Providing a model for pathology customer relationship management strategy (CRM) in adaptive enterprise business

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Publication history: Received on 07 September 2020; revised on 20 September 2020; accepted on 22 September 2020

Article DOI: https://doi.org/10.30574/wjarr.2020.7.3.0343

Abstract

Customer relationship management is one of the most important strategies that enables the organization to achieve its goals through long-term, profitable relationships with its customers. But many organizations are struggling to realize this strategy. Having a long-term perspective requires that organizations with a strategic approach to the topic seek pathology and address the problems associated with the incorrect use of this strategy.

This research, which is an attempt to solve this problem, presents a comprehensive CRM pathology model using an adaptive approach. For this purpose, the main factors and sub factors influencing the realization of CRM strategy were determined by descriptive method and using interviews and questionnaires as measuring tools and categorization. Then, using confirmatory factor analysis and T Student and Friedman tests with SPSS software, the accuracy and effectiveness of these factors and their ranking were verified. Finally, by matching the research results, a conceptual-innovative model was presented to help organizations recognize, pay close attention to and accurately address these factors in helping to realize the CRM strategy.

Keywords: Customer Relationship Management; customer agents; pathology.

1. Introduction

Most organizations consider customer relationship management as an important solution to their problems, which should be considered as a specific strategy aimed at establishing long term relationships with customers. In today's businesses, customer satisfaction has an important place in organizational goals and organizations have no choice but to pay close attention to the strategy of customer relationship management to achieve this goal.
This has led to a change in the organization's approach and, by passing the traditional form, introduces new concepts in the field of consumerism and marketing [1]. Over the years, customer relationship management has become an important organizational issue. Although the meaningful use of this term has come back to the last two decades, its principles have long been established [2].

The rapid growth of the Internet and related technologies has significantly increased the opportunities for marketing, and the ways to communicate with the customer have also changed [3]. Although CRM is widely recognized as an important business method, there is no accepted and unified definition of it [4]. Sometimes it is referred to as a business strategy for selecting and managing the most valuable communications with customers [5].

Customer relationship management can be defined as an "organizational approach to influencing customer behavior through effective communication, in order to improve customer uptake, customer retention, customer loyalty, and customer profitability [6]. CRM is also described as "strategic use of information, processes, technology and individuals to manage customer relationships [7]. According to these definitions, it can be seen that the experts classify customer relationship management in four general categories with the titles of strategy, technology, process, system or project [1].

These definitions emphasize the importance of considering CRM as a comprehensive customer acquisition and retention process to maximize customer value for the organization. Correct management of communication with customers will result in their satisfaction with the various affairs of the organization [8]. Establishing a proper relationship with customers will increase customer satisfaction, increase their loyalty and increase their competitiveness, and increase the average profitability [9].

Hence, different organizations require that they pay more attention to customer relationship management, considering their external and internal environment and the needs of their customers. Researchers believe that the rate of damage or failure rate of the customer relationship management strategy is more than sixty to seventy percent, which is a very high rate of funding [10].

Various issues such as startup costs, tools, and intercessional collaboration are issues that are known as CRM operational damage [5]. Sometimes, the difficulty of training employees is one of the issues that affects customer relationship management and is a major contributor to injury and failure [11]. Nevertheless, the importance and position of customers for the organization and their expectations are such that organizations, despite the high level of damage in implementing CRM strategy, still have a great desire to implement customer relationship management. In some studies in this area, although various factors have been mentioned as harmful or effective factors on strategy, yet a comprehensive model has not been provided on the pathology of factors and underlying factors influencing this strategy. In fact, this research is working to overcome this shortcoming and seek to answer this fundamental question: What are the main factors that can be harmful to the implementation of CRM in the organization?

2. Literature of study

The purpose of the present study is to present a conceptual model based on the pathology approach, to determine and categorize the factors and sub factors influencing the failure or success of the CRM strategy. It has also been attempted to review and present some of the concepts, commonly used concepts and terminology in this field.

In research related to customer relationship management and evaluation of CRM programs, about 60% to 80% of the implementation of this strategy in the organization is not successful Despite such a high failure rate, the answer to the question is, "What is the reason for the failure of CRM projects, with this high rate? "It will be of great importance”. In relation to customer relationship management, the history of the emergence of topics and issues related to the field of CRM in three periods, the Industrial Revolution (manual production to mass production), the quality revolution (mass production to continuous improvement) and the customer revolution (continuous improvement to Mass ordering) [12].

Since many customer relationship management projects are software-driven and to a large extent deal with software issues, in general, the main reasons for the failure of many customer relationship management software projects have been related issues such as weaknesses Users, obscure needs and desires, uncertainty estimation for cost and time, inconsistency in skills, hidden costs, design failure and communication classification, weak architecture, and late delays in failure declaration [13].
Inappropriate selection of target markets, poor market position, lack of distinctive capacities for inappropriate understanding, and the lack of balance between attracting new customers and retaining current customers are among the issues that challenge CRM in organizations and even fail [14]. Also, factors such as system users and their problems, processes used by the system and the rate of change, system owners, and the need for decentralization and budgetary issues, as some of these issues, have been introduced [15]. On the other hand, issues such as lack of proper and timely implementation of the program, inappropriate operational allocations, timely inefficiencies, undesirable infrastructure, and low education are recognized as effective in the success of the customer relationship management strategy [16].

On the other hand, problems and mistakes in two main areas of customer relationship management, is product and product errors, and process, and process errors and process problems, are also considered as two of the most important issues affecting the failure of customer relationship management systems [17]. Also, issues such as the lack of design of customer-centric techniques, the neglect of the human resources in customer relationship management, the resistance of the set against the changes and misconceptions about the system, have been introduced as some of the most important factors and reasons for the failure of customer relationship management processes.

In general, strategic errors in developing customer relationship management processes and executive and methodological errors in implementing this strategy can be highlighted as the most important factors affecting CRM strategy [18]. Customer Relationship Management includes a set of methodologies, processes, software and systems that help organizations, institutions and companies communicate effectively and well-organized with their customers and manage the relationship [19].

The set of these activities is carried out to achieve a specific goal, which is to create an appropriate and effective relationship with customers. Now, if these activities are in the form of a strategy for effective communication with customers, the strategy will be CRM. When a strategy fails to meet the organization’s intended goals and helps the organization to achieve those goals, it is said that the strategy has failed or failed [20]. Hence, the failure of customer relationship management will result in these strategies failing to achieve the desired goals of their implementation at a given time. Usually, failure to implement any strategy or system is a factor in a number of factors. Factors are referred to as those that can understand their environment through sensors and act on their environment through actors [21]. Customer relationship management is no exception. This means that a number of factors are unsuccessful in implementing this effective and effective strategy.

This study tries to determine the main and critical factors affecting the implementation of this strategy by carefully examining the issue and using the views and views of senior managers and experts in the field of strategic planning of the headquarters of the Ministry of Health and Medical Education, along with the pathology of CRM strategy. By using these results with the results of previous research conducted by the researchers, this study provides a comprehensive and appropriate model for these factors. Table 1 summarizes some of the studies and its results in relation to the subject of the present research.

Table 1 Some of related research and studies to the subject

| Research Title                                                                 | Year  | Researcher’s Name            |
|-------------------------------------------------------------------------------|-------|-----------------------------|
| Important factors in the success of customer relationship management strategy | 2007  | Mendoza& et al              |
| Classification success factors of CRM                                         | 2009  | Almotairi                   |
| Affective commitment to change: the key to successful implementation of CRM    | 2008  | Shum & et al                |
| Network of Customer Relationship Management: A new method for studying CRM    | 2002  | Sathish & et al             |
| CRM maturity scale                                                            | 2002  | Imhoff                      |
| Critical success factors in the implementation of customer relationship management | 2008  | Kavosh & et al              |
| Recognition of Customer Relationship Management: people, process and technology | 2003  | Chen & Popovich,            |
| Critical review of success factors in the implementation of customer relationship management | 2012  | Vazivedust & et al          |
| Dynamics of Competence of CEO in respect of professional services organization | 2002  | Skaates & Seppanen          |
| Implementation of customer relationship management: A case study of two services | 2005  | Loria & Obeng               |
| Title                                                                 | Year   | Author(s)                      |
|----------------------------------------------------------------------|--------|--------------------------------|
| Identify and prioritize the factors affecting the implementation of CRM in the edible oil industry | 2012   | Mohebi & et al                 |
| Empirical study to identify CSF in customer relationship management (CRM): A case study of the distribution of petroleum products | 2011   | Zahedi & et al                 |
| Analyze the impact of knowledge management in success of CRM: mediating effect of organizational factors | 2011   | Moreno & Melendez             |
| Practical problems in the implementation of customer relationship management | 2001   | Ryals & Knox                   |
| Antecedents and consequences of customer-oriented marketing           | 2002   | Sheth & et al                  |
| Customer Management Scorecard: Managing CRM for Profit                | 2003   | Woodcock & et al               |
| Relationship management evaluation tool: the question of identifying and prioritizing critical aspects of customer relations | 2006   | Lindgreen & et al             |
| The key to successful implementation of CRM                           | 2001   | Chang                          |
| Customer behavior training                                           | 2005   | Ahmed                          |
| The role of risk management in IT organizations                       | 2011   | Tohidi                         |
| Customer-oriented business processes                                   | 2004   | Bolton                         |
| A multi-layered approach to implementing CRM: Integration perspective | 2010   | Finnegan & Currie              |
| Ten critical success factors for CRM                                   | 2006   | Mankoff                        |
| Customer Relationship Management: Finding the factors of Value         | 2008   | Richards & Jones               |
| Implement CRM using fuzzy logic (Case Study: National Iranian Gas Company) | 2012   | Safavi Mirmahalleh & et al     |
| KM capabilities in CRM: Creating Knowledge for customers               | 2005   | Dous & et al                   |
| Leading innovation and improving the capabilities of staff: the effect of customer knowledge sharing in CRM | 2007   | Shi & Yip                      |
| Knowledge based CRM                                                    | 2008   | Lambe                          |
| CRM: the scale concept and development                                 | 2005   | Sin & et al                    |
| Beyond the Red Queen Syndrome: CRM technology and suppliers of building materials engineering | 2009   | Love & et al                   |
| CRM joint pin functionality                                           | 2002   | Brown & Gulycz                 |
| Tools for Customer Relationship Management                             | 2006   | Chalmeta                       |
| Critical factors and benefits of the implementation of customer relationship management | 2007   | Chang                          |
| Marketing strategy with the introduction of customer relationship management in financial institutions | 2009   | Yamaguchi                      |
| Checking Success factors for CRM                                      | 2010   | Arab & et al                   |

Although the research references in the table above and many other researches have been conducted on the subject of this study, these studies have only theoretically referred to the factors affecting the implementation of the customer relationship management strategy, and yet, a comprehensive classification for the identification of the factors that has a full agreement on it has not been provided. This study has been conducted to identify, assess and conclude the factors, pathology the CRM strategy in organization, by the research method which will be mentioned below, and by matching them with previous research using, presents a comprehensive model. To perform this study, five hypotheses considered that are:
• First hypothesis: There is a meaningful relationship between the implementation process and the strategy of customer relationship management in organizations.
• Second hypothesis: There is a significant relationship between technology and customer relationship management strategy in organizations.
• Hypothesis 3: There is a significant relationship between organizational culture and customer relationship management strategy in organizations.
• Fourth hypothesis: There is a significant relationship between organizational management and customer relationship management strategy in organizations.
• Fifth hypothesis: There is a significant relationship between financial resources and budget, and the strategy of customer relationship management in organizations.

3. Methods

In the present study, the purpose of the criterion is to investigate the applied and analytical method and the method of collecting data and information, descriptive research and specifically survey type. Also, as a result of pathology and determining the factors influencing the implementation of CRM strategy in organizations, a descriptive-survey research method has been used for the formulation and classification of these factors, and an adaptive approach has been used to provide conceptual-innovative model and its results will be used by all organizations seeking to improve their organizational conditions through the implementation of CRM strategy. The following steps are followed for this study:

In the first step, library reviews and reviews were conducted using various sources such as books, articles, internet sites and relevant and relevant theses for collecting research concepts and literature. In fact, at this stage, information was collected using library and electronic resources and used during the research process.

In the second step, the research step of the research was conducted through interviewing experts, senior managers related to the subject from two areas of strategic planning and customer orientation, using interviews and qualitative questionnaires. At this stage of the study, using different qualitative interviews, various factors were damaged by the customer relationship management strategy. This interview was conducted with key people in the research community including key specialists and managers and faculty guides related to Customer Relationship Management Strategy. Then, by summarizing their comments and comparing them with the studies and researches carried out in this field, the main causes of the damage to the enterprise business were determined. At this stage, an innovative conceptual model was designed for these factors and the underlying factors.

In the third step, using the main determinants effective in implementing CRM strategy, the main questionnaire was provided. Finally, using the views and opinions of experts, managers, consultants and specialists in the field of strategic management of customer relationship management in the field of this research, these damaging cases were investigated. In the fourth stage, the information obtained from the questionnaire was analyzed and the results were determined. Then, these results were compared and compared with previous research. Finally, the final results were presented in the form of a conceptual-proposed innovative model presented in Fig 1.

In this research, a questionnaire was used to measure the questionnaires. After the initial interview with a part (15%) of the statistical population of the study including senior managers of the strategic area of the organization, then, 30% of the population were divided into the statistical population, Party. After this stage, the validity of the questionnaire was reviewed by the professors of the university and the final confirmation was completed. The final version of the questionnaire was prepared and the validity of the questionnaire was confirmed.
The research questionnaire consists of three parts. In the questions section, 25 questions were used by Likert scale and 5-point scale scales. A total of 57 questionnaires were distributed among the statistical population of the study. A total of 52 questionnaires were returned and 50 of them were usable and exploitable. The validity of the questionnaire was also confirmed by Cronbach's alpha method using SPSS software. The alpha value obtained for the prepared questionnaire is 79.6%, which is considered as a desirable statistic and indicates the reliability of the questionnaire and the research before.

In this research, a study was conducted on a group of senior executives, experts and strategic field experts in implementing customer relationship management strategy at the headquarters of the Ministry of Health and Medical Education. In fact, this study evaluates the views and attitudes of the managers and staff of the Ministry of Health, Medical Education and Medical Education on the factors affecting the implementation of CRM strategy. Therefore, the statistical population of the study is all managers, experts, consultants and experts in the field of strategic planning related to implementing customer relationship management strategy at the headquarters of the Ministry of Health and Medical Education. This means that because of the pathology that influences the implementation of CRM strategy, it is necessary that everyone involved in the strategic and customer-oriented organization areas be investigated.

In this research, the total population of the population is 57 people. To determine the number of statistical samples, the method presented by Parker and Henry (1990) was used. In this method, if the total number of statistical population is less than 200, that is, \( N < 200 \) and 95% confidence, 95% \( e = 95% \) respectively, with a margin of error of 3%, ie \( r = 3\% \), then the minimum number of Sampling is equal to the whole community, ie \( N^* = N = n \).

In fact, in the model proposed by Parker and Henry, if the total population of the sample for surveying is less than 200, the entire community should be sampled and surveyed [22]. In this study, the total number of people in the statistical society is less than 200 cases and equals about 50 people, as a result, the number of statistical samples is equal to the total population of the statistical population, namely 57. Therefore, no sampling was performed and analysis was performed on all data.

In the research questionnaire, a Likert scale has been used. Because of the lack of information on variance and standard deviation of statistical society, statistical analysis of nonparametric statistical techniques has been used. Confirmatory factor analysis was used to determine the factors and factors behind the damage. In order to improve the relationships between variables and factors and to apply special transformations on them, factor era (factor rotation method) was used to confirm the factor analysis. In fact, this part of the factor analysis has been used to confirm that there is a relationship between the identified factors and each of them that affects the impact of the customer relationship management strategy, with a specific subset of the variables. Confirmatory factor analysis has been done for this purpose. Since the purpose of the research is to determine the factors and the main factors affecting the failure of the customer relationship management strategy, after determining these factors using expert opinion and opinion, the confirmatory factor analysis of these factors and the improvement of the relationship between them have been used. At this point, the rotational factors of the factors are performed using the Varimax standard method.
Also, t-student test was used to confirm or reject the effects of the main damaging factors and Friedman test was used to analyze the variance of these factors in order to compare their average rating in implementing CRM strategy. The T-student and Friedman tests are used in situations where the standard deviation of the statistical population is not known and the sample size is more than 30 [23]. The formula for the T-Student test statistic is Formula 1:

\[
T = \frac{\bar{x} - \mu}{S_n / \sqrt{n}}
\]

In analyzing the data obtained from the open-ended questionnaire and open interview, the research hypotheses test has been analyzed and analyzed. The independent and dependent variables are summarized in Table 2:

| Dependent variables | Independent variable |
|---------------------|----------------------|
| Damaging factors and sub factors in the implementation of CRM strategy in organization business | Process Executive - Technology - Organizational Culture – Organization Management - Funding and Budget |

The factors and underlying causes of harm to the implementation of CRM strategy in the organization's business Executive process - Technology - Organizational culture - Organization management - Funding and budget.

4. Results

After collecting the information, the necessary analyzes were done on the data obtained from the questionnaires. Based on the obtained data and analysis, 50 respondents to the questionnaire were 37 men and 13 women. Of these, 15 are bachelor and 21 are masters and 14 are doctors. Among respondents to the questionnaire, 5 people with a work experience of under 5 years old, 17 with work experience of 5 to 10 years, 21 years of work experience between 10 and 15 years, 5 years of work experience from fifteen to twenty, over 20 years of work experience are.

Based on the information obtained from the second stage of the analysis of the research data, using the confirmatory factor analysis performed by the time period of the factors and the results are presented in the following table, among the factors raised in the research and failure of the management projects of the relationship with Customers and each of these factors have a meaningful relationship with a specific subset of the variables used in the questionnaire questions. For each of the operational, technological, cultural, managerial, and cost factors (v1, v2, v3, v4 and v5) with hidden variables, the same questionnaire questions (q1, q2 and q3 and q25), there is a meaningful relationship. Each of these factors has been examined with five hidden variables (the questionnaire question), respectively. Because in the factor analysis, the underlying assumption is that any factor associated with a particular subset of the variables is attempted to use the time period of the factors Significant relationships between factors and hidden variables of the research should be considered.

Significant numbers and standard coefficients were determined for each of the factors after the time period method. Since the significant number for all factors is greater than 1.96 and the standard coefficient for all of them is greater than 0.5, it can be stated that all factors determined by experts and exploratory factor analysis affect the failure of CRM projects. To be In fact, it can be concluded that due to the careful consideration and proper use of each of these factors, we can reduce the failure of customer relationship management projects. The results obtained from the aging test are presented in Table 3.
### Table 3: Results of the factor analysis, confirmatory factor

| Component (Varimax) | v1   | v2    | v3    | v4    | v5    | v1   | v2    | v3    | v4    | v5    | Sig.  |
|---------------------|------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| q1                  | .073 | .041  | -.070 | -.232 | .244  | .279 | .762  | .071  | .284  | -.111 | 2.998 |
| q2                  | .368 | -.286 | -.192 | .069  | -.004 | .774 | .099  | .027  | .105  | .194  |       |
| q3                  | .366 | -.182 | .031  | .042  | .615  | .366 | .034  | .199  | .045  | -.029 |       |
| q4                  | .618 | .276  | -.100 | .005  | .160  | .165 | .097  | -.017 | .536  | .026  |       |
| q5                  | -.056| .069  | .066  | .000  | -.023 | .045 | .157  | .129  | .863  | .009  |       |
| q6                  | -.174| -.037 | -.117 | -.023 | .472  | .127 | .221  | .189  | .184  | .577  | 1.981 |
| q7                  | .090 | -.043 | -.078 | .582  | -.098 | .063 | -.079 | .541  | .103  | .340  |       |
| q8                  | .115 | .287  | .208  | .367  | .179  | .081 | .383  | .626  | -.246 | -.199 |       |
| q9                  | -.144| .296  | .248  | .499  | .076  | .164 | .492  | .045  | .264  | .133  |       |
| q10                 | .772 | .204  | .051  | -.041 | -.075 | -.147| .257  | -.034 | .012  | -.131 |       |
| q11                 | .145 | -.073 | .823  | .003  | .068  | -.008| .137  | .033  | .039  | .236  | 3.025 |
| q12                 | .850 | -.015 | .215  | .018  | .090  | .103 | -.060 | .798  | -.214 | .097  |       |
| q13                 | .477 | .496  | .334  | .026  | .090  | .134 | -.140 | -.103 | .037  | .382  |       |
| q14                 | .003 | .807  | .198  | .237  | .040  | .021 | .032  | -.104 | .177  | .012  |       |
| q15                 | .197 | .338  | .775  | .077  | -.040 | .095 | -.006 | .056  | .003  | -.042 |       |
| q16                 | -.109| .238  | .116  | .076  | .309  | .714 | -.011 | -.066 | .142  | .034  |       |
| q17                 | -.015| .205  | .237  | -.019 | .167  | .699 | .138  | .005  | .313  | .364  | 2.106 |
| q18                 | .124 | .112  | .189  | .321  | -.038 | .152 | -.018 | -.010 | .211  | .778  |       |
| q19                 | -.212| .348  | .409  | -.072 | .193  | .154 | .099  | -.249 | .210  | .469  |       |
| q20                 | .109 | .442  | .607  | .386  | -.166 | -.023| -.096 | .128  | .538  | .034  |       |
| q21                 | .091 | .217  | .066  | .019  | .831  | .019 | -.012 | -.103 | .076  | .169  |       |
| q22                 | .437 | .382  | .278  | .346  | -.018 | .203 | -.318 | .165  | .087  | .166  | 1.966 |
| q23                 | .235 | .661  | .050  | -.102 | -.11  | .091 | .056  | .237  | -.410 | .292  |       |
| q24                 | .291 | .315  | -.028 | -.050 | .499  | -.302| .217  | .303  | -.051 | .333  |       |
| q25                 | -.061| .051  | .231  | .785  | -.106 | .098 | -.063 | .008  | .046  | -.094 |       |
| Sc.                 | 1.369| 0.707 | 2.345 | 0.692 | 1.10  | 1.629| 1.274 | 0.68  | 1.414 | 0.866 |       |
In analyzing the factors and the main factors of injury, in order to reject or confirm the factors determined by t-test and to analyze the variance of the factors, in order to compare the mean of their rankings in order to confirm the significance of the relationship by Friedman test and through the calculation of the test statistic SPSS software has been used to determine the pathology of these factors more confidently about the implementation of CRM strategy in the organization. Since the calculations have been done with SPSS software, the error margin and critical margin for it are precisely determined, which is also available through the critical tables of the t-test. Testing hypotheses 0 and 1 are used to confirm or reject the damaging factors. By setting the error level of 0.05 and the degree of freedom 34, the assumptions were made and made. Then, by quantifying the t-test for each factor, this value is compared with the critical value. The critical value is 2.015 from the t-table. The table and graph of the distribution of T-Student’s statistics to reject or accept the hypotheses of zero and one are shown in Table 4 and Fig. 2:

Table 4 The student t test statistics

| df | T .50 | T .75 | T .80 | T .85 | T .90 | T .95 |
|----|-------|-------|-------|-------|-------|-------|
| 1  | 0.000 | 1.000 | 1.376 | 1.963 | 3.078 | 6.314 |
| 2  | 0.000 | 0.816 | 1.061 | 1.386 | 1.886 | 2.920 |
| 3  | 0.000 | 0.765 | 0.978 | 1.250 | 1.638 | 2.323 |
| 4  | 0.000 | 0.741 | 0.941 | 1.190 | 1.533 | 2.132 |
| 5  | 0.000 | 0.727 | 0.920 | 1.156 | 1.476 | 2.015 |

The t-test for the executive process as one of the damaging factors in implementing the CRM strategy based on the information obtained with the alpha of 0.05 and the degree of freedom 34 by SPSS software is 9.186. Because the amount of calculated statistic is greater than the critical value of 2.015 and the amount of calculated statistic is not in the critical region, it is assumed to be acceptable.

That is, based on statistical analysis conducted at 95% confidence level, the implementation process is effective in implementing customer relationship management strategy. The amount of t-student’s test statistic for technology as an effective factor in implementing CRM strategy based on information obtained with the alpha of 0.05 and degree of freedom 34 by SPSS software is 8.206. As a result, with a critical mass of 2.015, at 95% confidence level, technology is effective in implementing CRM strategy. The t-student’s test statistic for organizational culture was determined based on the obtained data and with alpha -0.05 and degree of freedom 34 with SPSS software was 13.293. Because the calculated statistic is not critical and is higher than critical value, as a result, with a 95% confidence level, organizational culture is effective in implementing CRM strategy. The amount of t-test student test in the field of organizational management based on the obtained data and with alpha 0.05 and degree of freedom 34 using SPSS software is 8.711. Because the amount of statistics calculated is higher than the critical value of the table, which is 2.015, the result is that by accepting the assumption at 95% confidence level, the organization’s management will be effective in implementing the CRM strategy. The t-test student’s t-test for financial and budget options was also done by analysis. The alpha -0.05
and the degree of freedom 34 were determined by SPSS software (8.117). Because this value was also higher than the critical value of the T Statistics Table, which was 2.015, with 95% confidence level, it was determined that funds and funds are effective as a source of harm in implementing the customer relationship management strategy.

In the second stage of the research, Friedman test was used to examine and compare the factors and factors influencing the CRM strategy to confirm the co-society and ranking of each of these factors by comparing their ranking average [24]. Based on the results of the analysis, using SPSS software, the Friedman test statistic for the first group of factors is the execution process equal to 3.09. Also, the test statistic for the second group of factors, namely technology 2.69, for the third group of factors, the organizational culture is 3.85, for the fourth group of factors, namely organizational management 3.21 and for the fifth group of factors, the cost factors are 2.16.

As a result, based on the statistics obtained from Friedman's test for each of the factors (Mean Rank), it can be concluded that there is a difference between the effectiveness of each of these factors on the CRM strategy and can be based on the amount of their obtained statistics Ranked. In fact, the effectiveness of this organizational culture in the first place, organizational management in the second level, the third-generation process, technology in the fourth order, and finally the cost factors in the fifth rank. Also, since the level of coverage of the Friedman test statistic is less than 0.05, it can be concluded with 95% confidence that the society (subgroup) of the sub-factors of each of the factors damaging the CRM strategy can be concluded. The results of Friedman test by SPSS software are presented in Table 5.

**Table 5 Friedman test statistics**

| Friedman Rank | Mean Rank |
|---------------|-----------|
| V1            | 3.09      |
| V2            | 2.69      |
| V3            | 3.85      |
| V4            | 3.21      |
| V5            | 2.16      |

| Test Statistic | N    | Chi-Square | Df  | Asymp. Sig |
|----------------|------|------------|-----|------------|
|                | 34   | 23.021     | 4   | .000       |

The findings from the statistical analysis was performed using student t-test and Friedman summarized and presented in Table 6:

**Table 6 Summary of findings from the statistical analysis**

| Rating influencing factor | The Friedman test | The Ineffectiveness | Status Factors | The t-statistic | Determined Factors |
|---------------------------|-------------------|---------------------|----------------|-----------------|--------------------|
| Third                     | 3.09              | High                | approved       | 9.186           | Administrative process |
| Fourth                    | 2.69              | High                | approved       | 8.206           | Technology          |
| First                     | 3.85              | Very high           | approved       | 13.329          | Organizational Culture |
| Second                    | 3.21              | High                | approved       | 8.711           | Management Organization |
| Fifth                     | 2.16              | High                | approved       | 8.117           | Cost factors        |
5. Discussion

In this research, we tried to investigate the CRM strategy through a survey and use the opinion and opinion of experts and experts in the field of strategic management of customer relationship management strategy. The scope of this research determines the factors affecting customer relationship management and the analysis of statistical analyzes will be carried out. Based on this, five groups of factors were identified as the main causes of damage to CRM and were approved and ranked after statistical analysis.

Based on this, five groups of factors were identified as the main causes of damage to CRM and were approved and ranked after statistical analysis. Factors of organization, organization management, executive process, technology and costs. The five main groups are factors that have been identified as the main factors damaging the CRM strategy.

Recognizing, identifying and ranking these factors is important because knowing and being aware of these factors and paying close attention to them during implementation of the CRM strategy by executives, including managers, consultants and executive experts, will be a failure and damage. Reduces implementation and drops it far. Reducing the failure rate, in addition to reducing the likelihood of failure of this strategy, will increase efficiency, effectiveness and ultimately productivity in the organization. In fact, this research has tried to solve one of the major problems of today's organizations in the field of customer relationship. In this research, five core categories were identified and identified as the main hackers in the strategy of customer relationship management.

While some researchers in their study introduced setup costs, tools, and intersectional partnerships as factors that damaged the CRM strategy [5]. Some other researchers have difficulty educating staff to The title of the main damage is the CRM strategy, as well as issues such as user weaknesses, obscure needs and expectations, far-reaching estimates for cost and time, skill mismatches, hidden costs, design failure and classification of communications, inappropriate choice of target markets, poor market position, Lack of distinctive capacities for inaccurate understanding and lack of capacity Adele between attracting new customers as factors affecting the pathology CRM strategy [11][13][14].

The present study showed that the most important and general factors that are mentioned in previous researches lies in these factors, affecting the strategy of customer relationship management in organizational business.

In the final stage of the research, the results and the specified damaging factors were compared and compared with the results of previous studies. Based on the studies that were carried out on some of them in the previous sections, the results of the research were matched with the factors influencing the CRM strategy. After confirming this compatibility, the results of the research were conceptualized in an innovative model it is presented in an adaptive manner as shown in Fig. 3:

![Figure 3 Conceptual model - the ultimate creative damaging elements in the implementation of CRM strategy](image)

Among the main constraints of this research, it is worth mentioning that this study examined a group of experts and experts in the field of strategic management of Customer Relationship Management Strategy. Although these people have a lot of background in the field of CRM strategy in different sectors, the study of other groups with good
backgrounds can help to generalize the research results. This is also true of choosing where to implement the CRM strategy.

Also, in future researches, some of the executive models of customer relationship management strategy that were found to be unsuccessful and damaged can be carefully examined and identify the main factors causing them to be damaged, and with the results of this research and the conceptual model - Innovative presented.

Considering that the main part of this research is carried out qualitatively and the main factors of the injured person are determined qualitatively, it is suggested in other research, the relationship between these factors to determine the exact and quantitative effect of each of them. It is also suggested that, for further research, a group of other experts and administrators of the strategic domain, with other executive backgrounds, be selected, and their views and views should be examined.

6. Conclusion

In the present study, it was tried to determine the main factors influencing the failure of customer relationship management projects by carefully examining CRM in the health system through surveys, using the opinions of experts, specialists, consultants and executive experts. Statistical analysis was performed and then re-examined. Based on the results, five groups of factors were identified as the main factors affecting the failure of CRM projects and after statistical analysis were approved and validated. Organizational process factors, technological factors, organizational culture factors, management factors and cost and budget factors are the five main groups of factors that were identified as the main factors influencing the failure of customer relationship management projects in the health system in this study. Undoubtedly, recognizing, determining and categorizing these factors is useful and very important because being aware of these factors and paying close attention to them during the implementation of the customer relationship management process by various executives in various fields, especially in the health system, including managers, consultants and executive experts, can prevent failure of implementing these projects.

Compliance with ethical standards

Acknowledgments

The authors owe it to themselves to thank and appreciate all the contributors to this article. We would like to thank all the interviewees who contributed to the qualitative part of the article.

Disclosure of conflict of interest

The authors declare no conflicts of interest.

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