

# Customer Relationship Management At Jordan University of Science and Technology: Case Study, Issues and Recommendations

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**Abstract**—One of the purposes of information systems is to increase the customer and supplier intimacy. Therefore, different types of organizations work on achieving this objective to be able to compete in the market. In other words, the organizations aware of the phrase "Customer comes first". Customer relationship management means being able to build up a strong, long-lasting relationship with customers. Universities are a form of organizations that need to enhance their relation with customers. Thus, the universities invested heavily in information systems for that purpose. This research paper presented the CRM system and its components in Jordan University of Science and Technology. This study analyzes the JUST's CRM and the related collected data. Eventually, set of recommendations are proposed in order to enhance the CRM at JUST. This research proposes set of recommendations that if followed will increase the effectiveness of the CRM at JUST. Especially, the study involves different components of the JUST's CRM system.

**Keywords**—*Costmer Relatinship Managemnt; CRM; University CRM; education*

## I. INTRODUCTION

A lot of students in any university complain about how their university is the worst university in the world, they don't like the staff there and how the academic staff is always not understanding, and the students are being mistreated from most of the employees and how the things that are done in their university is time wasting or useless.

From this point of view a study was made about this problem to see the percentage of student satisfaction of the university, because any university is considered a non-profit business with customers. As a business the most important thing is the customer and how to attract them to our products or services and their satisfaction. I would like to propose a Customer Relationship Management (CRM) based framework that handles the customers at Jordan University of Science and Technology (J.U.S.T).

CRM is a corporate wide approach to understanding customer behavior, influencing it through continuous relevant communication and developing long-term relationships to enhance customer loyalty, acquisition, retention, and profitability [1].

### A. Business Background

Businesses in general have two types, profit and non-profit. Profit organizations are focusing on how to make money which is their goal by decreasing their costs and using IT to achieve this goal. In non-profit organizations such as a university, it focuses on education and civilization to produce specialized students to compete with other national, regional and international universities.

Regardless of the business type, in every business there is an organizational structure, culture, strategy & business model to achieve business goals.

In this case I'll be focusing on non-profit organizations.

### B. Business in J.U.S.T:

As mentioned in the section above, our university is a non-profit organization, it is a student oriented organization which competes with other national universities to produce the most qualified students, which can compete in the labor market. student of this university have commonly experienced some problems, the root of these problems is the lack of management & a good feedback system that is missed. Realizing these problems and wanting to eliminate them, I've came up with a Customer Relationship Management (CRM) framework.

### C. Research Motivation

The main motivation of this research is to enhance the level of the services that are offered to the faculty, student, and staff at JUST. During the last 2 years, major development happened

to the information systems at JUST, especially the one that are related to the students' service, but the CRM at JUST still not mature when it is compared with similar institute. Therefore, the study is organized to raise up the level of the services that are provided to the customers of JUST (e.g. faculty, staff, student). This study concerned mainly with student's services.

*D. Research Scope*

The developed framework is going to handle the relationship of JUST with its most important type of customer whose are the students. This research goes over the students problems, students issues, and to propose solutions for different students' problems. The main concentration of this research is to work on the criteria that could be adopted by JUST to strengthen its relationship with the students. This can be done, only, though using a well-structured CRM systems.

*E. Research Constraints*

As an individual, amount of data that I have had problems with collecting and verifying, some for its inexistence and the culture and mentality of people to collect from.

**F. Objectives of research**

Proposing and designing a CRM-based framework to enhance the relationship of J.U.S.T with its students and how JUST can easily handle students' issues by building a well-designed CRM systems that is able to provide single view of its customers.

**II. CURRENT SYSTEM**

According to the educational cycle of every student that finishes high school, he/she will go through the following processes as explained in figure 1:

- Registration process, which includes major selection and health inspection, after successfully completing, the student well receive and/or be eligible for Student ID, health insurance, university map, academic plan, ability to register courses, online web services, ability to use university services and utilities, like cafeteria, gymnasium, health care center, open labs and wireless internet connections, financial loans and other extracurricular activities.
- Educational process, where the student takes courses that are relevant to his/her major and elective courses according to the study plan. The student will interact with several actors at JUST (e.g. Class rooms and halls, Academic members, Labs, Library, Educational trips,
- Graduation process which starts after successfully completing the study plan. This includes several activities (e.g. Ending financials, with the universities, Receiving certificate, Applying for graduate studies or work).

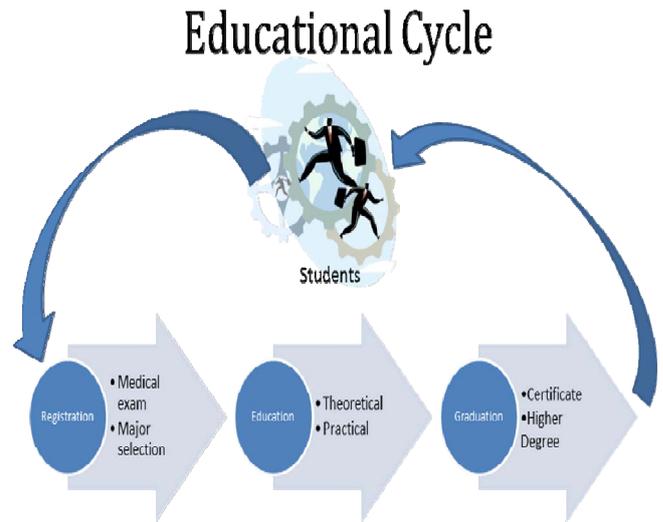


Fig. 1. The Educational Cycle at JUST

The educational cycle is handled by J.U.S.T organizational structure:

- Deanship of Student Affairs, it is highly responsible for the registration process above and to some point the Educational process and Graduation process. It's responsibility is held by its components (i.e. Registration Department, Financial Department, Student's Activities, extracurricular activities, Health Care Center, Library, Cafeteria, transportation).
- Deanship of Graduate Studies & Research that it is responsible of the Graduate students. It is responsible for Accepting students for graduate studies, Encouraging research, ..., etc.
- All other Faculties at the university. they are highly responsible for the Educational process. This is done by educating the students, providing consultation to students, and providing enough resources to the students.

After knowing the organizational structure we can now look at the weaknesses.

- Queuing
- Scheduling
- Maps and tags
- Misunderstanding between the students and J.U.S.T personal
- Misusage of J.U.S.T resources

III. THE RESEARCH SURVEY:

To verify the weakness above, a survey was made and filled out by a random sample of J.U.S.T students from different majors and year acceptance. The sample size is 1250 male and female students.

The survey contains the following parts:

- Student satisfaction of J.U.S.T management.
- Student satisfaction with J.U.S.T current services
- New needed services

the results of the survey are shown in figures 2, 3, 4, and 5.

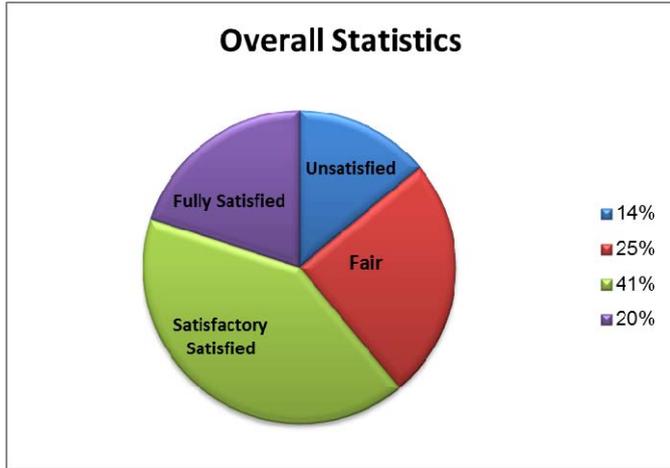


Fig. 2. Overall statistics



Fig. 3. Management statistics

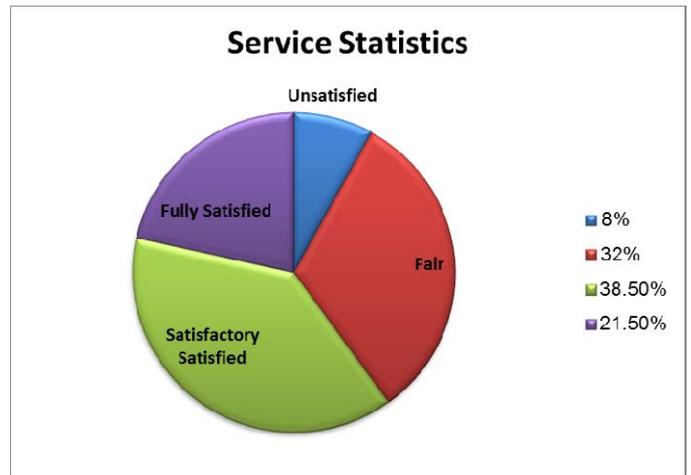


Fig. 4. Service Statistics

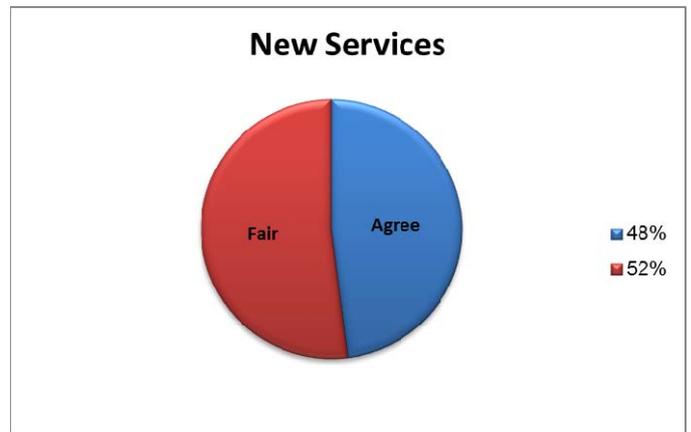


Fig. 5. New Needed Services

IV. HISTORY OF CRM

Customer relationship management is a concept that became very popular during the 1990s. It offered long term changes and benefits to businesses that chose to use it. The reason for this is because it allowed companies to interact with their customers on a whole new level. While CRM is excellent in the long term, those who are looking for short term results may not see much progress [2].

One of the reasons for this is because it was difficult to effectively track customers and their purchases. It is also important to realize that large companies were responsible for processing tremendous amounts of data. This data needed to be updated on a consistent basis.

In the last few years, a number of changes have been made to Customer relationship management that has allowed it to advance. These capabilities have allowed CRM to become the system that was once envisioned by those who created it. However, the biggest problem with these newer systems is the price. A number of personalized Internet tools have been introduced to the market, and these have driven down the cost of competition. While this may be a bane for vendors who are selling expensive systems, it is a bonanza for small companies

that would otherwise not be able to afford CRM programs. The foundation for CRM was laid during the 1980s [4-5].

During this time, it was referred to as being database marketing. The term "database marketing" was used to refer to the procedure of creating customer focus groups that could be used to speak to some of the customers of the company. The clients who were extremely valued were pivotal in communicating with the firm, but the process became quite repetitive, and the information that was collected via surveys did not give the company a great of information. Even though the company could collect data through surveys, they did not have efficient methods of processing and analyzing the information. As time went on, companies begin to realize that all they really needed was basic information. They needed to know what their customer purchased, how much they spent, and what did with the products they purchased.

The 1990s saw the introduction of a number of advances in this system. It was during this time that term Customer relationship management was introduced. Unlike previous customer relationship systems, CRM was a dual system. Instead of merely gathering information for the purpose of using for their own benefit, companies started giving back to the customers they served [6]. Many companies would begin giving their customers gifts in the form of discounts, perks, or even money. The companies believed that doing this would allow them to build a sense of loyalty in those who brought their products.

Customer relationship management is the system that is responsible for introducing things such as frequent flyer gifts and credit card points. Before CRM, this was rarely done. Customers would simply buy from the company, and little was done to maintain their relationship [7]. Before the introduction of CRM, many companies, especially those that were in the Fortune 500 category, didn't feel the need to cater to the company. In the minds of the executives, they have tremendous resources and could replace customers whenever it became necessary. While this may have worked prior to the 1980s, the introduction of the Information Age allowed people to make better decisions about which companies they would buy from, and global competition made it easier for them to switch if they were not happy with the service they were getting [8].

Today, CRM is being used to achieve the best of both worlds. Companies want to maintain strong relationships with their clients while simultaneously increasing their profits. The CRM systems of today could be called "true" CRM systems. They have become the systems that were originally envisioned by the pioneers of this paradigm. Software companies have continued to release advanced software programs that can be customized to suit the needs of companies that compete in a variety of different industries. Instead of being static, the information processed within modern CRM systems is dynamic[9-10]. This is important, because we live in a world that is constantly changing, and an organization that wants to succeed must constantly be ready to adapt to these changes.

## V. CRM CHALLENGES:

Despite the benefits, many companies are still not fully leveraging these tools and services to align marketing, sales, and service to best serve the enterprise.[3]

Tools and workflows can be complex to implement, especially for large enterprises. Previously these tools were generally limited to contact management: monitoring and recording interactions and communications. Software solutions then expanded to embrace deal tracking, territories, opportunities, and at the sales pipeline itself. Next came the advent of tools for other client-facing business functions, as described below. These technologies have been, and still are, offered as on-premises software that companies purchase and run on their own IT infrastructure.

Often, implementations are fragmented; isolated initiatives by individual departments to address their own needs. Systems that start disunited usually stay that way: siloed thinking and decision processes frequently lead to separate and incompatible systems, and dysfunctional processes.

## VI. CRM TYPES & VARIATIONS:

- Sales force automation
- Marketing
- Customer service and support
- Analytics
- Integrated/collaborative
- Small business
- Social media
- Non-profit and membership-based

Before moving to the CRM process we need to find out who are the customers of J.U.S.T.

The main customers of J.U.S.T are the students; regardless of being international or national students. Other customers are the employees in J.U.S.T; administrative or academic or other personnel like the security and janitors.

The model that is going to be used is a customer centric model, which means treating every customer as the only customer. This model work great when having thousands or millions of customers [13].

## VII. CRM PROCESSES

- Interacting: interaction between the customers & J.U.S.T
- Learning: collecting information about customers.
- Analysis: analyzing customer information & build value relationships

- Planning: developing a plan & strategies to meet customers' requirements.

*A. Interacting:*

A dialog between a customer and an organization consists of a series of transactions and interactions and may take several forms. A transaction may be a web-based transaction or a service request done face to face. An interaction may also include the learning process; the communication that goes back and forth between the students and the instructor. Each transaction or interaction represents an opportunity to build and develop a relationship with a customer.

It is very important to develop and maintain relationships with the customer by collecting information, events, incidents, transactions & interaction. After having all of those, the organization can form a good relationship with customers which lead to:

- Reduced costs
- Improvement in service level
- Customer satisfaction.

*B. Learning:*

Learning to apply the knowledge gained from analyzing customer behavior and applying this knowledge to interaction points between the customer and J.U.S.T. in this stage, ongoing procedures for maintaining customer contact are established to enhance customer relationship.

*C. Analyzing*

Analyzing customer behavior means applying insight to create relevant interactions that build valued relationships. This is a stage where market planning comes in and where marketing campaigns are initiated to build value for customers. Offering a customer something of value emphasizes a desire to retain that customer. This knowledge is a fundamental requirement to marketing strategies that treat each customer as an individual and can be achieved through constant analysis of the customer's transaction activity [12].

*D. Planning:*

A fourth important stage in the CRM process is planning the market strategies that evolve from knowing the customers, their patterns and lifestyles.

These four fundamental aspects of maintaining relationships with the knowledgeable customer of today are the basis for a formalization of a customer relationship strategy [14]. On each of these fronts, organizations need to position themselves to gather customer information, store it, and then use the appropriate technology tools to access this information and apply it to manage each and every customer relationship.

One-to-one customer relationships are strengthened by monitoring the individual transaction stream to understand behavior and detect significant changes that lead to the need for a customer dialog. The transaction stream can be used to accurately assess the value of each relationship. Transactions

can be viewed from different aspects to provide a consistent, holistic picture by segment or channel. Understanding the customer and the data can enable privacy policies to be implemented, including treating each customer according to his or her individual privacy preferences.



Fig. 6. The General Approach of SRM

VIII. TOOLS TO SUPPORT CRM:

It is important to choose the right technology tools to support a CRM solution. Technologies that directly support CRM, and other technologies that furnish indirect support, such as wireless, voice-over-IP (VoIP), and e-mail-based Internet communications, have evolved to the point of providing many more

channels for customer interaction. Business tools that support CRM include:

- Customer contact software
- Marketing campaign programs
- Channel integration
- Product literature

The IT department plays a very prominent role in the development, implementation, and support of a CRM solution because of the various technology tools involved, which need to be selected, analyzed, and acquired. It is important that these tools be seamlessly integrated into the IT environment.

This aspect of the CRM strategy requires a formal plan to manage the selection of the tools — from data warehouse and database software to the business applications and processes.

IX. CUSTOMER VALUE:

Transforming customer knowledge into customer value can create a significant competitive advantage. For example, when high-value customers are identified, and their needs anticipated, new value is created for them where it did not exist before. Ultimately, customer-centric organizations build customer loyalty.

X. THE PROPOSED FRAMEWORK

Improved service, loyalty, and customer retention, better profiling and targeting, and reduce expenses. Figure 7 provides the framework of the suggested CRM at JUST.

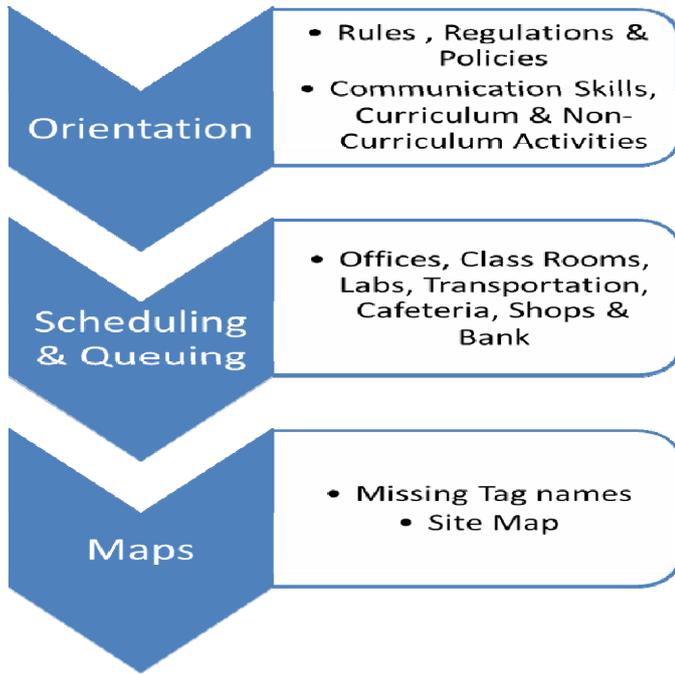


Fig. 7. The proposed CRM framework

XI. CONCLUSION AND FURTHER DIRECTIONS:

By the end of this research, defining the old system weaknesses and strength points, enhancing the old system and replacing it with a new CRM-based framework by a system design that is supposed to help in assessing the quality of the different kinds of services that are provided to the students. The researchers in the future can pursue this work by doing one or more of the following:

- Implementation of this purposed framework.

- Survey for the administrative parties
- Testing of such system by using real data
- Study the abilities to deploy the system in J.U.S.T and other governmental universities.

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