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IMPLEMENTATION OF CUSTOMER RELATIONSHIP MANAGEMENT (CRM) IN HIGHER EDUCATION INSTITUTIONS (HRIs)

A CASE STUDY FROM MUET, JAMSHORO, PAKISTAN

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Abstract

Customer relationship management (CRM) terminology involves People, Process and Technology (PPT) it represents a Business Strategy (BS) built around the concept of improving customer services.CRM aims to increase customer satisfactions and thus increases the business income. It is less evident that CRM has been widely utilized for less developing countries like Pakistan, especially in Higher Education Institutions (HEIs). The aim of this study is to investigate the importance of CRM in fulfilling the needs for provision of quality education



through better customer services. It is a challenge for HEIs in Pakistan, which trying to break the traditional process of business strategies (BS) by implementing CRM practices. It is identified through this research that Mehran University of Engineering & Technology (MUET) partially implements CRM practices for improving quickly to adopt all the parameters of CRM. In this respect a model is developed to sketch the CRM practices being carried out and desired to improvise better performance in HIEs such as MUET, through coordinated efforts of people, process and technology (PPT).

Keywords: CRM (Customer Relationship Management), HEIs (Higher Education Institutions), Business Strategy, PPT (People, Process and Technology), Pakistan

INTRODUCTION

Customer relationship management (CRM) involves people, process, and technology to develop interaction with your customers for the development of the business (Jung, 2005). CRM is a term that represents a business strategy built around the concept of improving customer services. Peppard (2000)suggest that CRM helps in retaining customers due to efficient and effective customer relations, which ultimately enhances business in long term. The same is also applicable to Higher Education Institutions (HEIs) as well. Robert et al (2006) indicate that the implementation of CRM practices in educational institution provides support for all exercises carried out in an institution. Since, CRM mainly emphasis on improving the customer relationship. The advent of relationship marketing has had a profound impact on the marketing / finance interface (Ryals, 2008).

The said research is beneficial for university managers and policy makers who are eager to facilitate their customers primarily the students to increase their satisfaction level towards the provision of quality of services. This will ultimately increases the quality ratings of HEIs. Yin (2003) and Yin (2009) explained that the case study based research methodology investigates a contemporary phenomenon within real life context, especially when the boundaries between phenomena and context are not cleanly evident. This paper, thus investigates the same scenario for Mehran university of Engineering & Technology (MUET), Jamshoro. Moreover, the results of this study may be replicated to other organizational as well. The lack of CRM implementation in HEIs, could be due to many reasons ranging from administrative issues to unawareness towards the benefits of CRM implementation. The administration should move in the direction of making culture that is based on the "benefit more prominent in the last" instead of "individual increase" (Flory.2014). Currently, HEIs are working on a traditional style of doing

business by not adopting this approach. CRM helps to spread the work and worry of new changes (Bennett, 1996). The inclusion of CRM in HEIs will reduce the time-consuming procedures involving many personals and steps.CRM is to take a shot at the organization's level of method to lessen expenses and build productivity through the combination of consumer loyalty and reliability, and promotion (Anderson and Mittal, 2000). Thus, CRM implementation groups needs to settle on a suitable approach introduce CRM in institutions of higher learning, as it refers to the commitment and the procedures adopted or approach selected best suits the needs of every individual within an organization. This includes the implementation of CRM fundamental change in both business operations and the organization itself, so it is necessary to do the appropriate organizational change management (Shum, POV, and AUH, 2008).

CRM Ingredients

CRM is a combination of people, process, and technology, which seeks to understand the customer's needs of the company [fig:1]. It is an integrated approach for management to maintain its relationship with customers. CRM ingredients are evolved from advances in information technology and changes in the regulatory process giving more focus to customer centric services.

People Process Technolog

Figure 1: CRM ingredient

CRM, although a very effective process to develop the customer base having higher satisfaction, nevertheless its adoption is a challenging task for HEIs in Pakistan as it try to break the traditional processes. From a client viewpoint, Anderson (1994) emphasizes the implementation of CRM through enhancement of communication strategies within education

institution. There could be various problems regarding adoption of such practices in Pakistan like willing to share information, the culture, the company's (HEIs) business process, the software itself, etc. Therefore, it is highly sensitive to understand that whether the models of CRM can be replicated from developed nations, or new models are to be created for CRM implementation in HEIs of Pakistan. Table 1 represents some of the good CRM practices in HEIs.

Table 1. Characteristic of Developed Countries University

Key word	Description	Developed University
Emergency SMS system	Once registered it is important that you	Australian National
	keep your emergency contact details up	University
	to date so we have the right number to	(Australia)
	contact to you should the need arise. The	http://www.anu.edu.au/
	list of numbers is then updated into the	
	system daily ready to use in case of an	
	emergency.	
Career learning network	[Student and recent grads]	University of Toronto
(CLN)	To ensure the success of our students	(Canada)
	through a variety of support centers and	http://www.utoronto.ca/
	programs	
	[Employers & Partners], Their	
	groundbreaking research and expertise	
	inform policymaking and news media	
	coverage around the globe.	
	[faculty & staff],	
	Faculty do not only teach. They make	
	discoveries and develop new innovations.	
	[Alumni]	
	To provides comprehensive services and	
	resources to aid students, alumni and	
	employers	

MUET, even though have initiated innovative ideas to facilitate its prime customer's i-e: the students, the faculty and staff. The said research is one of its kind to investigate the role and benefits of CRM practices in HEIs of Pakistan i-e: MUET, Jamshoro.

RESEARCH METHODOLOGY

All aspects of the study was carefully designed before the data are collected. And is based on quantitative research on the numbers and calculations, based on qualitative research in novels written or spoken (or qualitative data) (Creswell, 1998). In order to investigate the scenario of MUET in implementing CRM, a large sample of the questionnaire is developed, diffused and collected. To further understand the phenomenon in detailed; interviews were conducted from key stakeholders. Various stakeholders of the university such as students, faculty, management, administration and alumni and other external actors are added into the group of the sample. About 600 questionnaires are diffused with the rate of return as 50% approximately (table 2). The questionnaire in this research used for data collection is comprised of two types. First type of questionnaire used is open ended and second type of questionnaire used is close ended. Open ended questionnaire is used to collect the data from students and administration, whereas, close ended questionnaire focused to collect the data from faculty.

Table 2. Sample Distributions

University	Distributed Questionnaire	Response achieved
Administration	200	81
Faculty	200	65
Students	200	126
Total	600	272

The survey questions were framed on the basis of an extensive literature review. The response was measured on the Likert scale on five points ranging from strongly agree to strongly disagree. The reliability test was performed on the collected data. After finding the data reliable, descriptive analysis and Pareto analysis tests were conducted through SPSS to test the data. After performing various statistical tests, the main findings discovered are discussed below:

ANALYSIS AND RESULTS

All research ultimately has a quantitative grounding (Easterby et al., 1991). The data collected is analyzed in four different scenarios. The first described the desired components of CRM for MUET. The second scenario pinpoints and picks the most important elements of CRM in technology, HR and Business process through Pareto analysis. However, the third scenario traces the acceptance percentiles of desired CRM components and finally the fourth scenario discuss the actual practices of CRM being carried out in MUET. The entire overview of CRM practices in MUET are also described at the end.

Identification of desired components for CRM Implementation

Eight desired CRM components as identified through literature were investigated through the responses of stakeholders. The results are given in figure 2. Regarding better customer services, 46% respondents wereof strongly positive opinion that it must be the core CRM elements of MUET. Among all the identified factors, the response for this factor shows highest value of agreement on average combining both the strongly agree and agree responses. For customer loyalty 53% agrees, simplify scheduling 45% agree, supervise publicity48% are agree, create more lead (success) 54% agree, associate documentations 51% agree, customers (contact management) 57% agrees and for element is to optimize workflow (work process) respondents are 60%. The highest deviation of responses is observed for simplifying scheduling. Exactly the same is identified through workflow/work process factor, which represents the highest value i-e: 59% that it need to remapped in processes adopted at MUET.

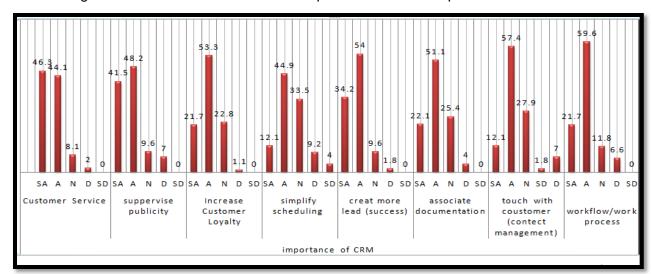


Figure 2: Identification of desired components for CRM Implementation

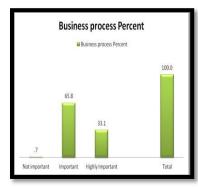
After identifying the first scenario, that what could be desired liking of CRM components exists in MUET another second scenario for identifying the key steps to be adopted in CRM to make it successful following analysis were performed.

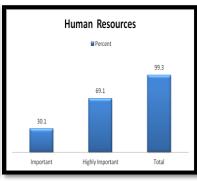
The Main Focuses of the Assessment Phase (Human Resources, Technology, Business Process)

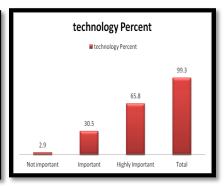
According to this combine descriptive graph (figure 3), the result showed that 69% responded consider human resources highly important, while 65% respondent consider business process important but not highly important (33%) for CRM success in MUET. 65% responded consider

technology highly important. However, few of the respondents are not agree with the role of technology in making CRM more successful. Thus, to make CRM a true success in MUET, the development of human resources must be given utmost importance. The finding shows all main focuses of the assessment phase of CRM implementation and specific need of MUET.

Figure 3. The Main Focuses of the Assessment Phase (Human Resources, Technology, Business Process)







Human Resources

However, in human resources five important parameter such as organizational commitment (the attachment that employees feel to the organization where they work); work engagement (the vigor, dedication, and absorption that people experience on the job), job satisfaction (how satisfied people are overall with their jobs), work ability (how capable a worker is of performing his or her job) and contribute to building a better world by taking responsible, ethical actions to improve my life, the lives of others and the environment were identified and response was taken against each on the basis highly important, important and not important. Then Pareto analysis is applied to find the most important elements. The graph (figure 4) shows that if we work on building a better world ethically all other things will be managed automatically.

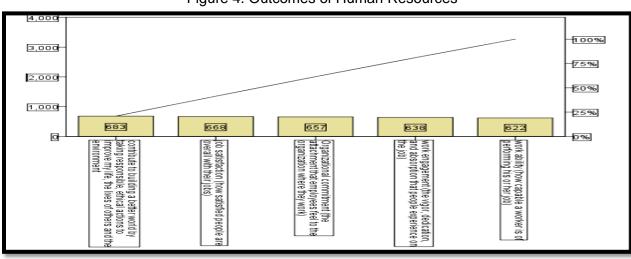


Figure 4. Outcomes of Human Resources

Business Process

Similarly, in business process eight important parameters such as lifelong learning & personal development prompted, improved access services, improved environment, loyal customer, profitable and cash positive, motivated satisfied staff, employment and prosperity for all (from a vibrant economy), greater value for money and response was taken against each on the basis highly important, important and not important. Then Pareto analysis is applied to find the most important elements. The graph (figure 5) shows that if we improve access services then all other things will be managed automatically.

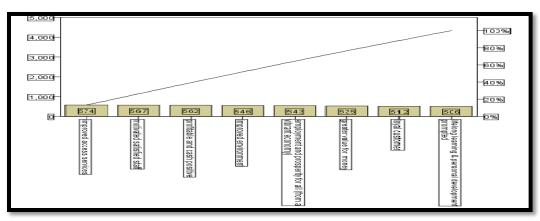


Figure 5. Outcomes of Business Process

Technology

CRM especially utilizing internet are emerging trends.CRM on the Internet, otherwise called facilitated Customer Relationship Management, CRM online or on-interest CRM, are samples of SaaS i-e: services as a software (Price, 2002).Thus, in technology seven important parameters such as to develop an understanding of the role and impact of technologies in changing and influencing societies, gain the confidence and skills to embrace and use technologies now and in the future, at home, at work and in the wider community, gain the confidence and skills to embrace and use technologies now and in the future, at home, at work and in the wider community, be capable of making reasoned choices relating to the environment, sustainable development and ethical, economic and cultural issues, expand my understanding of the role that information and communications technology (ICT) has in the global community, expand my awareness of how ideas in mathematics and science are used in engineering and the technologies and experience work-related learning, and establish firm foundations for lifelong learning, and specialized study and careers and response was taken against each on the basis highly important, important and not important. Then Pareto analysis is applied to find the most

important elements. The graph (figure 6) shows that if we are capable of making reasoned choices relating to environment, sustainable development, and economic and cultural issues then all other things will be managed automatically.

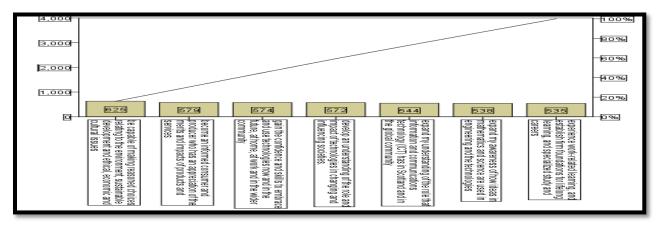


Figure 6. Outcomes Technology

Identification of Needful Areas For CRM Implementation

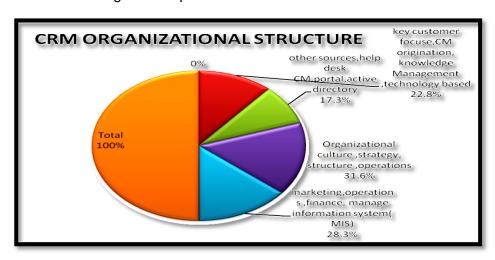
CRM is more than other programming package. It includes in addition to this position, it is a way to work together, and how to interact with others in the company. Achieve implementation CRM puts on the shoulders of the workforce who is willing to share data about customers and contacts. Then again, this "synergy" mentality contrary to the way of life in some department's expert companies (Isokovic, 2013). Regardless, many departments professionals experts leery of data exchange is inspired by a paranoid fear of loss of employment opportunities for the production of contact they had rid themselves (MacDonald, 2002). In any case, if it is to identify the CRM implementation with the workforce as an opportunity to make open new doors for all, and enhances achievement rates mainly. However, if a CRM implementation is introduced to the workforce as an opportunity to create new opportunities for all, success rates will improve significantly.

In actual practice there is 100% need for the CRM to fit within the organizational structure of HEIs such as MUET. The main elements of CRM, which needs more focus in MUET are being ranked on the basis of data represented in table 3and highlighted in figure 7 such as (i) Organizational culture, strategy, structure and operations (31.6%) (ii) marketing and finance operations, managing effective information system (28.3%) (iii) key customer focused, CM origination, technology based knowledge Management, (22.8%) and (iv) other source, help desk CM, portal, active directory (17.3%). It has also been identified that new initiatives are already taken on above parameters such as launching of new interactive website, establishment of human resource directorate, and practicing of **Moodle** a course management system (CMS), however, more initiatives are in pipeline.

Table 3. Area wise need for CRM Implementation fit within the organizational structure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	key customer focused, CM origination knowledge Management, technology based	36	22.8	22.8	22.8
	other source, help desk CM, portal, active directory	13	17.3	17.3	17.3
	Organizational culture ,strategy ,structure ,operations	175	31.6	31.6	31.6
	marketing, operations ,finance , manage information system	48	28.3	28.3	100.0
	Total	272	100.0	100.0	

Figure 7. Implementation Structure of CRM



Since not all the CRM parameters are being currently implemented at MUET, another question regarding the implementation status of CRM was asked from the respondents. The aim for investigating such question was to identify the percentile share of CRM implementation in MUET for People, Technology, and Business processes (figure 8). The result shows that the

majority of respondents i-e:68% are of the opinion that the CRM is partially implemented, where as 27.9% respondents considering its full implementation. Thus it can be concluded that CRM is present in university but not all of its parameters are being exercised.

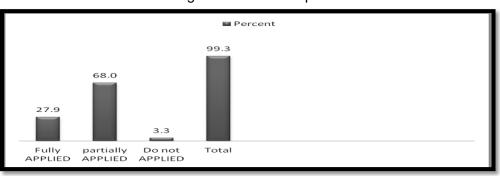


Figure 8. CRM Components

Actual Implementation Process Based on CRM

However, currently in actual practice the elements of CRM existing in university are plan, engage, execute ,evaluate, Analysis, configuration, development ,operations, plan, prepare ,test, launch Discovery, design, development, deployment. According to figure 9 drawn on the basis of table 4, the pie chart shows that one or other way CRM is being implemented at MUET but more CRM parameters are needed to be included for its effective functioning as discussed above. However, as per current practices the entire scenario consists of parameters ranked as (i) plan, prepare, test, and launch (40%) (ii)Analysis, configuration, development, operations (32%) (iii) plan, engage, execute, evaluate (19%) and discovery, design, development, deployment (8%).

Hence, it is evident that there is the need for implementation of CRM, best fits within the organizational structure of institutes of higher learning including MUET as well.

Frequency Percent Valid Percent Cumulative Percent 50 19.1 19.1 19.1 plan, engage, execute, evaluate 72 32.7 32.7 32.7 Analysis, configuration, development, operations Valid plan, prepare ,test, launch 126 40.0 40.0 40.2 Discovery ,design ,development ,deployment 24 8.1 8.1 100.0 272 Total 100.0 100.0

Table 4. Actual Customer Management Implementation

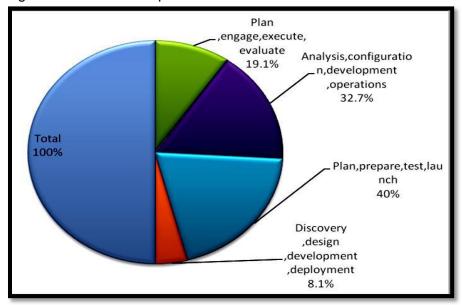


Figure 9. The Actual Implementation Process Based on Different CRM

Model for CRM implementation in MUET

As per the findings discussed in above sections, the model emerged for CRM implementation in MUET is shown in figure 10 (See page 13).

CONCLUSION

Through this research, it is identified that, CRM is partially implemented in MUET, Jamshoro. However, in order to increase the customer satisfaction of its stakeholders, new strategies must be adopted to implement all the parameters of CRM. It is proposed that university management needs to organize training programs, which will help to create an awareness regarding benefits of CRM implementation. CRM implementation will increase the market share and customers' focus in the MUET. As much as customers focus strategies will be utilized, the greater will be the profit. It will also help to implement a proper system of CRM practices in HEIs of developed countries. This novel idea of CRM implementation in higher education institutions in Pakistan will open new avenues of investment in the private as well as public sector institutions. Charm of institutions due to CRM will also attract more venture capitalist in the HEIs of Pakistan. Currently in Pakistan, majority of HEIs are public sector after successful implementation of CRM more private sector institutions will compete. In result Proper implementation of CRM in higher education institutions will create competition, and, this competition will improve the quality of educational services in the country.

Figure 10. Model for CRM implementation in MUET Pre - Implementation **CRM Business Process** Technology Human Resource Learning & Personal Organizational Commitment • Learning & Experience development Expand Awareness ICT Work Engagement Loyal Customer • Expand Info. & Com. Job Satisfaction Valuation of money Broadly Accepted Work Ability • Profit Oriented Motivated Employees Motivated Employees • Improved Access Services Improved Access Services **CRM Components** Implementation Structure of CRM

Actual Implementation

1. Plan, prepare, test, and launch (40%)

Ethics

- 2. Analysis, configuration, development, operations (32%)
- 3. Plan, engage, execute, and evaluate (19%)
- 4. Discovery, design, development, deployment (8%).

Desired Implementation

- 1. Organizational culture, strategy, structure and operations (31.6%)
- 2. Marketing and finance operations, managing effective information system (28.3%)
- 3. Key customer focused, CM origination, technology based knowledge Management, (22.8%) and
- 4. Other source, help desk CM, portal, active directory (17.3%)



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