

#### IT, CRM ENHANCING AND ECONOMIC DEVELOPMENT

### تكنولوجيا المعلومات وتعزيز إدارة علاقات الزبائن والتنمية الاقتصادية

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#### ABSTRACT

This paper aims at revealing the importance of information technology, IT to the knowledge economy and economic development in Iraq. It focuses on the importance of enhancing Customer Relationship Management, CRM. The role of IT in economic development is rarely addressed. This has been considered here with a special vision.

The paper adopts a field study to assess the shape and direction of the relationship between banks and Customers, via electronic media. A sample of four private banks was approved in Baghdad in mid-2018. A questionnaire was designed to gather primary data. Eighty questionnaires were distributed, of which 74 were valid, six of which were excluded due to incomplete responses.

The paperwork, also examines the importance of IT in management of banking relations via electronic contact, characterizing its role with respect to the growth of banking activity. Data estimation and results analysis showed that the use of IT enhances Customer relations with a significant positive relationship for banks and their services. The use of IT has an important impact and clear importance on its role in developing the economic activity of banks.

Key Words: Economic Development, Information Technology, Customer Relationship Management, JEL Code :01,M5,M21

الملخص

تحدف هذه الورقة إلى الكشف عن أهمية تكنولوجيا المعلومات لاقتصاد المعرفة وللتنمية الاقتصادية على مستوى الإقتصاد الجزئي في العراق وتركز على أهمية تعزيز إدارة علاقات الزبائن الكترونياCustomerRelationshipMnagement, CRM. ونادرا ما يتم تناول دور تكنولوجيا المعلومات فيما يتعلق بالتنمية الاقتصادية. وهذا ما تم أخذه في الاعتبار هنا برؤية خاصة.

تعتمد الورقة دراسة ميدانية لتقدير شكل واتجاه العلاقة بين المصارف والزبائن الكترونياً. وقد أعتمدت عينة من أربعة مصارف أهلية في بغداد، أواسط عام 2018. وقد صمم استبيان لجمع البيانات الأولية، وتم توزيع ثمانين استمارة استبيان، ظهر 74 استماة منها صحيحة، وستة منها أستثنيت بسبب الإجابات غير المكتملة.

ويختبر العمل البحثي أهمية وسائط تكنولوجيا المعلومات في إدارة العلاقات المصرفية الكترونيا، ورسم ملامحها بالنسبة للنمو الإقتصادي للنشاط المصرفي. أظهر تقدير البيانات وتحليل النتائج أن استخدام تكنولوجيا المعلومات يعزز علاقات الزبائن وبعلاقة إيجابية قوية بالمصارف وخدماتها، وأن استخدام تكنولوجيا المعلومات له تأثير كبير وأهمية واضحة على دورها في تنمية النشاط الاقتصادي للمصارف.

**الكلمات المفتاحية**: التنمية الاقتصادية ، تكنولوجيا المعلومات ، إدارة علاقات الزبائن.رمز الموضوعات بتصنيف مجلة الأدب الإقتصادي JEL : O1 ، M5، O1 : JEL.

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#### Introduction

The evolution of the World Wide Web, www uses has led to very wide changes in the economic management of businesses. It has been a cause for the rapid competition among business organizations. The CustomerRelationship Management (CRM) network has become a necessity for businesses to manage the relationship with their customers. Fast and rapid development of CRM, for example, has transformed the use and communication of traditional methods to modern ones, and the use of modern communication to manage customerse-connections.

**Subject Importance**. The importance of this study lays in several aspects, that can take advantage of the development of Information Technology, IT in the banks work to get as many customers as possible. Perhaps, the most prominent of these aspects:

1- To manage the e-communication of banking customers as a modern scientific topic dictated by the latest and increasing scientific-technological developments.

2 - The effective role of the administration in e-dealing with customers, in order to increase their number, and thus profits. It dedicates the concept of modern marketing of banking services, which shows that if the customer has reached the degree of loyalty to the bank the cost of marketing work for banking virtually become non-existent, and intimately managing that relationship is a promotional tool for an increasing number of potential customers.

3 - The effectiveness of e-CRM and the extent of its spread is an essential element in the growth of economic activity, i.e. banking, in which each bank seeks to gain the loyalty of customers to the commercial banking, through contact, communication, and trust in transactions, and meet the needs of customers, i.e. quality of banking services.

In Iraq, like the rest of the world, reliance on e-network communication to save and retrieve data has been increasing as the need for it evolves in a more efficient and easy way. This paper is based on a theoretical framework and a number of related works. It draws on a questionnaire, designed specifically for primary data collection. Eighty- questionnaires were disrtibuted, of which 74 were valid, and the remaining 6 were excluded due to lack of answers.

The positive thinking of business units and their management works to adopt advanced strategies aimed at maintaining their continuity and survival as well as their economic growth. The trend of business increasingly tends at Iraqi banks to meet the needs and desires of customers and prefer to e-communicate and e-deal. This modern relationship has made a clear impact on banks' response to customers. There has also been a clear change in the thinking and behavior of customers with banks and have the ability to search for alternatives and evaluate them to find the best ways to meet their needs.

**Research Purpose**: this work aims to "reveal the role of IT, a common component of the information systems and knowledge economy in the management of customers e-relations in Iraq." A number of private banks in Baghdad were selected for a field study to identify the difference between the application of CRM and its traditional management in banks and to identify the difference in the degree of response of customers benefiting from the banking services that result from the application of CRM. This difference returns economic benefits to banks and their economic growth.

Other objectives are: (1) To identify the reality of the relationship with IT; (2) To study how the banking system can benefit from the management of these relationships in directing the capital market towards customer satisfaction and loyalty; (3) Testing the role of IT in Iraq in



promoting the knowledge economy and in the economic development of banking activity. These are so vital targets in order to build long-term relationships for the banking sector, customers and the economy.

**Study Problem**: The practical reality experienced by private banks in facing the conditions of strong competition in the banking market shows the increasing difficulty in how to create permanence to deal with the bank by customers and how to find customers loyal to the bank. Since all banks often provide the same services, the subject of customer loyalty has become the main concern of banks, and also the customer is the key to the success of any bank and to lead to a more competitive environment. The satisfaction of customer forms and compass wih its realizeof product. This consensus comes after an effective dialogue between banks and customers to let each bank identify the needs of customers and seeks to meet them. Therefore, the study problem can be summed up by the fact that the reality of the relationship between IT and the development of the knowledge economy with its effectiveness in it is imperative to search for answers to these two questions, among many:

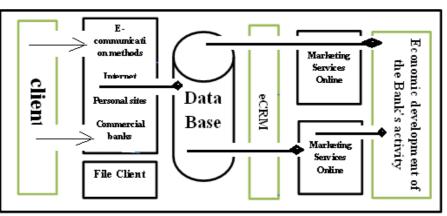
1- The role of CRM in developing customer loyalty for a particular bank!

2- The importance of eCRM in creating confidence to meet the customers'needs through IT and quality of e-services!

With no doubt, the answer suggests the best ways to reach loyalty and grow their numbers.

**Study Hypothesis**: The study assumes that there is a correlation between the activities of the bank and the customer, and the IT has a positive effect on the performance of the bank in managing its relations with the e-Customers, as well as in the economic growth of the banking activity.

**Study Diagram**: In light of these scenarios, the plan of the research paper can be presented and directed at drawing a diagram of the relationship between the economic performance variables of the bank and the customer as follows:



Data: The paperadopted two methods for datacollection:

Figure 1: Scheme of CRM and Economic Development for Banking Activity

**1. Theoretical Framework**: Previous works of dissertations and theses, notes, journals, studies and periodicalson this area, as well as those documented on the Internet, related to the subject of thiswork, were reviewed to arrive at a suitable theoretical background for studying and determining variables and the quality of data to be obtained in the experimental field.

2 - **Empirical Work**: Data needed to carry out the research and verify the achievement of its goal was obtained by the adoption of a questionnaire, specifically designed for the purpose of research and adopted as the main tool for research, analysis, and testing.



3.**Data**: Documented data on economic variables can be obtained through a field survey of variables. A sample of business units was selected for banking activity in Iraq. The work dealt with the axis of modern electronic information technology, one of the axes of the knowledge economy, and its relation to the variable of CRM electronically and the growth of economic activity.

**Study Society &Sample**: as astudy community, a sample included all employees of four banks in Baghdad, some were selected to experiment with the data obtained through the questionnaire. Sample bankswere appropriate, in which a random sample of 74 samples was analyzed.

**Paper Structure**: the paper divided into three parts, in addition to introduction (included an analytical view) and conclusion. The first topic dealt with the theoretical framework; the second is with the analysis of the experimental aspect, and; the third focused on the role of the variables of the study in the development of the economic activity.

#### I Theoretical Framework

This deals with the theoretical framework of the subject, which includes an overview of IT and its characteristics, and management of electronic customer relations.

**First: Information Technology, IT**: it is one of the basic components of the knowledge economy. It has become increasingly important because it provides the right information quickly in various economic, social and other fields, and the development of the use of IT employs electronic means to perform business. IT applications that address all aspects of Customer relationship management have emerged by gathering information about Customers, interests, and tastes to meet customers' needs by providing more efficient services and products.

Asim with Ibrahim (Asim and Ibrahim 2013, 233) defined IT as the technology that connects computer networks together via the Internet, allowing the transfer and exchange of information among all users around the world in time for rational decisions. Like hardware, software, tools, media, methods, and systems that the business organization needs to achieve its objectives and assist in the recording, recording, storage, processing, use and retrieval of information by information systems and the IT people. Therefore, they are the means and tools whether visible, audio or written, as well as the software through which information is collected, stored, transmitted, transmitted and retrieved, and which facilitates operations for the beneficiary, whether organized or individual.

Al-Shibail (Al-Shibail, 2012, 26) defined the use of channels of direct communication with customers through the Internet and e-mail, in addition to some modern wireless technologies for chatting, trading and managing electronic customer relations, and automatically able to deal with customers and sometimes without human intervention, with minimal human intervention. These applications allow companies to manage their relationship with customers in a one and unique way in the Internet and Intranet.

## Second: Characteristics, Benefits, and Advantages of IT by Enhancing, electronically the relationship with customers:

IT has been distinguished from other technologies with a variety of characteristics (Al-Warda 2013, 26):



1. Interactive: The user of this technology can be a receiver and sender at the same time with the participants in communication use exchange, which allows creating the type of interaction between people.

2 - Decentralization: a property that allows the exploitation of information technology, the Internet has the continuity of its work in all cases, no one can disrupt them throughout the world.

3 - Mobility and conversion: the possibility of transferring information from a mediator or holder to another, such as converting the audio message to a printed or readable message. The globe and the global: the environment in which this technology is active, where the information takes paths of different and complexity spread across the different regions of the world and allows the capital and investments to flow electronically, especially in view of the ease of business information driven by information capital, allowing them to overcome the obstacle of place and move across international borders .

There are many benefits and combinations that companies can greatly benefit from in improving their relationships with the customer. Here is a brief overview of these benefits:

1 - IT has contributed to the elimination of borders and restrictions to enter the customer to the commercial markets, and thanks to the world turned into a market open to customers some consideration of the geographical location of the seller or the buyer (Zouini 2007, 54).

2. IT works to marketing the products and services of companies more effectively and achieve greatest profits by providing products and services to the world without interruption, throughout a day and day of the year (Horngren 1994, 7).

3. 'IT'has achieved a high customer satisfaction rate, which is not provided by traditional means. The customer can know the types, prices, and specifications of each item, compare them and evaluate the product in terms of satisfaction. All these things can be received by the customer in minutes or seconds, while it may take days and weeks to get the product specifications.

4. IT provides an opportunity to online visitordto various types of shops as well as provide customers with full information about products, as acustomer can shop from more than one site and see the most products of companies and easily compare the products of companies without a geographical company-location visit.

**Third: Customer Relationship Management, CRM**: In the context of the concept of CRM, after visiting the Internet, the concept of CRM has changed to become E-CRM. In line with the trends of the world, companies have integrated business management systems with the capabilities of the electronic CRM system to provide excellent applications for companies to give them stronger competitive opportunities in the light of the changes and new markets. CRM used communication channels through the Internet, e-mail, social media and helped These applications manage their relationship with customers in a distinctive way (Shibail 2012, 17).

#### Fourth: IT and Economic Development

The current study, with a recent view, addresses the role of IT in the management of electronic customer communication and its relationship to economic development at the micro-economic level. It has not been specifically addressed in economic studies and in information systems. The question is: what is the link between information systems and business development? In fact, there is no economic literature focused on the role, with the



exception of the activities of the so-called economic development institutions, which are engaged in practical scientific partnerships approved for the development of business, such as Oc to UX, for example (Wengler 2018). Therefore, the current study began to examine the role of business-customer relationship in the economic development of business.

This role is based on the conceptual framework in economic development literature focusing on marketing relationships (Parvatiar and Sheth 2002), which is used by business development professionals in development agencies, chambers of commerce, tourism, energy and other entities responsible for economic development (Cloud Nine 1 Economic Development <sup>™</sup> 2018). Consultants in these activities emphasize their concernon economic development (PA Group 2018). The Conrin website (conrin.com) reviews case studies on how CRM can benefit economic development organizations. In 2003, the American Conner Foundation was asked to present a proposal for a local economic development organization and the proposal was presented, including practical consultation for the implementation of CRM, data migration and rapid training. Conrin specializes in first-class sales. Uptoday, the customer continues to use the customer's success platform <u>www.salesforce.com</u> while Connron continues to support investors, set budgets and deliver new applications.

Knowledge economy interests with banks. It is based on four pivots, notably: parameter technology and communications, as well as education and human capital; innovation and innovation; economic incentives, government, and the institutional system.

Customer satisfaction with workers' products or services is seen as the key to long-term success and competitiveness. In the context of marketing, customer satisfaction is often seen as a key determinant of customer retention (Hennig and Klee 1997). An analysis of the economic policies of development, organizations found that IT in developing countries strengthened efforts to develop information and communication systems (ICTs) increasingly used in CRM for further economic growth and market development (Berndt et al. 2005). "Executive Pulse" is a Customer relationship management tool designed specifically for economic development. It is used by a range of businesses such as manufacturing, consulting, banking, health, media, and others. Prepared CRM software packages are ready for Google environments and Office 365 (economicdevelopmentcrm.com/).

Anyhow, the establishment of links and relationships with the customer has become an urgent necessity for business organizations in this era because of its many competitive advantages. In light of the great technological developments in the field of IT, some have taken the CRM to the technical dimension of customer orientation (Suwaidi 2010, 84).

The traditional methods of attracting customers are no longer feasible in light of the IT revolution, especially the Internet crisis that has helped create opportunities for business organizations to build better Customer relationships than ever before in an offline world by combining direct response capabilities with customer demand and high interaction. Given this the opportunity and greater capacity ever to establish, nurture and support long-term CRM.

CRMDepartments helporganizations to establish valuable relationships scheme with the customer. The integrated sales units enable employees to share information in order to improve sales success and provide a consistent and efficient service to customers and make organizations the customer's primary focus by identifying their aspirations and ensuring their satisfaction (Amroosh 2007: 9).

The concept of CRM can be illustrated (Kotler 2005: 16) as an overall process of building and maintaining customer relationships by delivering customer value and customer satisfaction as it addresses acquisition concepts and customer development and retention. (Berndt & herbst



2005: 16). It is a management philosophy that seeks to build long-term relationships with customers and includes management for the development and maintenance of mutual benefits between the customer and the organization as strategy that addresses the changes occur, or expected changes in the needs and desires of customers as well as the market.

#### **Types of eCRm:**

Dychesuggested two types of eCRm (E-CRM), namely (Dyche, 2001: 13):

(A) Executive eCRM, which is concerned with points of contact with customers via e-mail, telephone, fax; (B)Analytical eCRM that needs the use of IT to handle large quantities of Customer data.

**Importance of eCRM**: The importance of customer relationships has emerged through the increasing need to respond to changes in the market that have forced many large organizations to re-evaluate the ways they connect with customers (Lewis & Lewis, 2004: 1). That the importance of CRM can be said is it:

1. Focuses on the process of value creation through interactions between the organization and its customers (Sliveni, 2011: 33).

2. Helps the organization to support its markets by targeting the best customers and managing marketing campaigns with clear and objective objectives. (Al-Tai, 2010: 43).

3 - Provide employees with information to meet the need of operations to know the Customer and understand their needs and how to build a good relationship and continuously between the organization and the Customer and partners in the distribution process and effectively.

4. The organization's revenues can be developed through increases in the marketing of products and services, which generates surplus revenues distributed in the annual payouts of employees, monthly incentives and bonuses, which necessarily means increased consumer spending and incomes, as well as other benefits.

5. In the case of the study of the impact of CRM on IT, ie, the reverse direction of this subject, no such impact was found (Haddadin 2014). While there are significant effects achieved by the use of IT on the electronic management of customer relations, the most important:

1) Helps the organization to enable its marketing department to identify and target the best customers of the organization. It also allows for the formation of an individual relationship with customers, which leads to increased customer retention, revenue, loyalty and satisfaction, and more importantly, providing the employees with the required information to know their customers and understand their needs. Organization and Customer database (Al-Baghdadi 2008: 44)

2) Helps to identify the quality of the customer and analyze the data that belong to him, which effectively contributes to change the strategy of the organization in its various operations, including in particular the function of electronic marketing and evaluation of electronic services.

#### II Empirical and Analytical Work

This paper examines the validity of the truth test by means of the method of truthfulness and the validity of the content in the peripheral comparison, followed by the use of the research method of Alpha Kronbach to demonstrate the stability of the answers of sample members of the study and descriptive analysis of the personal data, of the sample by percentages, followed by descriptive analysis of the study variables. The study concludes with



the hypothesis test, implementing two statistical tests (T-TEST, F-TEST), using statistical analysis software SPSS-25. Therefore, this section included four paragraphs, as follows:

First: Statistical methods and measurements used in the analysis; Second: Testing the instrument of measurement, resolution; Third: a descriptive analysis of personal information with an analysis of the levels of variables and importance of the study; Fourth: Statistical tests to the hypotheses of the study.

#### First: Statistical methods and measurements used in the analysis

1. Weighted Mean: it is a value that gives an initial meaning to the nature of the data and is used to determine the level of importance of respondents and responses to the questionnaire. (Joudeh 110).

2. Relative Importance: it is the relative weight of the mean, obtained from the division of the arithmetic mean of each statement to the highest score taken by the fivecard scale. (Amory 58).

3. Coefficient of Determination  $R^2$ : to determine the ratio of the independent variable variable to the dependent variable. (No'aimi 178).

4. Simple Correlation Coefficient, r: it uses to demonstrate the strength of linear correlation between two variables (No'aimi 172).

5. Z-test: to determine the significance of the correlation between two variables in case the sample size is 30 or less. In other words, it is used to indicate the acceptance or rejection of correlation between variables (No'aimi 187).

6. F-test: to determine the significance of the linear relationship between the independent variables and the dependent variable, i.e. to show the significance of the independent variable in the dependent variable (No'aimi 215).

#### Second: Checking and testing the Measurement Instrument:

#### **Credibility Test**

**A**-Virtual honesty: confirms the apparent honesty on the need to present the questionnaire to the competent arbitrators to determine the validity. (79.17%), which is a high percentage that proves the veracity of the questionnaires to represent the phenomenon studied. Nineteen paragraphs have been agreed upon by the arbitrators in twenty-four paragraphs.

**B- Method of Verifying Content by Peripheral Comparison**: This method depends on the order of the data descending or ascending, followed by the selection of 27% of the top section and 27% of the bottom of the data, and then use the T-test to compare between the two averages. The honesty requirement is provided in the resolution when calculated T be greater than its scalable counterpart (2.00). After ranking data and applying the test, T value calculated between the mean of the two sections for all resolution paragraphs (47.98) was significant because the corresponding tabular value was lower than the calculated value, demonstrating that all paragraphs of the questionnaire were successfully passed for honesty testing.

#### **Stability Test**

The stability test indicates the reliability of the data one will obtain from the resolution, by applying the alpha-cronbach method, which is the best way to measure stability. After applying the stages of the method, the value of the alpha-Cronbach stability coefficient for all the resolution clauses (0.777) was established, thus establishing the stability condition in all the paragraphs of the questionnaire, since the coefficient value is more than (0.600).

## Third: Descriptive Analysis of Personal Information with an Analysis of the Levels of study Variables and Importance



This paragraph deals with the definition and characterization; personal information of the study sample; analysis oflevel and significance ofvariables of the study; the independent variable, which is IT; the dependent variable, the electronic CRM.

#### **Personal Information**

1. Gender: Table (1) shows that the members of the study sample were male (75.68%) and females (24.32%), due to customs and traditions that limit the work of females in the state departments.

2. Class of Account: Table 1 indicates that most of the respondents in the study sample had a savings account (75.68%) while bank transfers were the lowest ratio (8.108%).

3. Activity Type: Table (1) shows that most of the sample members of the study were state employees (63.51%) and private sector owners among the bank's customers were the lowest percentage (13.51%).

4. Educational Attainment: Table (1) also shows that the percentage of holders of bachelor's degree in the studied sample was the highest, reaching (75.68%), which confirms that the members of the sample have sufficient scientific expertise to answer the paragraphs of the questionnaire Baalmip.

5. Age: Table (3) shows that the age group (from 20 years to less than 35 years) recorded the highest percentage among the sample of the study, reaching (51.35%), while the percentage of people aged 55 years and over ) Represents the lowest percentage among the respondents (5.405%).

#### 6. Analyzing the Importance of Study Variables

7. Importance of IT Variable and eCRM: This section analyzes the level of variables in all their paragraphs, using weighted accounting scales and relative importance, and commenting on results where appropriate. The results in (Table 1).

Metadata	Category	Number	%
Gender	Male	56	75.68
	Female	18	24.32
	Total	74	100%
Account	Savings Account	56	75.68
	Current Account	9	12.16
	Bank transfers	6	8.108
	Other	3	4.054
	Total	74	100%
Type of activity	Private sector	10	13.51
	State employee	47	63.51
	Retired	15	20.27
	Other	2	2.703
	Total	74	% 100
Achievement	PhD	3	4.054
	Master 's	6	8.108
	Bachelor	56	75.68
	Other	9	12.16
	Total	74	% 100
Age group	20 to under 35 years of age	38	51.35
	35 years old To less than 45 years	21	28.38
	45 years To less than 55 years	11	14.86
	55 years and over	4	5.405
	Total	74	100%

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**IT, The Independent Variable**: (Table 2) shows that the value of the arithmetic mean of the IT variable was 3.9901, which is greater than the mean value of the mean between the agreement and the disagreement. The Independent has moved towards an agreement. The relative importance of the IT variable (79.827%) was recorded, indicating the agreement of most of the study sample members on the paragraphs of the independent variable, from which we show that the Iraqi banks are clearly dependent on IT but in varying percentages.

Levels of the importance of IT variable were divided between the highest level of response achieved by the first paragraph among allitems of IT variable with a mean value of 4.851 and relative importance of (97.03%). This confirms the agreement of most of the study sample on this paragraph, (Table 2) showed that the third paragraph achieved the lowest level of response among the IT items, with a mean value of (1.59) and relative importance (31.9%). This confirms the agreement of most of the sample members study on the absence of fear and hesitation by the customer is using IT in dealing with the bank. Figure (1) shows the order of paragraphs of the independent variable from the most available in the bank to the least.

**eCTM,The Dependent Variable**: (Table 3) indicates that the value of the arithmetic mean of the CRM variable was (4.2586), which is greater than the mean value of the mean between the agreement and the non-agreement (3) The importance of the responses of the sample on the dependent variable went towards full agreement and the relative importance of the CRM variable was recorded (85.188%), indicating the agreement of most of the sample of the study on the paragraphs of the dependent variable. And it is clear that the Iraqi banks are clearly dependent on the activation of customer relations management electronically but at different rates.

Levels of theimportance of the terms of CRM variable were divided between highest level of response in paragraph 11 among all the terms of the CRM variable with a mean value of 4.72 and relative importance of (94.3%). Paragraph, which confirms the low level of deliberate or unintentional errors in directing the Customer bank, while highlighted (Table 3) that the third paragraph achieved the lowest level of response among the paragraphs of CRM, (3.88) and relative importance (77.6%). This is confirmed by the agreement of most of the sample of the study that there is a weakness in increasing the chances of detecting bank failures when providing services. Figure (2) shows the order of the dependent variables (CRM) from the most dependent by the bank until the least dependent.

s	items	Fully Agreed	Agreed	Neutral	Do not agree	fully Do not agree	Weighted arithmetic mean	Relative import- ance %
		1	2	3	4	5		
1	High response by customers to electronically manage their relationships bt bank	64	9	1	0	0	4.851	97.03
2	Increase in the Customer 's keenness to, electronically follow up his banking activities	41	19	10	2	2	4.28	85.7
3	There is concern and reluctance by the Customer to use IT about dealing with the bank	3	2	7	12	50	1.59	31.9
4	Increasing the degree of Customer confidence in electronically managed banking services	54	16	2	2	0	4.65	93
5	Disclosure of early financial	44	20	5	3	2	4.36	87.3

Table 2: Importance Level of Independent Variable, IT

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	difficulties experienced by the Customer							
6	Limited nunber of Bankers with the bank in the medium and high cultural grades	15	18	9	12	20	2.95	58.9
7	Increasing in the number of customers with banks by increasing the use of e- information management	33	17	10	8	6	3.85	77
8	Reduction of direct collisions with customers	31	29	10	2	2	4.15	83
9	Reducing the momentum of the auditors and discouraging the work	37	22	9	4	2	4.19	83.8
10	Increasing the quality of banking services provided to the Customer	44	26	2	2	0	4.51	90.3
11	Increase of Customer satisfaction by banking services	36	17	10	6	5	3.99	79.7
12	Increasing the number of customers with the bank and confidence in its performance	51	10	13	0	0	4.51	90.3
	Information Technology							79.827

High response by customers Increase of customer confidence in services Increase of quality of banking services provided Increasing number of the bank's customers Disclosure of early financial defaults

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Increase customer's keenness following up business

- Reduce momentum of reviewers & stifle work
- Reducing direct collisions with adultery
  - Increase customer satisfaction
  - Increase number of customers with banks
- Low number of dealers with refineries
- There is fear and hesitation by customer
- Figure 1: Distribution of IT Variables

Table 3: Importance Level of Dependent Variable (CRM)

	items	Fully Agreed	Agreed	Neutral	Do not agree	fully Do not agree	Weighted	Relative import-
S		1	2	3	4	5	arithmetic mean	ance %
1	Communication with banks at any time and take advantage of services	33	10	27	4	0	3.973	79.459
2	Possibility of submitting proposals according to customer needs	32	20	13	6	3	3.97	79.5
3	Increase opportunities to detect bank failures in service delivery	37	15	7	6	9	3.88	77.6
4	Identify areas of customer service development	29	17	19	9	0	3.89	77.8
5	Reduce personal judgment in the provision of banking services to customer	35	22	17	0	0	4.24	84.9
6	Increasing customer relationship management by providing fast and efficient services	39	19	10	4	2	4.2	84.1



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7	Transparency and accuracy in providing banking services to customer	52	12	10	0	0	4.57	91.4
8	CRM staff have great skill and accuracy at work	46	15	13	0	0	4.45	88.9
9	Reduce physical and psychological stress, access cost to bank's site and wait for service	53	11	10	0	0	4.58	91.6
10	Obtain customer's need for information that satisfies all important banking desires	42	20	9	3	0	4.36	87.3
11	Low level of intentional or unintentional misdirection of customer banking	56	15	3	0	0	4.72	94.3
12	Increasing customer's attachment to bank that deals with him & marketing this to others	40	14	20	0	0	4.27	85.4
	e CRM							85.188

#### Fourth: Statistical Hypotheses Tests

The work indicates the use of Z test to show the significance of the relationship between the IT and the CRM. It will accept the correlation hypothesis between the two variables if the calculated value of Z is greater than the Z value of 1.96 at 95%. To find out the strength of the correlation between the two variables, the study found the value of the simple correlation coefficient (Spearman). Table (4) confirms the acceptance of the first main hypothesis, which states that there is a significant statistical correlation between IT and CRM, at 95%, as recorded value (5.6319). The significance of Z is greater than the Z value of 1.96 at a significant level (0.05), while the simple correlation coefficient between the IT and the CRM was negative (-0.678) Indicating a strong correlation between IT and CRM.

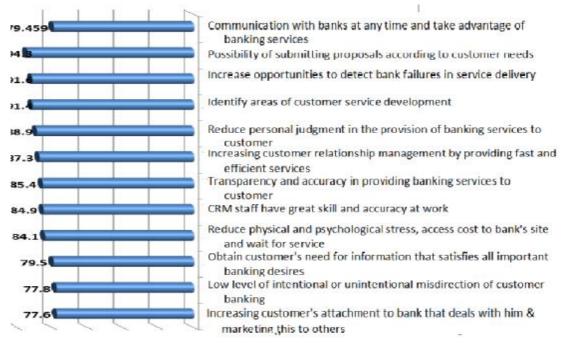


Figure 2: Distribution of Customer relationship management variable clauses

In order to demonstrate the impact of IT in CRM, we apply the F-test. We accept the assumption of influence if the value calculated for F is greater than the periodic F value of (4.0012) confirming the acceptance of the impact hypothesis with 95% confidence. The interpretation of IT for the management of customer relations, electronically will be mediated



by finding the value of the coefficient of selection% R2, confirming (Table 5): accepting the second main hypothesis that provided for the existence of a significant effect of statistical significance of the IT variable in the CRM, The calculated value of F (63.173) is a significant value, and especially that the calculated value for F is greater than the value of F Tabulated adult (4.0012), confirming the acceptance of the hypothesis by influencing the confidence of 95%, while the proportion of interpretation of IT to manage customer relationships electronically reached (48.16%), which reflected the value of R2%.

Table 4. Contention rypotnesis Test							
Varia	bles	value of the simple correlation	Z te	est	comment		
Independent	dependent	coefficient	estimated	tabulated			
Information Technology	CRM	0.678	5.6319	1.96	Acceptance of the first main hypothesis with 95%		

Table 5: Results of	Impact Hypothesis Test
	Etest

Variables		Determination coefficient	F test	Decision	
Independent	dependent	$\mathbb{R}^2$	estimated	tabulated	
Information Technology	CRM	48.16%	63.173	4.0012	Acceptance of the first main hypothesis with 95%

#### III Both Variables in Developingthe Economic Banking Activity

The e-banking services deal with internet banking, SMS, dial-up and e-commerce including POP and EJABY & ESAL and Pay-Pal services to pay bills, just as in the case of bank charges.

In Iraq, there are nine banks in the private sector, namely: Al Warka Bank for Investment and Finance - Iraqi Middle East Bank for Investment - Iraqi Credit Bank - Bank of the Tigris and Euphrates for Development and Investment - Babylon Bank - Bank of Baghdad - Basrah International Bank for Investment - Dar es Salaam Investment Bank, Economy Bank for Investmentand Finance. The first four banks were selected as an objective sample for the empirical survey due to the existence of an integrated Web Site for each of them on the internet. Four of them represented the questionnaire and analysis environment. The survey analyzes the importance of (www.warka-bank.com, www.imeib.com, www.babylonbank-iq.com, www.dfdi-bank.com, www.kubba-group.net)the growing number of customers in banking and its development in the following fields:

SWIFT (Wire transfers) receives the following revenues: external wire transfers \$ 50; fast external wire transfers 0.3%; internal bank transfers 0.3%; deposits and withdrawals through access to branch location 0.175. And total of 0.775% of the value of operational funds.

The internal transfers of the basic banking system are converted from the conversion of 0.175% in IQD to IQD; 0.225% from USD to USD; 0.225% from USD to IQD; 0.175% from IQD to USD; 0.175% From various provinces to Baghdad.

In the assurance of checkbooks: an Iraqi checkbook worth 5000 Iraqi dinars per book; checkbook checks in the US \$ 5 per notebook.

Bank guarantee letters include: 10% bond plus 0.4% per month; collaterals of 20% plus 0.4% per month; and Advanced Payment Bonds with 0.2% per month.



It should be noted that the commercial real estate collateral or equity should be the minimum price per share for safety inspection: IQD 0.3% minimum and IQD 2,500; and 0.3% minimum US \$ 3.

Checks: Not more than 5,000,000 Iraqi Dinars are to be paid for JD 5,000; amounts exceeding IQD 5,000,000 cost 10,000 IQD; amounts not exceeding US \$ 5,000; and US \$ 5,000 in excess of US \$ 5,000.

The fees vary from a bank to another depending on the concentration of activity and specialization. Overall, they provide important returns, the most important of which are commission fees, the percentage of delivery, fast fees (in US dollars) and miscellaneous fees. In each case, customer transactions come in the areas of issuance; modification; acceptance of the Deferred Payment document; postage/postage payment; LC transportation; LC cancellation; payment of a bill of lading; acceptance of inconsistencies; and DHL courier for each branch.

Assuming X of money, the customer handles with the bank (m), the total collection percentage of the money dealt by (g) of the customers is the percentage of revenue from the customer (maybe one customer or multiple customers to meet all points),which included only percentages is 3.45% of the X money movement only. This figure does not include the fixed fee amounts recorded in the mentioned paragraph. And the movement of funds for every hundred million Iraqi dinars:

(IQD 100,000.00  $\times$  3.45% = 3,450,000 IQD)

This amount doubles in the size of customers X, whose numbers are increasing, and the way to manage the electronically customer relationship, the left and most dependent on the business.

#### **Endnotes and Conclusions**

This paper reached a number of results, that can be summarized as follows:

1. Acceptance of the first main hypothesis, which states that there is a significant statistical correlation between IT and CRM, as shown in Table 4,

2.Acceptance of the second main hypothesis, which states that there is a significant statistical effect of the variable of IT in the electronically CRM, as shown (Table 5)

3. There is a high positive correlation between IT and CRM.

4. Iraqi banks are clearly dependent on IT, but in varying proportions.

5. They also clearly relies on the activation of eCRM but also in varying proportions.

6. Most respondents agreed that there is a weakness in increasing the chances of detecting bank defaults when providing services.

7. Most respondents agreed that there is no fear and reluctance on the part of the customer to use IT in dealing with the bank.

8. The secret to the bank's success in growth and expansion is in the credibility that its performance draws in an accurate manner, free of mistakes and estrangements, as well as harming integrity. With these fundamentals, the acquisition of new customers in increasing numbers thanks to the CRM tool and its system and its effectiveness to achieve economic growth and banking, and certainly contribute to the economic growth of different business sectors, as well as the general public of bankers in the deposit and shopping and remittances as in credit, financing and investment funds.

#### **Analytical Results**

CRMis an approach to managing the bank's interaction with current and more potential customers. This approach analyzes customers data and their history with the bank to improve the best business relationships, with a particular focus on retaining customers and growing their numbers, in order to drive sales growth. This inevitably contributes to the bank's economic growth. One of the important aspects of the CRM approach and systems, that it



expands the economic activity as well as the increase of branches of the bank. Based on the results of this study, it is possible, if the recommendation is given, to get rid of proposals, the most important of which:

1. Constructing a good customer database that includes accurate details to help banks to identify the right needs of their customers and design the products that meet the best. This requires training to front office staff to serve customers in all branches on how to obtain data and enter it correctly for use in Subsequent sales to clients, using CRM software to facilitate the task.

2 –To consider the relationship of the bank with the customer as a partnership does not focus only on a relationship benefit, i.e. support the customer in all circumstances .. incase of profit or loss, and finding appropriate solutions to him that prevent the stumbling, which will promote the loyalty of the customer.

3. IT is an important and critical tool for implementing CRM strategies that should be used to attract more and more customers, especially those interested in facilitating their banking transactions through electronic communication. This can be a tool to build a loyal relationship with the customer. To achieve this, the study suggests that banks develop communication with customers and provide the latest services that meet the new and renewed desires, and stay informed of their needs through continuous study of the local market and evaluate its position compared to the competing market.

4 - The need to cover various aspects of CRM electronically and ensure its success and achieve its goal, which is to achieve customer loyalty and thus higher profitability of the bank.

5. To harness IT in CRM and product development that the customer needs. This calls for expanding the bank's reputation, name and relationships to attract as many customers as possible. Two aspects of action are required: announcing and advertising through all available channels; research and development of the Bank's products and means of interaction with the public.

The banking environment requires strong follow-up of all developments in the strategies of marketing banking and sales policies, both of which are under the direct management of customer relations electronically. The bank, which aims at growth and development, does not hesitate to keep pace with it so that it remains in the competition. The customer is an asset of the banks and his satisfaction is the tool through which the bank can reach its objectives.



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Annex (1): Questionnaire form

Mr. Fadhel .....

good greeting

We are pleased to draw your attention to the fact that this questionnaire has been prepared and submitted to you to be a contribution to the research entitled "IT and Strengthening Customer Relationship Management and Economic Development", a scientific field study applied to a sample on commercial banks in Baghdad. With sincere thanks and appreciation.

First: - Definition of the most important terms contained in the questionnaire

1- Information Technology

A variety of hardware and software organizations use to achieve a competitive advantage by using the information and creating human skills experienced and efficient in dealing with IT. Application of the science curriculum in dealing with data and information.

Saving: Provide new methods and methods for organizing the work.

Credentials: Reliance on technology in dealing with data and information.

Accuracy in the processing and operation of data and information.

The speed in the circulation of information between different administrative levels and in various areas of the organization's activity.

2- Customer Relationship Management, CRM

It uses direct channels of communication with customers through the Internet and e-mail, in addition to some modern wireless technology such as chat, and the management of electronic Customer relations capable of dealing with customers automatically without human intervention or human intervention to a minimum, these applications will allow companies to Manages its relationship with customers in a unique and unique way in the Internet and the Internet.

Second: General questions

1- Academic AttainPlease Tick 🗾 🛩	
A- Bachelorher Diploma C– MasthD	
2. Work Type	
A) Private sector I servant c) retire thers (please on)	
3- Type of banking dealings	
A- Saving Account B- t Account C- Bank T s	
D- Other (please mention)	
4- Age group of beneficiaries of banking services. Please Tick 🛛 🛩 :	
A- 20 years to less than 35 B- 35 to less than 45	
C - 45 to less than 55 D- 55 years and above	

Third: - The Questioning Hubs Please mark () the answer you think is appropriate.

The first axis: the use of customers to manage Customer relations electronically

The use of Customer Relationship Management (CRM) enables the Customer to:

S	Factors	Fully Agreed	Agreed	Neutral	Do not agree	fully Do not agree 5
	Communication with bonks at any	l	2	3	4	5
1	Communication with banks at any time and take advantage of banking					
	services					
2	Possibility of submitting proposals according to customer needs					
3	Increase opportunities to detect bank failures in service delivery					
4	Identify areas of customer service development					
5	Reduce personal judgment in the provision of banking services to customer					
6	Increasing customer relationship management by providing fast and efficient services					
7	Transparency and accuracy in providing banking services to customer					
8	CRM staff have great skill and accuracy at work					
9	Reduce physical and psychological stress, access cost to bank's site					

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	and wait for service			
	Obtain customer's need for			
10	information that satisfies all			
	important banking desires			
	Low level of intentional or			
11	unintentional misdirection of			
	customer banking			
	Increasing customer's attachment			
12	to bank that deals with him &			
	marketing this to others			

Factors agreed:

Completely agreed to agree to some extent do not agree not fully agree

- 1 Communicate with banks at any time and benefit from various banking services
- 2. The possibility of making proposals according to Customer needs
- 3 Increase opportunities to detect bank failures in service delivery

4. Identify the areas in which the banking service offered to the Customer can be developed

5 Reduction of cases of judgments and personal judgments in the processing and delivery of banking services to the Customer

6. Increasing Customer relationship management by providing fast and efficient banking services

7 Transparency and accuracy in providing banking services to the Customer

8 Customer relationship management staff have great skill and tact

9 Reduce the physical and psychological effort and expenses of access to the bank site and wait until the service

10. Obtain all the information that the Customer needs in order to satisfy all the important banking desires of the Customer

11 Low level of deliberate or unintentional misdirection of Customer banking

12 Increase the Customer's attachment to the bank that deals with him and can work to market it to others