

The Effect of Applying Customer Relationship Management (CRM) on Improving Citizens' Satisfaction with Public Services in Egypt by Applying it to the Egyptian Post

على تحسين رضا المواطنين عن الخدمات (CRM) أثر تطبيق إدارة علاقات العملاء العامة في مصر من خلال تطبيقه على البريد المصري

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Abstract

This study examines the potential impact of implementing customer relationship management (CRM) on improving citizens' satisfaction with public services in Egypt. This research explores the specific benefits and challenges associated with (CRM) implementation in the Egyptian context, examines the potential impact of implementing customer relationship management (CRM) on improving citizens' satisfaction with public services in Egypt, explores the specific benefits and challenges associated with (CRM) implementation in the Egyptian context.

The study uses a quantitative analysis approach. Quantitative data is collected through surveys conducted on citizens who interacted with government services before and after implementing customer relationship management by testing some dimensions of citizen satisfaction with improving public services, such as building trust between citizens and government service providers, addressing citizens' complaints, and supporting their participation in developing Strategy for providing these government services. The results revealed many positive results of implementing customer relationship management in the public sector in Egypt, and showed acceptable levels of citizen participation and improvement in their satisfaction with these services.

Keywords: Customer Relationship Management, (CRM), Public Services, Citizens' satisfaction.

المستخلص:

تتناول هذه الدراسة التأثير المحتمل لتطبيق إدارة علاقات العملاء (CRM) على تحسين رضا المواطنين عن الخدمات العامة في مصر. يستكشف هذا البحث الفوائد والتحديات المحددة المرتبطة بتنفيذ إدارة علاقات العملاء (CRM) في السياق المصري، ويدرس التأثير المحتمل لتنفيذ إدارة علاقات العملاء (CRM) على تحسين رضا المواطنين عن الخدمات العامة في مصر، ويستكشف الفوائد والتحديات المحددة المرتبطة بتنفيذ إدارة علاقات العملاء (CRM) تنفيذ (CRM) في السياق المصري.

تستخدم الدراسة نهج التحليل الكمي. يتم جمع البيانات الكمية من خلال المسوحات التي تجرى على المواطنين الذين تفاعلوا مع الخدمات الحكومية قبل وبعد تنفيذ إدارة علاقات العملاء من خلال اختبار بعض أبعاد رضا المواطنين عن تحسين الخدمات العامة، مثل بناء الثقة بين المواطنين ومقدمي الخدمات الحكومية، ومعالجة شكاوى المواطنين، وودعم مشاركتهم في تطوير استراتيجية تقديم هذه الخدمات الحكومية. وأظهرت النتائج العديد من النتائج الإيجابية لتطبيق إدارة علاقات العملاء في القطاع العام في مصر، وأظهرت مستويات مقبولة من مشاركة المواطنين وتحسن رضاهم عن هذه الخدمات.

الكلمات المفتاحية: إدارة علاقات العملاء، (CRM)، الخدمات العامة، رضا المواطنين.

Introduction

In the age of information and communication technology, improving public services and enhancing the experience of citizens is one of the most important challenges faced by governments around the world. {1} In order to achieve these goals, Customer Relations Management (CRM) technology has become a powerful and effective tool widely used in enhancing the quality of government services and raising the level of citizen satisfaction. {2}

(CRM) is a multi-dimensional structure; it can be seen that from multiple perspectives. (CRM) Description Thanks to various system advancements including transaction support systems, decision support systems, marketing information systems (MIS), databases Marketing and call center management. {3}

The concept of customer relationship management in its modern sense is considered a relatively new concept, but its practical practice is considered a precedent for knowing it in its current meaning. It is a development and modernization of the concept of relationship marketing and the extent of maximum benefit from modern technologies in information and communication. Its basic idea emerged from the modern marketing trend towards paying attention to customers as an asset of the organization, and thus the customer relationship management strategy has become an effective marketing tool. Vogt (2011) described it as a marketing innovation whose principles are compatible with modern marketing. {4}

Maintaining close relationships with customers is the main driver of the success of organizations and the focus of their attention^{5}, and according to the Egyptian government's plans to shift towards a digital society, the intensity of competition between companies in Egypt has increased, as they seek to raise the level of their services and provide distinguished services at reasonable costs. {6}

1. Problem Statement

Implementing customer relationship management (CRM) technology in the public sector is becoming increasingly important for governments around the world. However, there is a need to specifically evaluate the impact of (CRM) implementation on improving public services in Egypt. Understanding the effectiveness of (CRM) technology in improving government-citizen interaction and improving the quality of public services is critical for the Egyptian government to make informed decisions regarding its adoption and implementation.

2. Key Research Questions

- a. How does Customer Relationship Management (CRM) work and what are its main features and benefits?
- b. What are the potential impacts of implementing (CRM) technology on improving public services in Egypt?
- c. What challenges and constraints does Egypt currently face in delivering public services?
- d. What are the practical suggestions for effective implementation of (CRM) in the Egyptian public sector?

3. Research Importance

a. Improving public service delivery: Understanding the impact of (CRM) implementation in the Egyptian public sector can provide insights into improving the quality and efficiency of public services and help Egyptian policymakers and government officials make decisions regarding the implementation and implementation of (CRM) Informed decisions systems that increase citizen satisfaction. and improve service delivery.

b. Digital Transformation in the Public Sector: Implementation (CRM) is part of wider digital transformation efforts in the public sector. Research in this area can highlight the potential benefits of (CRM) in creating a more responsive and citizen-centric ecosystem and in understanding the challenges, opportunities, and best practices related to public services in Egypt.

The recommendations can support policymakers in developing (CRM) strategies, establishing implementation frameworks, and addressing specific challenges and opportunities in the Egyptian context.

4. Research Objective

This study aims to explore the impact of applying (CRM) technology on improving public services in Egypt. The study will focus on understanding the mechanisms of applying customer relationship management technology and how it affects improving citizens' experience in interacting with government services.

Egypt is among the countries witnessing rapid digital transformation in the public sector, striving to modernize its technological infrastructure and implement best practices in providing government services. By examining the impact of implementing (CRM) technology in Egypt, the research can provide useful insights into the potential opportunities and challenges facing the Egyptian government in achieving its goals of improving public services and interacting with citizens.

By addressing these research objectives, the outcomes of this research can guide the Egyptian government in making informed decisions regarding the adoption and implementation of (CRM) technology, ultimately leading to enhanced citizen satisfaction and improved public services.

5. Literature Review

While there is limited specific research available on the impact of (CRM) implementation on public services in Egypt, there are a few studies and case studies that have explored related aspects and can provide valuable insights. Here are a few relevant references:

1- Habeh O. M., et al, (2022), Efficiency and Effectiveness of CRM Solutions in Public Sector: A Case Study from a Government Entity in Dubai, this paper presents a case study measuring the efficiency and effectiveness of CRM systems in public sectors. The case study is conducted through a survey that is applied to one of the Dubai's government entities. ^{7}

2- Mai T. P., Reicher R. Z., (2021), The Potentials of CRM Application in the Public Sector, the paper reviewed existing findings to provide a better understanding of the field and figured out the main potentials of CRM in promoting government reputation, engaging citizens to the operating system, and improving the quality of service delivery in the public services system. ^{8}

3- El Sheikh S. A., et al, (2020), The Impact of CRM on Customer Satisfaction and Customer Loyalty: Mediation Effect of Customer Perceived, this study aims to explore the relationship between CRM and customer perceived value (CPV), and their impact on customer perceived satisfaction and loyalty towards hotels in Egypt. ^{9}

4- Reddick G. C., (2010), Impact of Citizen Relationship Management (CRM) on Government: Evidence from U.S. Local Governments, this paper examines the impact of Citizen Relationship Management (CRM) technology adoption on local governments in the United States. The purpose of the paper is to determine whether this technology has influenced organizational change. ^{10}

5- Schellong Alexander, (20٠٥), CRM in the Public Sector –Towards a conceptual research framework, in this paper, the latest findings in CRM research from the private sector are reviewed and linked to the public sector. ^{11}

While these studies may not focus exclusively on the impact of (CRM) implementation on public services in Egypt, they provide insight into the broader context of (CRM) adoption and its impacts on organizational performance, customer loyalty, and citizen satisfaction. Here the research gap becomes apparent, and the most important thing that distinguishes the current study from previous studies is its specialization in studying the Egyptian reality and testing the most important variables that affect customer satisfaction, such as the quality of service provision, handling complaints, participation, and building trust with customers.

6. Study Variables

In light of previous studies, the researcher was able to formulate the proposed study model:

Independent Variables	Dependent Variables
Customer Relationship Management	Improving Citizens' Satisfaction with Public Services
<ul style="list-style-type: none"> • Organizing Customer Relations 	<ul style="list-style-type: none"> • Building Trust with Citizens
<ul style="list-style-type: none"> • Customer Relationship Management Based on Technology 	<ul style="list-style-type: none"> • Handling Complains
<ul style="list-style-type: none"> • Building Customer Relationships 	<ul style="list-style-type: none"> • Citizen Participation

7. Research Assumptions

• **Assumption of improving public services to increase citizen satisfaction:** The application of customer relationship management systems in the Egyptian public sector is assumed to increase citizens' satisfaction with the quality and delivery of public services. The following sub-hypotheses emerge from the previous hypothesis:

A- **Assumption of building trust with citizens:** The application of customer relationship management is supposed to build trust between citizens and government agencies providing public service.

B - **Assumption of complains handling:** It is assumed that implementing (CRM) will enable identifying complaints submitted by those requesting government services and attempting to address those complaints.

C - **Assumption of increased citizen participation:** It is assumed that the implementation of (CRM) will enhance citizen participation and greater involvement in public service processes.

8. Dimensions of Customer Relationship Management:

A- **Organization of Customer Relationship Management:** It is the method through which customer relationships are organized and the creation of added value for

customers, and the availability of a harmonious organizational structure in which all levels of the organization are harmonized to achieve the common goal of establishing strong relationships with customers. {12}

B- Technology-Based Customer Relationship Management: It is one of the marketing strategies for integrating online services as a result of the rapid development in information technology. It can also be defined as all the modern technologies, applications and systems that the organization uses in managing its relationships with customers in order to establish a long-term relationship with customers and achieve the greatest possible rapid response to gain their satisfaction. {13}

C- After Building Customer Relationships: Building good relationships with customers is considered one of the most important factors for the success of organizations. Through constant communication with them, identifying their problems, working to solve them, and providing the best services that suit their desires and needs. {14}

9. How can (CRM) Systems Help in Improving the Responsiveness of Government Agencies in Egypt? {15}

Customer relationship management systems can play an important role in improving the responsiveness of government agencies in Egypt by facilitating the following:

A. Centralized Citizen Data: (CRM) systems allow centralized storage and management of citizen data, including contact information, preferences, and interaction history. This allows government agencies to gain a holistic view of each citizen's interactions and needs, enabling rapid and personalized responses.

B. Effective Communication Channels: Customer Relationship Management (CRM) systems provide various communication channels, such as e-mail, telephone, and other channels to receive inquiries, complaints, and feedback from citizens and respond to them immediately, which enhances responsiveness.

C. Automated Workflow and Case Management: Customer relationship management systems simplify and automate workflow processes within government agencies, ensuring that those processes are processed in a timely manner, reducing manual effort, reducing delays, and improving response times.

D. Tracking Service Requests: Customer relationship management systems enable government agencies to track and monitor citizen service requests throughout their life cycle, prioritize urgent matters, and ensure their timely resolution. It also enables citizens to know the progress of their requests.

E. Analytics and Reporting: (CRM) systems provide analytics and reporting capabilities that allow government agencies to monitor response-related key performance indicators (KPIs) to improve their operations and enhance response.

By leveraging (CRM) systems, government agencies in Egypt can streamline their operations, enhance communication with citizens, and improve response times. This, in turn, leads to increased citizen satisfaction, enhanced confidence in government, and increased efficiency of public service delivery.

10. What are common challenges that government agencies in Egypt face when customizing CRM systems?

Egyptian government agencies may face some common challenges when adopting a (CRM) system. These challenges may include:

A. Complex Business Processes: Government agencies often have complex and diverse business processes that are difficult to map and adjust in (CRM) systems.

B. Limited IT Resources and Expertise: Government agencies may have limited IT resources and expertise for (CRM) customization.

C. Data Migration and Quality: Government agencies handle large amounts of data, and migrating data from existing systems to custom systems (CRM) can be a complex task.

D. Change Management Support: Deployment of custom (CRM) systems requires effective change management. Government agencies must train and support their employees to ensure a smooth transition and acceptance of the new system.

E. Security and Privacy Concerns: Government agencies deal with sensitive citizen data, and ensuring the security and privacy of this data is a critical challenge.

These challenges can be mitigated through comprehensive planning, stakeholder engagement, and allocating adequate resources to identify and address any challenges when implementing (CRM) systems. ^{16}

11. An Overview of the Field of Application of the Research (The Egyptian Post) ^{17}

Egypt Post is the governmental agency responsible for postal service in Egypt. Established in 1865, it is one of the oldest governmental institutions in the country.

Services Provided by the Egyptian Post

A. Egyptian Post provides many services to citizens, the most important of which are:

B. Electronic payment services and issuance of electronic payment cards.

- C. Open smart savings accounts.
- D. Pension and salary transfer services.
- E. Disbursing irregular employment grants.
- F. Submitting requests to obtain civil status issues.

The number of customers is about 20 million, and the number of Egyptian Post Offices is about 4,238. Egyptian Post is one of the important arms of the Egyptian Ministry of Communications and Information Technology in providing digital government services to citizens. These post offices have become the citizen's interface for obtaining digital government services, due to their wide spread throughout the republic.

Egyptian Post has recently been able to restructure its services in a way that suits the needs of citizens on the one hand and keeps pace with the rapid progress in information technology on the other hand, through which it seeks to develop and automate the work systems of all post offices across the Republic. ^{18}

12. Statistical Analysis

Data for the field study was collected over a period of three months, and the researcher relied in designing the study form on a review of administrative literature in the subject area of the study. A number of (10) post offices were chosen to apply the study to them, and it was taken into account that there would be five offices whose services cover geographical areas of a poor nature, and five other offices whose services cover geographical areas whose residents are characterized by a greater degree of high social and economic level, to ensure that the selected sample is The study population was correctly represented, and (384) questionnaires were distributed to citizens requesting services from the Egyptian Postal Authority, and (338) valid questionnaires were obtained for analysis. The researcher relied on the following equation to find out the number of the sample:

$$n = \frac{Z_{\frac{\alpha}{2}}^2 \times p(1-p) \times N}{Z_{\frac{\alpha}{2}}^2 \times p(1-p) + e^2 (N-1)}$$

whereas:

n: represents the sample size

N: community size

$Z_{\frac{\alpha}{2}}^2$: The tabular value corresponding to the 95% confidence coefficient.

P: The proportion of the characteristic of interest in the population

e: Estimation error

(12-1). Research method

As was discussed in Section five, the main aim of this research is to assess the impact of implementing customer relationship management (CRM) on improving citizens' satisfaction with public services in Egypt. For this purpose, along with previous literature, a model is constructed. A well-known research method called the structural equation model (SEM) was employed to analyze the hypotheses of the research. Based on the SEM method, the main steps for executing the research and examining hypotheses are as follows.

Step 1. Designing and validating an appropriate questionnaire

Step 2. Determining sample size.

Step 3. Gathering filled out questionnaires.

Step 4. Analyzing data using Confirmatory Factor Analysis (CFA)

Step 5. Evaluating the fitness of the model using statistical parameters

Step 6. Hypotheses examination using SEM methodology.

Step 7. Reliability evaluation of the variables.

Step 8. Providing main discussions on the obtained results.

(12-2). Data analyses

Statistical analyses were conducted using SPSS 25 and AMOS 25 software. First, we examined reliability, descriptive statistics, and correlations. Second, prior to testing the hypothesized structural model, we conducted a confirmatory factor analysis (CFA) to test the validity of the measurement model. To assess the model fit of the CFA model, we considered multiple fit indices, including the chi-square goodness of fit statistic, comparative fit index (CFI), Tucker–Lewis index (TLI), and root mean square error of approximation (RMSEA). We followed the model evaluation criteria suggested by Byrne [1], that is, $CFI \geq .90$, $TLI \geq .90$, and $RMSEA < .08$. We also considered the standardized factor loadings. *

(12-3). Results

(12-3-1). Reliability and Descriptive statistics

Table (1) display reliability and descriptive statistics of the items that were used to measure customer relationship management (CRM) and citizens' satisfaction. In detail, Cronbach's Alpha values of all variables are greater than 0.70, ranging from 0.85 to 0.95, which confirms the reliability of all scales in this study. The descriptive statistics reported in Table 1 indicate, the mean values of independent variable customer relationship management (CRM) is 4.14 (Organizing Customer Relations (OCR) is 4.19, Customer Relationship Management Based on Technology (CRMBT) is 4.04 and Building Customer Relationships (BCR) is 4.17.

* Byrne BM. Structural equation modelling with AMOS: Basic concepts, applications, and programming (2nd ed.). London, UK: Routledge; 2009.

Additionally, the mean values of dependent variables citizens' satisfaction (CS), Building Trust with Citizens (BTC), Handling Complains (HC), and Citizen Participation (CP) were 4.01, 4.11, 4.05, and 3.86, respectively.

(Table 1) Descriptive statistics and correlations

Variables	Number of Items	Cronbach's Alpha	Mean	Min	Max
Organizing Customer Relations (OCR)	4	0.956	4.19	1.00	5.00
Customer Relationship Management Based on Technology (CRMBT)	5	0.909	4.04	1.00	5.00
Building Customer Relationships (BCR)	4	0.917	4.17	1.00	5.00
Customer Relationship Management (CRM)	13	0.917	4.14	2.00	5.00
Building Trust with Citizens (BTC)	5	0.913	4.11	2.00	5.00
Handling Complains (HC)	5	0.922	4.05	3.00	5.00
Citizen Participation (CP)	5	0.857	3.86	2.00	5.00
Citizens' Satisfaction (SC)	15	0.956	4.01	3.00	5.00

(12-3-2). Correlations matrix

Table (2) display the Pearson Correlation analysis which used to examine the association between the variables. The results revealed that customer relationship management (CRM) was positively correlated with citizens' satisfaction (CS) ($r = 0.763, p < 0.001$), Building Trust with Citizens (BTC) ($r = 0.663, p < 0.001$), Handling Complains (HC) ($r = 0.672, p < 0.001$), and Citizen Participation (CP) ($r = 0.561, p < 0.001$).

(Table 2) Correlations matrix

Variables	BTC	HC	CP	SC	OCR	CRMBT	BCR	CRM
Building Trust with Citizens (BTC)	1							
Handling Complains (HC)	0.885***	1						
Citizen Participation (CP)	0.752***	0.840***	1					
Citizens' Satisfaction (SC)	0.825***	0.829***	0.779***	1				
Organizing Customer Relations (OCR)	0.770***	0.760***	0.616***	0.772***	1			

Customer Relationship Management Based on Technology (CRMBT)	0.773***	0.746***	0.590***	0.753***	0.788***	1		
Building Customer Relationships (BCR)	0.613***	0.596***	0.605***	0.693***	0.681***	0.663***	1	
Customer Relationship Management (CRM)	0.663***	0.672***	0.561***	0.763***	0.876***	0.885***	0.865***	1
Note(s): ***Significant at 1% level								

(12-3-3). Measurement and structural model

Prior to testing the hypotheses, we conducted a confirmatory factor analysis (CFA) to examine the measurement model. The fit indices for the CFA indicated that the customer relationship management (CRM) model in Figure (1) showed a satisfactory fit to the data, $\chi^2/df = 3.91$, CFI = 0.92, TLI = 0.91, and RMSEA = 0.07. And all standardized factor loadings were statistically significant and exceeded 0.50, ranging from 0.63 to 0.94. This result indicates that the measurement model of customer relationship management (CRM) fits the data well. Additionally, the fit indices for the CFA indicated that the citizens' satisfaction (CS) model in Figure (4) showed a satisfactory fit to the data, $\chi^2/df = 2.32$, CFI = 0.93, TLI = 0.92, and RMSEA = 0.05. And all standardized factor loadings were statistically significant and exceeded 0.50, ranging from 0.64 to 0.92. This result indicates that the measurement model of citizens' satisfaction (CS) fits the data well.

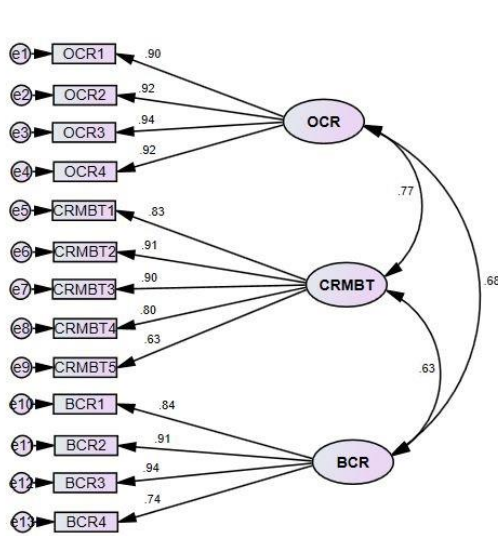


Figure 1

CFA of customer relationship management

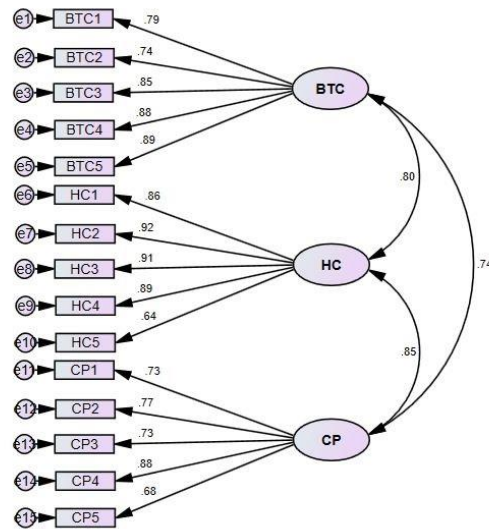


Figure 2

CFA of citizens' satisfaction

(12-4). Results of research hypotheses evaluation

In Figure (3) and (4), the output of the path analysis coefficients of the structural equation model was presented. In this section, the results of the hypotheses examination via SEM methodology has been shown.

(12-4-1). Main hypothesis testing:

The main hypothesis of this paper is that the application of customer relationship management systems in the Egyptian public sector is assumed to increase citizens' satisfaction. In the main hypothesis of the research, based on the results which are shown in Table (2) and Figure (3).

The results reveal that: there is a significant and positive impact of the independent variable Customer Relationship Management (CRM) on the Citizens' Satisfaction. as the regression coefficient were 0.763 at the level of significant p.value < 0.01. Furthermore, the R2 was 0.582, confirming that Customer Relationship Management (CRM) could explain 58.2% of the variances in the Citizens' Satisfaction.

(12-4-2). First sub-hypothesis testing:

First sub-hypothesis is that the application of customer relationship management is supposed to build trust between citizens and government agencies providing public service. In the first sub-hypothesis of the research, based on the results which are shown in Table (2) and Figure (4).

The results reveal that: there is a significant and positive impact of the independent variable Customer Relationship Management (CRM) on the build trust between citizens and government agencies. as the regression coefficient were 0.663 at the level of significant p.value < 0.01. Furthermore, the R2 was 0.440, confirming that Customer Relationship Management (CRM) could explain 44% of the variances in the build trust between citizens and government agencies.

(12-4-3). Second sub-hypothesis testing:

The second sub-hypothesis of this paper is that the implementing of customer relationship management (CRM) will enable identifying complaints submitted by those requesting government services and attempting to address those complaints. In the second sub-hypothesis of the research, based on the results which are shown in Table (2) and Figure (4).

The results reveal that: there is a significant and positive impact of the independent variable Customer Relationship Management (CRM) on Handling Complains. as the regression coefficient were 0.672 at the level of significant p.value < 0.01. Furthermore, the R2 was 0.452, confirming that Customer Relationship Management (CRM) could explain 45.2% of the variances in Handling Complains.

(12-4-4). Third sub-hypothesis testing:

The third sub-hypothesis of this paper is that the implementation of customer relationship management (CRM) will enhance citizen participation and greater involvement in public service. In the third sub-hypothesis of the research, based on the results which are shown in Table (2) and Figure (4).

The results reveal that: there is a significant and positive impact of the independent variable Customer Relationship Management (CRM) on the b citizen participation. as the regression coefficient were 0.561 at the level of significant p.value < 0.01. Furthermore, the R2 was 0.315, confirming that Customer Relationship Management (CRM) could explain 31.5% of the variances in the citizen participation.

Figure 3. Structural equation model (path analysis of main hypothesis)

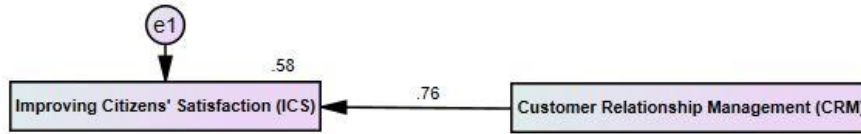


Figure 4. Structural equation model (path analysis of the three sub-hypothesis)

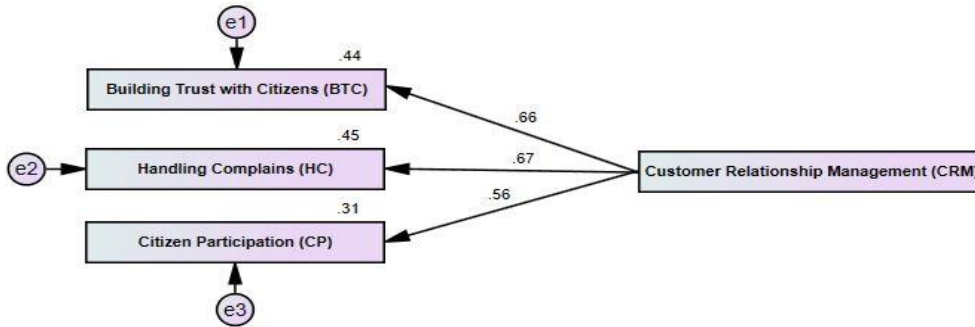


Table 3. Hypotheses examination results

Hypotheses	Coefficient of impact	T-statistic	R ²	Test result
customer relationship management systems affect the citizens' satisfaction	0.763	21.650***	0.582	Confirmed
customer relationship management systems affect the build trust between citizens and government agencies	0.663	16.264***	0.440	Confirmed
customer relationship management systems affect the identifying complaints	0.672	16.658***	0.452	Confirmed
customer relationship management systems affect the citizen participation	0.561	12.449***	0.315	Confirmed

Note(s): ***Significant at 1% level

13. The Result

The statistical analysis of the research confirmed the stability and credibility of all measures that were used in analyzing the data obtained through the surveys that were distributed to the target sample (Table 1), and it was also confirmed that customer relationship management is positively related to citizen satisfaction. (Table 2 & Figure 3), and the model for measuring citizen satisfaction fits the data well and matches the results of evaluating the research hypotheses (Table ٣).

Therefore, we can emphasize the acceptance of all hypotheses, whether the basic hypothesis or the dependent hypotheses, and confirm that each of the independent variables is: Organizing Customer Relations, Customer Relationship Management Based on Technology and Building Customer Relationships, it is the main independent variable, which is Customer Relationship Management it positively affects the main dependent variable, which is Improving Citizens Satisfaction with Public Services, through the application of the dependent sub-variables, which are Building Trust with Citizens, Handling Complains, Citizen Participation.

Recommendations

1. Enhancing citizen engagement: Implementing customer relationship management can facilitate better engagement with citizens by providing effective channels of communication. It enables government agencies to learn about citizens' preferences, interests and expectations, allowing for personalized and responsive services.

2. Simplified service delivery: Customer relationship management systems can help simplify service processes and workflow, reducing bureaucratic obstacles and enhancing the efficiency of public service delivery. Automating and digitizing processes can lead to faster response times, reduced paperwork, and improved overall service quality.

3. Data-driven decision making:(CRM) systems generate valuable data about citizen interactions, preferences, and service requests. Analysis of this data can provide insights into areas for improvement, resource allocation, and policy formulation.

4. Proactively resolve issues: Customer Relationship Management (CRM) systems allow for proactive identification and resolution of issues by tracking and analyzing citizen complaints, inquiries, and feedback.

5. Improved service coordination:(CRM) systems can facilitate better coordination and collaboration between various government agencies involved in public service delivery, eliminating duplication, reducing administrative burden, and ensuring a seamless service experience for citizens.

6. Performance monitoring and accountability: (CRM) systems provide mechanisms to monitor key performance indicators, track service delivery metrics, and measure citizen satisfaction. This enables government agencies to evaluate their performance, identify areas for improvement, and enhance accountability in the provision of public services.

It is important to note that successful implementation of (CRM) in the public sector requires careful planning, stakeholder engagement, and capacity building.

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Appendix (1) QUESTIONNAIRE

(1)

Dimensions/Paragraphs						
Independent Variables/Customer Relationship Management						
No	(Organizing Customer Relations)	Very agree	Agree	neutral	not agree	Not agree at all
1	The organization is interested in preparing a strategy for implementing the customer relationship management program					
2	The organization is keen to provide sufficient support for the success of customer relationship management					
3	The organization designs training programs for employees to develop customer dealing skills					
4	The company periodically learns customers' needs and expectations					

(2)

Dimensions/Paragraphs						
Independent Variables/Customer Relationship Management						
No	(Customer Relationship Management Based on Technology)	Very agree	Agree	neutral	not agree	Not agree at all
1	The organization has a clear, accurate and up-to-date database for all its clients to ensure ease of dealing with them					
2	The organization provides technical support using technology to build strong customer relationships					
3	The institution is keen to update customer data periodically					
4	The institution is distinguished by its use of modern technological means and equipment to facilitate work and improve its quality					
o	The organization's employees are well trained to use modern technology					

(3)

Dimensions/paragraphs						
Independent Variables/ Customer Relationship Management						
No	(Building Customer Relationships)	Very agree	Agree	neutral	not agree	Not agree at all
1	The Corporation is keen to improve the services provided to customers, to maintain the confidentiality of information and to respect their privacy					
2	The organization is keen to follow up on customer complaints and work to resolve them immediately and in a timely manner					
3	The organization is keen to constantly communicate with customers, identify activities of value to them, and provide them with useful offers					
4	The organization allows the establishment of good relationships with customers to achieve their satisfaction and gain their trust and loyalty					

(4)

Dimensions/Paragraphs						
Dependent Variables / Improving Citizens' Satisfaction with Public Services						
No	(Building Trust with Citizens)	Very agree	Agree	neutral	not agree	Not agree at all
1	Service providers are keen to respond promptly to customers' wants and needs					
2	All decisions announced by the institution are characterized by clarity and credibility and aim to serve citizens					
3	Service providers are keen to provide services to customers free from damage to interests, risks and the customer's sense of insecurity					
4	Service providers provide accurate and reliable answers to customers that are comprehensive and credible					
5	Service providers are keen to build trust between themselves and customers by maintaining customer confidentiality and privacy					

(5)

Dimensions/Paragraphs						
Dependent Variables / Improving Citizens' Satisfaction with Public Services						
No	(Handling Complains)	Very agree	agree	neutral	not agree	Not agree at all
1	Service providers record all complaints and follow up on them					
2	Service providers provide appropriate solutions to all problems and obstacles that customers encounter					
3	When developing a strategy or new service offers, the complaints disclosed by the service seekers are taken into account					
4	There is a clear mechanism for receiving complaints and clear ways to solve these problems					
5	There are clear and announced official channels for receiving complaints					

(6)

Dimensions/Paragraphs						
Dependent Variables / Improving Citizens' Satisfaction with Public Services						
No	(Citizen Participation)	Very agree	Agree	neutral	not agree	Not agree at all
1	When designing a work system or new offers, consultation with those requesting services is taken into account					
2	There is adequate representation of service seekers when developing business strategies					
3	There is an appropriate and clear mechanism for submitting requests and suggestions from service seekers					
4	Decision makers in the organization take into account the requests and suggestions of the service seeker when providing a new service					
o	The work methods or services provided are reviewed in accordance with the requests and suggestions of those requesting services					