Research Article **NLB**

Impact of customer relationship management on student's satisfaction

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Abstract

The current article was design to determine the relationship between students' satisfaction and CRM (customer relationship management) in different universities. The main objective of the study was to find out the awareness about CRM in Pakistani universities and its impact on students' life. Both descriptive and inferential statistics were applied in research work. This research was based on the customer relationship management practices and customer satisfaction in the higher education institute of Lahore, Pakistan. The sample was selected only from private HEI according to their populations. The results were conducted through statistical software SPSS. This study has cleared not only the relationship between CRM and customer satisfaction, but also has explained the moderating effect of students in this relationship. On the basis of results, it can be predicted by the researcher that the CRM's future will be brighter in HEI and the decision makers will take effective and impressive decisions for future work and may be decrease the gaps with international institutions. The sample sized 298 used in this research work and Questionnaires were distributed in the top three universities of Lahore Pakistan. The reliability test, correlation and linear regression tests were applied and the entire tests showed the goodness of study. Correlation and regression test showed the positive relationship of the research hypothesis. Results proved that effective used of CRM create positive impact on student's satisfaction.

Key words: Customer Relationship Management, Customer (Students) Satisfactions

Introduction

CRM is not just a technology infect it is a accurate implementation is just possible with an integrated and balanced approach of people, procedure and advanced technology (Chen & Popovich, 2003).Firstly CRM concept was introduced by Pine Peppers and Rogers (1995) through an Article which was published in Harvard review (Manasa & Naik, 2016). CRM has been the progress of information technology and communications which allowed the firm to understand the customer mind and try to create the basic products according to their desire needs. Through the integration of technological and function components CRM links the systems of marketing departments like front line office (marketing, sales and customer service) and back office (budgeting or financial, logistics, warehousing, accounting, human resource management and so forth (Russell & Taylor-Iii, 2008).All the structured data which is used in the CRM system get from the data warehouse then where data extracted, transferred and stored from different electronic system like ERP, SCM or operational CRM (Orenga-Roglá & Chalmeta, 2016). Earliest merchants also knew about the use of CRM and according to them it was a good idea to create long term relationship with customer for repeating purchases (Jobber, Saunders, & Mitchell, 2004).

The internationally competitive market place provides today's consumers with choices never before imaginable by previous inventions (Hoots, 2005).In 1980s the concept of companies has been changed. They focused on the customers rather than product because they realized that their core point is customer if customer satisfied then ultimately, he retains his relationship with the firm. CRM is a concept which was firstly introduced in the 1990s in the United States of America. It has been established, implemented and run in many successful organizations globally or all over the world,

without taking any cultural difficulties into consideration any geographical boundaries. So for getting customer satisfaction companies adopted some software in which CRM also included through companies send all product relevant information's. According to (Dimitriades, 2006) described that if dealings are made more convenient, beneficial and at lower cost available for the customer , it is expected that it will give firm or company repeat business from that customer side. (Ozuru & Kalu, 2009) explained that the function of Customer relationship management is to build belief, connection or correlation between the business firm and a customer with the aim to create a repeat purchase.

The initial function of the marketing department is to create exchanging relationship between companies and firm (OMOTOSO, 1999). CRM is the major example of relationship marketing which purpose to build long lasting relationship, make customer loyal and increase customer value for the company (Manasa & Naik, 2016).

Research Problem

This research is conducted to find the awareness of students about CRM and find that if CRM facilitate them or not and also that they become satisfied from that system or not. Many researchers work in different sectors but no one worked in educational sectors and the impact of CRM on student's life. According to Zarah and Kilmiloglu it is not easy to measure the effect of CRM and its success in the sector. Many universities don't know that how CRM is working in their progress so we want to give them correct view and clear view. Many Universities do not adopt the CRM concept because they have a fear that technology is tough to run and not have significant effect on the customer (students), after this research they will be realize that technology accelerate their business.

Research Objectives

- To find the satisfaction level of students from the use of CRM technology.
- To find the changes in students' life due to the use of CRM technology.
- To find the importance of CRM in future.

Research Question & Hypothesis

H_1: Use of Customer Relationship Management affects the students' satisfaction.
H_2: Effect of Customer Relationship management practice Operational Perceived benefits on students' satisfaction.
H_3: Use of Customer Relationship Management Knowledge Management Capabilities impact on students' satisfaction.
H_4: Effect of Customer Relationship Management practice Technological Readiness on students' satisfaction.
H_5: Effect of Customer Relationship Management practice Top Management on students' satisfaction.

Operational Management is the one where all operations take place. Knowledge Management capability department gathered all the information related to customer and forward these to next department. Technological Readiness is the system where measure the maturity level of the CRM technology. Top Management Support is the basic element in the use of CRM technology here involved the all top managers in the customer caring programs and gets their point of in every new step. Top managers also encourage the employees to motivate customers and their satisfactions' process.
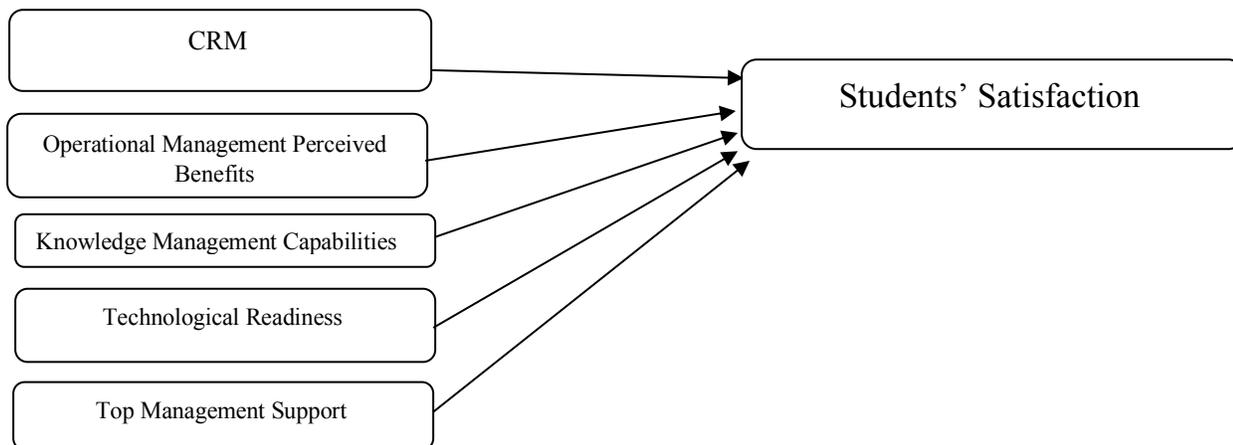
Research Model

Figure 1. Conceptual Framework

Literature Review

Different writers described CRM differently here are some definitions are presented according to Business dictionary "A computerized system for identifying, targeting, acquiring, and retaining the best mix of customers". Hasan et.al (2012) in their study defined CRM as customer centric managerial strategy that explain how to develop long term relationship with beneficial customers by employing all-inclusive customer knowledge. This definition highlighted that who will be the actual customer and what will be their needs. That is all possible through appropriate management approaches. This definition includes customer centric strategy, long term relationship and customer knowledge clarification (Bhakane, 2015)."CRM is basically mean achieving purchaser information, considerate what unlike consumers are importance, treating different clients differently and improving competency" (Newell, 2003 (Mukerjee & Singh, 2009).The basic and large differences among the CRM definitions are technological and relationship aspects of CRM. With passage of time there is changing take place in the CRM applications.

"CRM is about to maintain and develop long term mutually relationship with strategically significant customers" (Buttle, 2009).

Background of CRM

The word "Customer Relationship Management" (CRM) was first discovered in a common sense by management scholars like Peter Drucker and Theodore Levitt in the 1960s (Venoos & Madadiyekta, 2005).The concept of CRM firstly introduced in united states America. It is not new concept oldest traders also knew about CRM that for repeat purchasing it is a good thinking. Customer Relationship Management involved a single person, processes (getting and saving information) and technology and it is in search of for the customers' conception of an organization. Forwarding beyond customer database, CRM is one of the attractive thinking that carried business world with the commitment of long term changing the way of all small and large business in the sense of customer interaction face in the 1990's century. The concept of relationship centric marketing and Christan Gronroos and Evert Gummesson of the Nordic School and Theodore Levitt were firstly highlighted the impact of relationship with customers (Bhakane, 2015).

A stage began where the prevailing business orientation focused on customer interaction and customer relationship management (CRM), where each customer treated individually and in impressively way with much care and attention, according to their preferences (Bose, 2002). Now the purpose is to create value for customers, recognized their requirements, needs and then provide them value-added services (Sadek, Youssef, Ghoneim, & Tantawy, 2012).

CRM in Pakistan

Initially Pakistani companies have product concept, produced in large quantity and send it to the retail outlets. But now they have adopted a strategy of customization and focuses on customers. They make product according to the demand of the customer with their feedback and started direct marketing. For that purpose, Pakistani companies are also prevailing CRM application. In order to check the satisfaction many companies collect feedback and try to remove the gaps between customer and company. Its task is to provide best qualities to the Pakistani universities because there is not a single university of Pakistan is considered in the list of top 500 universities in the world. The preseason is that there are so many problems in Pakistan such as no attention were given to the quality criteria; scholarship and huge funds were allocated for the brilliant students in many universities but all in vain. (TATLAH, AMIN, & SALEEM, 2015) .CRM software makes use of a dashboard, analytics and reporting tools to provide business owners with an all-encompassing vantage point of operations. With that being said, there are some major benefits of utilizing CRM software.(Adebanjo, 2003).In the reference of (M. Xu & Walton, 2005) Studies they have concluded that the core reasons due to which companies' managers are implementing CRM for:

- Improve customer Satisfaction.
- Retention existing customers.
- Provide strategic information.
- Improve customer lifetime Value.

CRM components

The success of CRM structure depends on the right balance between three important organizational resources, people, technology and processes. Customer Relationship Management (C RM) depends on the certain components which are:(Payne & Frow, 2005)

- Customer
- Relationship
- Management

Customer Satisfaction

Customer satisfaction is the main thing in every business because if customer is satisfied then he will continue his relationship with that firm. It is the main consideration of every firm that its customer must be satisfied with their services and goods. Hansemark and Albinson (2004) explained that satisfaction as an overall customer behave (reaction) towards a service provider after using product, or the difference between customer expectation and customer perception concerning the satisfaction of some wants, needs, desire or goals(Singh, 2006). (Oliver, 1981) defined that "satisfaction as a totality of psychological state that arises in relation to his or her expectations". (Tse & Wilton, 1988) defined satisfaction as " the customers reaction to an assessment of the perceived discrepancy between prior expectation (and some other norm of performance) and the actual performance of the product as perceived after its consumption".

CRM ingredients

The main ingredients of CRM are people, Technology and Process all organizations use these all ingredients in the proper way for maintaining customer information. People are the main elements of CRM process, without people CRM implementation cannot be possible. Coordination between people and organization is the key to successful customer relationship management (Chakraborty & Chuan Tan, 2012).Implementers must need to understand that what changes should be take place, which difficulties are hanging program will be beneficial to the organization (Chakraborty & Chuan Tan, 2012). According to Davenport and Short, 1990; Porter, 1987 technology is the second ingredient of CRM through companies maintains the customers' data. There is a software used in which customer data safe and give through it future information regarding sales. With using of technology companies can create 360-degree view of customers to learn and understand from the past interaction with customer to optimize future (Chen & Popovich, 2003). Process is the stage where external data fed into system and saved it for long term purpose. In fact, Companies have been repeatedly warned

that failure will element if they trusted that CRM is only a technology solution (Goldenberg, 2000).Customer is the in element of every organization without customer any business can cot run, every business purpose is to earn profit with sell goods and services to customer (Shaikh & Al-Dossary, 2013). It gives a clear path to company that how the company deal with customer and also show that company spend its worth on customers (Gupta et al., 2006). The ultimate aim of the CRM value chain process is to ensure that the company builds long-term mutually-beneficial relationships with its strategically-significant customers". (Buttle, 2009)

(Bose, 2002) explained some steps of CRM development:

- Planning
- Research
- System analysis and Conceptual Design
- Design
- Construction
- Implementation
- Maintenance and documentations
- Adoption

Need of CRM in an Organization:

In the advanced age where everything is now changed business concept is also changed. In Pakistan due to the many problems like bad and damage infrastructure of buildings, low quality of information technology, lack of personality development planning, unsatisfactory examination procedure and low quality of research culture many students went to abroad (Isani & Virk, 2005). To understand modern thinking of customer organizations also required a process through which they understand the customer mind. The significant need of CRM is following below:

- To understand Customers' Expectations regarding goods and services.
- To find the way that how to Manage Customers in better way.
- To focus on building long term relationships with profitable customers.
- For generating and running a customer focused CRM solution.
- To minimize the production cost with the customer required taste and need (Anderson, Jolly, & Fairhurst, 2007).

CRM in higher educational sectors

In the current situation students of the higher educational sectors also required satisfaction and feedback system. Recently, (Gustafsson, Johnson, & Roos, 2005), "explores the relationships between customer retention, intentions and satisfaction". Other researchers also describe that "This has always subjected the students to pitiable conditions, disrupting academic programs, giving students' undeserved extension in their study years, poor students' attention on educational programs and poor teacher-student relationships amongst others" (Edinyang, Ubi, Usang, & Adalikwu, 2013) . The issue of student being considered as customers has attracted a lot of logical debate among scholars. Why students should be treated as customers? now a number of scholars have been able to identify the answer and reasons of this question (Olaleke et al., 2014) For getting affective results, higher Education Institutions (HEI) are adopting CRM (Customer Relationship Management) strategy (Rigo et al., 2016) .In Pakistan, Higher Education Commission of Pakistan (HEC) established Quality Assurance Agency (QAA) on January 18, 2005with a high intention to arrange the resources for capacity building through trainings/seminars and workshops in order to enable the higher education institutions (HEC) to fulfill their international objectives (TATLAH et al., 2015). In Higher Education institutions CRM has meet the students' expectations (Olaleke et al., 2014). In the educational institutions the concept of this CRM project adoption was not only concentrated the maintenance and satisfaction of students (Rigo et al., 2016). SRM (Students Relationship Management) is oriented specifically for a Higher Education atmosphere where strategy processes and philosophical lines are oriented to educational goals and student requirements (Zhou, 2012; Trocchia, Finney, & Finney, 2013).

Methodology

There are two kinds of research approaches which are used in research work namely Quantitative and Qualitative (Hair Jr) (Saunders, 2011). Quantitative research was used in the present research work because quantitative data collected. To find the research question's result, the research would be in descriptive or an exploratory research or both of them. According to Academicians may have more than one purpose of the research change with the passage of time (Zikmund, 2000); (Saunders, 2011). Explanatory research is a research in which is used to find the relationship between dependent and independent variables.

In the present research survey strategy is selected. It helps in the deductive approach and the researcher can collect quantitative data through survey method. Population considered the all private and public universities student of Pakistan. According to the present survey of Pakistan there are 132 universities in which 73 are public and 59 are private universities (studysols.pk). In Punjab province, there are 26 universities in which 10 GOV. universities and 16 private universities (punjabdata.com). On the basis of this information selected the main city of Punjab 'Lahore' and distributed our questionnaires in three private universities. These universities were Sargodha University, The University of Lahore and UCP University (private universities). The population of the study was the students of all these universities in the Lahore city which represent the whole universe. The researcher used personal opinion in the non-probability sample and doesn't depend on the chance to chosen the sample elements (N. Malhotra, Birks, Palmer, & Koenig-Lewis, 2003).

Sample Size Calculations

There were selected three poplar universities from the city of Punjab Lahore; there population according to their social website is 5000 students enrolled in UCP, 26935 students and 28342 students enrolled in the University of Lahore (Wikipedia, The free Enclopedia). So, for the sample calculation there was a Slovin's Formula used, which was formulated by Slovin in 1960(Statisticshowto.com) after many research work formula again proposed by Isreal in 2009 (Shalev et al., 2009). Formula is $n=N\backslash 1+Ne^2$ in this formula n=sample size, N=Population, e=error tolerance (Which is extracted from confidence level). In the present study, the confidence level is 90% then error tolerance was 0.1. Using N= 60277 in the formula, the resulting size (n) were 298 and were distributed which is show in below Table 3.1

Table 3.1   Sample Size

Universities	Students Enrollment	Sample Size	Error percentage 10%
The University of Lahore	26935	100	0.1
The University of Sargodha	26342	100	0.1
University of Central Punjab	5000	98	0,1
Total	60277	298	0.1

Source Wikipedia, the Free Enclopedia 2016 – 2017

Data collection Method

(Zikmund, 2000) and Sounders et.al (2009, p.256) introduced two methods for collection of data which are: Primary data (first hand) collection source and secondary data collection. There was a snowball sampling technique used in this study and also close, ended questionnaires were used for data collection in the present study respondent was not allowed to express her or his own judgments and opinion. In open ended questionnaire respondents are allowed that he or she can also explain and also give his\her personal opinions. The researcher always wants to minimize the measurement errors; these errors are reduced when the variables consistently and accurately represent the actual concept. Accuracy depends on the word 'validity' while consistency is related to 'Reliability' (Hair Jr). More officially, Cook and Campbell (1997) explained this as the "best available approximation to the truth or falsity of a given inference, proposition or conclusion."(Colosi & Dunifon, 2006).

Researchers explained the level of reliability from 0.9 to 0.05 (Gliem & Gliem, 2003). In the present study instrument consists on the 25 items and the resulting data gathered from the 280 respondents they were subjected to Cronbach's Alpha test. The statistical reliability from the result reflects α value= 0.953 which meant the instrument operational

benefits, technological readiness, knowledge management, top management supports and customer satisfaction used in this research was reliable.

Table 3.3 Reliability

N	Cronbach's Alpha	No of items
298	.953	25

The table 3.3 shows that 298 participants were in this pilot study that showed Cronbach's Alpha was .953 for which the analysis is reliable.

The study was conducted in the given time period so according the **(**Saunders, 2011**)**, thinking it is considered cross sectional research. Questionnaires were distributed into 3 parts according to the objectives of the study. Population of the study was three universities' students' which parents the whole Lahore (Punjab) population. After conducting pilot study; a full research project was carried out with samples size of 298 students.

Data Analysis Procedure

Data aalysis is the stage of interpreting, summarizing, organizing and drawing conclusions on the basis of collected data and supporting decision making process. In the business world managers and decision makers use statistical data analysis methods for effective decisions (Zikmund, 2000)**.** The kind of data analysis in which describe the relationship between variables and find the strength between them that how many degree of change accord due to independent variable in the dependent variable (Bryman & Bell, 2011); Saunders, Lewis & Thornhill (2009), Ghauri). Regression analysis shows the explanation between one variable with the respect of other, it shows the explanation between dependent variable with independent variable Bryman & Bell (2011), in the present study linear regression analysis implemented due to the nature of study.

Data analysis discussions and results

Data analysis process divided into three steps: preparation face of data, data analysis and reporting (R. Malhotra & Temponi, 2010). According to sample size there were 298 Questionnaires were distributed in the major three universities. In distributing process 100 questionnaires were distributed in the University of Lahore and from which received 95 filled and five unfilled. From remaining questionnaires 98 were distributed in the Sargodha University in return 95 received and other 100 questionnaires were distributed in the UCP University and collected 90 filled questionnaires.

In the below table 4.1 presented the data of respondents demographic information.

Table 4.1   Respondents Demographic Information

	Frequencies	**Percentages %**
Gender		
Males	128	45.7
Females	152	54.3
Total	280	100.0
Age		
20	7	2.5
21	52	18.6
22	55	19.6
23	63	22.5
24	51	18.2
25	28	10.0
26	14	2.5
27	7	.7
28	2	2.5
29	0	0
30	1	.4
Total	280	100

In the above table, there were 128 males' respondents (45.7%) took part and gave their views and 152 (54.3%) respondents were females. From the table, there were 7 (2.5%) respondents fall in the age group of 20. In the group of 21 years old consisted on 52 (18.6%) respondents, there were 55(19.6%) belonged to 22 years. Large number of respondents belonged to group 23 years old they were 63(22.5%), 51(18.2%) were 24 years old, 28(10.0%), 14(2.5%) respondents fall in 26 years, 7(.7%) belonged to age group 27. There were 2(2.5%) respondents were 28 years old, there were no student fall in 29 and only 1(.4%) fall in 30. The table showed that large no of respondents belonged to age group 23.

The normal value of Cronbach's Alpha will be between 1 (perfect internal reliability) 0 (non-internal reliability).Bryman in 2012 highlighted that level 0.7 to o.9 is considered acceptable value (Wahyuni, 2012). In the present study, the value of Alpha was .953 which showed high consistency of variables.

Table 4.2 Reliability Statistics

N	Cronbach's Alpha	No of items
298	.953	25

Construct reliability to the degree to which a set of factors (constructs) stability and consistency reflect a given factors (Vu & Huan, 2016). Tables 4.2 showed the Cronbach's alpha value of each construct which were used in the research model. All these variables reliabilities values are entered in the below table 4.2.

Table 4.3 Variables Reliabilities

Items	Cronbach's Alpha	No of Items
Customer Satisfaction	.823	6
Operational Benefit	.767	5
Knowledge Management	.859	5
Technological Readiness	.870	5
Top Management Support	.854	4
Total		25

Sources SPSS

In the **(**Bryman & Bell, 2011**)** point of view if someone wants to measure of a concept in a study basically that actually concept validity refers. The present research work was also quantitative in nature so there was also used a construct validity. In present study constructed 5 factors (Components) and applying KMO and Bartlett's test and their KMO values were greater than 0.5 so they were acceptable. The P-value (Bartlett's Significance) in the present study was .000 it's meant the items were valid, showed the results of these constructs in Table 4.4 below.

Table 4.4 Validity through KMO and Bartlett's Test

Constructs	NO. Of Items	KMO Measure of Sampling Adequacy	Bartlett's Test of Sphericity Chi	Square Bartlett's test of Sphericity Sig.
Customer Satisfaction	6	.731	1.252E3	.000
Operational Benefit	5	.797	365.479	.000
Knowledge management	5	.867	582.374	.000
Technological Readiness	5	.87 4	621.094	.000
Top Management Support	4	.825	479.294	.000

Extraction Method: Principal Component Analysis In the present study the variance percentage of constructs are given in the below table in which Customer Satisfactions is 55.806 %, Operational Benefit is 52.919 %, Knowledge Management is 64.321 %, Technological Readiness is 65.887 %, Top Management Support is 69.941 %.

Table 4.5   Eigen Values and Total Variance Explained

Constructs	Components	Initial Eigen Values		
		Total	% of Variance explained	Cumulative % of Variance explained
Customer satisfactions	1	3.348	55.806	55.806
Operational Benefit	1	2.646	52.919	52.919
Knowledge Management	1	3.216	64.321	64.321
Technological Readiness	1	3.294	65.887	65.887
Top Management Support	1	2.798	69.941	69.941

Correlation Analysis

Pearson correlation test was applied in the present study because we have been used scale variables and all its assumptions have fulfilled (Mayer, 2015). In the present study to determine the relationship between variables correlation test applies with help of SPSS. The Pearson's was calculated which value r was greater than 0.7 and Pearson's r positive + sign showed that there was positive relationship.

Table 4.6 Correlation Analysis

	Variables				
	Customer satisfaction	Operational Benefit	Knowledge Management	Technological Readiness	Top Management Support
1.Pearson Correlation Sig. (2-tailed) N	1 280	.814** .000 280	.669** .000 280	.644** .000 280	.587** .000 280
2.Pearson Correlation Sig. (2-tailed) N	.814** .000 280	1 280	.694** .000 280	.658** .000 280	.593** .000 280
3.Pearson Correlation Sig. (2-tailed) N	.669** .000 280	.694** .000 280	1 280	.840** .000 280	.815** .000 280
4.Pearson Correlation Sig. (2-tailed) N	.644** .000 280	.658** .000 280	.840** .000 280	1 280	.876** .000 280
5.Pearson Correlation Sig. (2-tailed) N	.587** .000 280	.593** .000 280	.815** .000 280	.876** .000 280	1 280

**Correlation is Significant at the 0.01 level (2-tailed)
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H$_1$: The first variable value of correlation coefficient(r) is 0.587** shows that there is positive relationship between these two variables because the double stars with value shows the moderate relationship and further this relationship of variables are applied in research. The p value or 2 tailed values is .000 which is less than 0.05 which show that this hypothesis is accepted.

H$_2$: The relationship between operational management and students satisfactions also has positive relationship because correlation value of this variable is.593** and its two stars show moderate relationship. The significant value also supported this hypothesis because it is less than 0.05.

H$_3$: The customer relationship management factor knowledge management capability has positive relationship its correlation coefficient value is.815**. Its two stars shoe the moderate relationship between two variables. The significant value also supported this hypothesis because it is less than 0.05.

H$_4$:   The impact of CRM practice technological readiness has positive relationship after checking the correlation test because its correlation value is.876**. Its two stars and 2 tailed value show the acceptance of this hypothesis.

H$_5$: Top management support creates positive impact on students' satisfactions because its correlation coefficient value is.563**. Its significant value is .000 which is less than .05 so this means this hypothesis also acceptable.

Regression Analysis

In the present study used multiple regressions test to check the linear relationship between variables. Because in the present study Customer satisfaction was dependent variable and CRM was independent variable. The results of multiple regression analysis showed in the below table 4.7 and table 4.8.

Table 4.7 Multiple Regression Analysis

Regressor(Model)	Coefficient	Standard Error	t-Ratio
Constant		.034	.000
OM	.876**	.048	13.742
KM	.000	.070	1.678
TR	280	.080	1.295
TS	.876**	.074	.139

a. Dependent Variable: Customer Satisfaction.

Table4.8 Necessary Statistics

R2	Adj- R2	F-Statistics	Prob. (F- Statistics)
.687	.682	150.592	0.000

Predictors: (Constant), Top Management, operational Benefit, knowledge Management, Technology Readiness.
In the above table 4.8 the value of adjusted R^2 (.68) shows that all CRM factors like Operational Management, Knowledge Management, Technological readiness and Top Management Support explained 68% variation of Customer Satisfactions'. F test (F-Statistics=150.592, P-Value= 0.000) shows that joints effect of independent variables is Significant and it proves that the research model is good fit.
The below table indicates the dependent variable significantly well.   ANOVA table results are showed in the below table 4.9

Table4.9 ANOVA Table

Model	Sum of Squares	Df	Mean of Square	F	Sig.
Regression	191.551	4	47.888	150.592	.000
Residual	87.449	275	.318		
Total	279.000	279			

 b. Dependent Variable: Customer Satisfaction
a. Predictors: (Constant), Top Management, operational Benefit, knowledge Management, Technology Readiness

Table 4.10 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	Std. Error	Beta		
(Constant)	3.461E-17	.034		.000	1.000
Operational Management	.658	.048	.658	13.742	.000
knowledge Management	.117	.070	.117	1.678	.095
Technology Readiness	.104	.080	.104	1.295	.196
Top Management	.010	.074	.010	.139	.890

a. Dependent Variable: Customer Satisfaction.

In the above table Coefficient Error are the errors of the regression coefficients. For the constructing confidence intervals and testing hypothesis this Standard Error can use. In the above table standard error are .034, .048, .070, .080 and .074 of the including variables.

Discussion of Results or Findings

There were applied all the research necessary tests first of all to check the validity and reliability for the instrument consistency Cronbach's Alpha and KMO tests applied they showed the great value which was greater than 0.7 which means that instrument was corrected. For checking the correlation between students' satisfaction and each factor of the CRM technology, the results of Pearson correlation showed that there is a positive and significant correlation between each of the CRM factor (operational management, technological Readiness, Knowledge management and Top management support) and student's satisfaction. The first variable value of correlation coefficient(r) is 0.587** shows that there is positive relationship between these two variables because the double stars with value shows the moderate relationship and further this relationship of variables are applied in research. Correlation value of second variable is .593** and its two stars show moderate relationship. The significant value also supported this hypothesis because it is less than 0.05. The customer relationship management factor knowledge management capability has positive relationship its correlation coefficient value is .815**. CRM practice technological readiness has positive relationship after checking the correlation test because its correlation value is .876**. Top management support creates positive impact on students' satisfactions because its correlation coefficient value is .563**.

The research model in this study was supported because the adjusted R^2 value was .68 which was greater than 0.5 it indicated that research hypothesis accepted. The B-value of independent variables were Operational Management=0.65, knowledge Management=0.11, Technological Readiness=0.10 and Top Management support=0.01 which indicated a variance in how they individually influence the dependent variable students' satisfaction.

- **Hypothesis # 1**
  The results have proved that the H_1 has accepted. The first variable value of correlation coefficient(r) is 0.587** shows that there is positive relationship between these two variables because the double stars with value shows the moderate relationship and further this relationship of variables are applied in research. The p value or 2 tailed values is .000 which is less than 0.05.
- **Hypothesis # 2**
  It was observed that CRM operational performance has a positive impact on students' satisfaction which now proved true after testing and calculating the data. Correlation value of this variable is .593** and its two stars show moderate relationship.
- **Hypothesis # 3**
  In this research, it was expected that customer knowledge management has a positive impact on students' satisfaction. After applied all tests and analysis results the Correlation coefficient value of this hypothesis is .815**. Its two stars shoe the moderate relationship between two variables.
- **Hypothesis # 4**
  After statistical tests and results it has been cleared that technology is the basic requirement of the modern age. Correlation value is .876**. Its two stars and 2 tailed values show the acceptance of this hypothesis.
- **Hypothesis # 5**
  Correlation Coefficient value of H_5 is .563**. Its significant value is .000 which is less than .05.this means this hypothesis also acceptable.

Conclusions

All the independent variables have positive impact on the dependent variable (Students satisfaction). About 70% of the students are satisfied from the use of CRM technology in their universities. The results of research show that there is a bright future of CRM in Pakistan and Students also want to CRM technology program in their institutions. All the CRM practices like Knowledge Management, Operational Benefits, Top Managers involvement and Technological Readiness have positive effect on Students satisfaction. Results show that in the city of Lahore Pakistan universities used CRM practices for students' satisfaction and like other countries of the world customer satisfaction is the core purpose of every institution.

The tests applied in this research all gave positive relationship between dependent variable and all independent variables. There were 128 males' respondents (45.7%) took part and gave their views and 152 (54.3%) respondents were females. In the present study instrument consists on the 25 items and the resulting data gathered from the 280 respondents they were subjected to Cronbach's Alpha test. The statistical reliability from the result reflects α value= 0.953. In the table standard error are .034, .048, .070, .080 and .074 of the including variables. The Beta values in the table of every factor show that how much this factor affected the constant variable. The value of adjusted R^2 (.68) shows that all CRM factors like Operational Management, Knowledge Management, Technological readiness and Top Management Support explained 68% variation of Customer Satisfactions'. F test (F-Statistics=150.592, P-Value= 0.000) shows that joints effect of independent variables is Significant and it proves that the research model is good fit.

Recommendations

From all getting results it has been cleared that students have little knowledge about CRM but they do not have sufficient knowledge about this technology. In many institutions, they are using CRM program but they do not give view about this to the students. In the modern era technology is the basic requirement in every field of life, so for the success technologies must be implemented in the organizations in proper way. Every institution should give brief information to the students that there is a special technique for their satisfaction and the way through which they can convey their complaints and can clear their confused points regarding management or studies. In educational institutions CRM is a great tool for managing the prospects (future students) because with this technology universities can get day by day feedback from the modern students and try to follow this new trend.

Future Study

The current era is considered as a technological era where everything is going to be electronically and automatically. The whole world depends on the technology and everyone consider technologies the basic need and part of successful and social life. Educational trend has also changed with the passage of time, now students rely on modern technology. Everyone believes that technology has positive as well as negative impacts on students' learning process as in this study some technological factors has discussed with the reference of CRM concept. It is suggesting for the future study to check the other technological factors' impact on students learning level that whether the other technological factors have positive impact or negative impact on students' learning behavior. It is also a considerable point that either modern technologies like social media, face book, WhatsApp and Gmail etc has increased the students learning capability or they have disturbed the students learning capability.

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