CRM implementation were validated by both companies. Success factors as proposed by this research were identified by the two companies with different level of emphasis. Although the acknowledgment of the existence of the success factors by the two companies, these factors were not identified clearly or officially. However, company1 emphasised success factors of nature of human and organisational as it faced problems regarding restructuring its processes and regarding change resentment by its staff. On the other hand, company2 emphasised the importance of technological factors.

Measuring success factors was not sufficiently developed and applied while the overall performance assessment was highly supported especially in terms of financial measurements.

In general, the framework proved feasible implementation and provided a useful guidance for successful, implementation for CRM projects. Other factors such cultural impact on CRM implementation, especially on CRM human components, have a significant effect on the implementation process. Such factors need more investigation especially in developing countries.

References

- Adrian Payne and Pennie Frow. 2004. "The role of multichannel integration in customer relationship management". *Industrial Marketing Management*, 33: 527-538
- Adrian Payne and Pennie Frow. 2005. "A Strategic Framework for Customer Relationship Management". *Journal of Marketing*, 69: 167-176
- Adrian Payne and Pennie Frow. 2006. "Customer Relationship Management: from Strategy to Implementation". *Journal of Marketing Management*, 22: 135-168
- Carl-Erik Wikstrom. 2004. "A Case Study of Emergent and Intentional Organizational Change: Some Implications for Customer Relationship Management Success". *Proceedings of the 37th Hawaii International Conference on System Sciences – 2004*
- Darrel K. Rigby, Frederick F. Reichheld, and Phil Schefter. 2002. "Avoid the Four Perils of CRM". *Harvard Business Review*, February, 2002
- Ed Peelen, Kees van Montfort, Rob Beltman, and Arnoud Klerkx. 2006. "A Study into the Foundation of CRM success". *NRG Working Paper no. 06-09*
- Emmanuella Plakoyiannaki, Nikolaos Tzokas, Pavlos Dimitratos and Michael Saren. 2008. "How Critical is Employee Orientation for Customer Relationship Management? Insights from a Case Study". *Journal of Management Studies*, 42(2): 268-293
- Goodhue, D.L., B.H. Wixom, and H.J. Watson. 2002. "Realizing business benefits through CRM: Hitting the right target in the right way". *MIS Quarterly Executive* 1(2): 79-94
- Grabner-Kraeuter, Sonja and Gernot Moedritscher. 2002. "Alternative Approaches Toward Measuring CRM Performance". *Paper presented at the Sixth Research Conference on Relationship Marketing and Customer Relationship Management, Atlanta, USA, 2002*
- H. Salomann, M. Dous, L. Kolbe and W. Brenner. 2005. "Customer Relationship Management Survey, Status Quo and Future Challenges". *Institute of Information Management. University of St. Gallen, January 2005*
- Hugh Wilson, Elizabeth Daniel, and Malcolm McDonald. 2002. "Factors for Success in Customer Relationship Management (CRM) Systems". *Journal of Marketing Management*, 18: 193-219
- Injazz J. Chen and Karen Popovich. 2003. "Understanding customer relationship management (CRM) People, process and technology". *Business Process Management Journal*, 9(5): 672-688

- James E. Richard, Peter C. Thirkell, and Sid L. Huff. 2007 "The strategic value of CRM: a technology adoption perspective". *Journal of Strategic Marketing*, 15: 421-439
- Luis E. Mendoza, Alejandro Marius, Maria Perez, Anna C. Griman. 2007. "Critical success factors for a customer strategy". *Information Software Technology*, 49: 913-945
- Matthias Meyer. 2005. "Multidisciplinarity of CRM Integration and its Implications". *Proceedings of the 38th Hawaii International Conference on System Sciences – 2005*
- Maged A. A. Ali and Sarmad Alshawhi. 2003. "Investigating the Impact of Cross-culture on CRM Implementation: A Comparative Study". [online] accessed at <http://www.iseing.org/emcis/EMCIS2005/pdfs/EMCIS05-Alshawhi.pdf> [accessed 10/12/07]
- Paul Gray and Jongbok Byun. "Customer Relationship Management". *Centre for Research on Information Technology and Organisations, University of California, Version 3-6*
- Peter C. Verhoef and Fred Langerak. 2002. "Eleven misconceptions about customer relationship management". *Business Strategy Review*, 13(4): 70-76
- Rachel McCalla, Jean-Noël Ezingear and Kevin Money. 2003. "A Behavioural Approach to CRM Systems Evaluation". *Electronic Journal of Information Systems Evaluation Volume*, 6(2): 145-154
- Rainer Alt, Thomas Puschmann. 2004. "Successful Practices in Customer Relationship Management". *Proceedings of the 37th Hawaii International Conference on System Science - 2004*
- Rajan Varadarajan. 2006. "CRM Implementation: Effectiveness Issues and Insights". *Journal of Service Research*, 9(2):184-194
- Ricardo Chalmeta. 2006. "Methodology for customer relationship management". *The Journal of Systems and Software*, 79: 1015-1024
- Riyad Eid. 2007. "Towards a Successful CRM Implementation in Banks: An Integrated Model". *The Service Industries Journal*, 27: 1021-1039
- Rui Vinhas Da Silva and Ilan (Daniel's) Rahimi. 2007. "A Critical Success Factors model for CRM implementation". *Int. J. Electronic Relationship Management*, 1(1): 3-15
- Russel S. Winer. 2002. "A Framework for Customer Relationship Management". *California Management Review*, 34: 89-105

Shari S. C. Shang and Jai-Sheng Lin. 2005. "A Model for Understanding the Market-orientation Effects of CRM on the Organizational Processes". *Proceedings of the Eleventh Americas Conference on Information Systems, Omaha, NE, USA 2005*

Siebel Systems. 2004. "Critical Success Factors for Phased CRM Implementations". *Siebel white papers, 2004*

Sonja Grabner-Kraeuter, Gernot Moedritscher, Martin Waiguny, and Werner Mussnigb. 2007. "Performance Monitoring of CRM Initiatives". *Proceedings of the 40th Hawaii International Conference on System Sciences – 2007*

Stephen F. King , Thomas F. Burgees. 2007. "Understanding success and failure in customer relationship management". *Industrial Marketing Management*, doi: 10.1016/j.indmarman.2007.02.005

Steve Mankoff. 2001. "Ten Critical Success Factors for CRM: Lessons Learned from Successful Implementations". *Siebel System, White Paper, 2001*

Sudhir H. Kale. 2004. "CRM failure and the seven deadly sins". *Marketing Management*, 13(5): 42-46

Tae Hyup Roha, Cheol Kyung Ahn, and Ingoo Han. 2005. "The priority factor model for customer relationship management system success". *Expert Systems with Applications*, 28: 641-654

Thompson S.H Teo , Paul Devadoss , Shan L. Pan. 2006. "Towards a holistic perspective of customer relationship management (CRM) implementation: A case study of the Housing and Development Board, Singapore". *Decision Support systems*, 42: 1613-1627

ThuUyenH H. Nguyen, Joseph S. Sherif, and Michael Newby. 2007. "Strategies for successful CRM implementation". *Information Management & Computer Society*, 15: 102-115

Timothy Bohling, Douglas Bowman, Steve LaValle, Vikas Mittal, Das Narayandas, Girish Ramani, and

William Boulding, Richard Staelin, Michael Ehret, and Wesley J. Johnston. 2005. "A Customer Relationship Management Roadmap: What Is Known, Potential Pitfalls, and Where to Go". *Journal of Marketing*, 69: 155-166

Zhedan Pan, Hoyeon Ryu, and Jongmoon Baik. 2007. "A Case study: CRM Adoption Success Factors Analysis and six sigma DMAIC Application". *IEEE computer society DOI 10.1109/SERA2007.51*