

## ***The Influence of Customer Knowledge Management on the level of Customer Perceived Value: Case Study of The National Insurance Company***

***Imene Irain<sup>1</sup>, Thabit H. Thabit<sup>\*2</sup>, Sid Ahmed Hadj Aissa<sup>3</sup>***

*<sup>1</sup>Laboratory of Entrepreneurship, Human Resources Management and Sustainable Development)  
University of Blida2, Algeria, [irainimene@gmail.com](mailto:irainimene@gmail.com)*

*<sup>2</sup>Department of Computer Engineering and Information, College of Electronics Engineering, Ninevah  
University, Iraq, [thabit.thabit@uoninevah.edu.iq](mailto:thabit.thabit@uoninevah.edu.iq)*

*Laboratory of Entrepreneurship, Human Resources Management and Sustainable Development)  
University of Blida2, Algeria, [s.hadj\\_aissa@live.fr](mailto:s.hadj_aissa@live.fr)*

***Received : 11/09/2022***

***Accepted : 11/11/2022***

### ***Abstract:***

*This paper aims to study, determine and build knowledge about the impact of customer knowledge management (CKM) on the customer perceived value (CPV) by analyzing the level of availability of CKM dimensions in the National Insurance Company, and measuring the impact of these dimensions on CPV, where the research importance stems from the importance of the customers to the company and the importance of managing knowledge related to their needs and requirements of the products and services provided by the company in order to enhance their loyalty and raise their level of satisfaction. The researchers used the statistical method in order to measure the impact of CKM dimensions on CPV by designing a questionnaire and distributing it to a sample of individuals and analyzing it statistically using SPSS program, and then discussing the results of the analysis to prove the research hypotheses.*

***Key Words:*** *Customer Knowledge Management, Customer Perceived Value, Customer Satisfaction, National Insurance Company.*

***JEL Classification:*** *M10, M21, M31*

---

\* - Corresponding author: Thabit H. Thabit, e-mail: [thabit.thabit@uoninevah.edu.iq](mailto:thabit.thabit@uoninevah.edu.iq)

## **1. INTRODUCTION**

Knowledge represents one of the most important resources for organizations in light of the modern economy, digital society and the information revolution, where organizations are competing on the basis of what they provide of value-added products or products based on knowledge, and since customer satisfaction is one of the most important goals of the organization, the customer knowledge has become one of the basic trends that organizations want to manage in order to monitor all changes in his/her taste and expectations and embody them into specifications that support the organization's products, which increases his/her satisfaction and enhances his/her loyalty (Hadj Aissa & Thabit, 2019, p. 10). Therefore, the term customer knowledge management (CKM) appeared in order to manage the desires of customers and turn them into positive elements that contribute to the success of the organization through constant interaction with it.

## **2. LITERATURE REVIEW**

### **2.1 The Conceptual Framework of CKM:**

Knowledge patterns differ according to multiple factors such as the environment, society and economy (Mahmood, Raewf, & Hamadany, 2019, p. 28). For this reason, the concept of the term CKM has differed according to the researchers' interests, orientations and factors affecting them (Peng, Lawrence, & Koo, 2009, p. 148). So, the concept of CKM can be classified according to the following approaches (Ahmad, Jameel, & Raewf, 2021, p. 3), (Chaithanapat & Rakthin, 2021, p. 74), (Madhoushi, Saghari, & Madhoushi, 2010, p. 217):

- Operations Approach:

This approach focuses on defining CKM as a set of operations carried out by the organization to change the attitude of its customers from receiving products or services to empowering them as participants in the knowledge of these products or services (Mehri, Daneshgar, & Fattahi, 2009, p. 5). Also, it is defined as the integration processes between the support technology and the organization to understand its customers in addition to serving and learning from them (Feng & Tian, 2005, p. 2241). The CKM can be technical processes that must be implemented in an effective manner and cost-effective methods that support individuals, processes and customers, and achieve these goals according to a systemic approach to extract process, and disseminate knowledge about customers (Taherparvar, Esmaeilpour, & Dostar, 2014, p. 594). The researchers believe that CKM is the processes that the organization employs to manage, acquire and achieve internal benefit from customer knowledge, as it reflects teamwork with customers to collect existing knowledge and create new knowledge, and this new knowledge is key to the organization's ability to creativity and is reflected in

the research and development function in it and increase its ability to generalize and improving new products and services.

- Interaction Approach:

This approach focuses on the fact that CKM is an interaction between an organization and its customers (Karem, Raewf, Thabit, & Shakir, 2022, p. 70), CKM according this approach can be defined as The customer's interaction with the organization and what results from this interaction is knowledge of that customer as an interaction that achieves information that contributes to the mutual understanding between the organization and the customer (Raewf & Thabit, 2018, p. 45).

- Teamwork Approach:

This approach emphasizes the cooperation between customer and organization, which leads to achieving gains for both parties (Jameel, Hamdi, Karem, Raewf, & Ahmad, 2021, p. 3). CKM has been defined as a collective action that results in a form of valuable information that is used in making decisions and determining activities in the organization according to the requirements of the zone, and it is the first step that provides better management of profitable interactions between the two parties, and learning about customer needs through multiple channels (Thabit, Hadj Aissa, & Harjan, 2016, p. 8) (Xiaofan & Saeheaw, 2020, p. 266).

- Knowledge Increase Approach:

This approach confirms that CKM is part of a broader knowledge that is the knowledge of the organization as a whole, which is an addition or sub-system within a more comprehensive system (Hadj Aissa, Thabit, & Hanniche, 2018, p. 69), that includes obtaining the dissemination and distribution of the latent knowledge of customers about the organization and its products and services and defined as knowledge derived through Interactive processes between customers and employees of the organization (Garcia-Murillo & Annabi, 2002, p. 878).

In general, and according to the previous definitions, researchers believe that CKM is a comprehensive concept that includes these combined approaches, and on this basis it can be defined as a group of purposeful operations planned by the organization aimed at increasing its knowledge about its customers and the market through interaction between it and customers and a joint teamwork that contributes to increasing the efficiency of the organization in designing and producing its services and products to achieve greater benefit to the customer.

## **2.2 The CKM Challenges:**

The CKM system faces a set of challenges that stand in the way of its potential for success, and those challenges can be highlighted as follows (Rod, Ashill, Shao, & Carruthers, 2009, p. 107), (Raewf, Hadj Aissa, & Thabit, 2021, p. 570), (Thabit & Raewf, 2017, p. 67), (Rowley, 2002, p. 272):

- Structural Challenges:

Effectively implementing CKM requires a shift from product-centric organization to customer-centric organization, where the processes for organizing the structure start in the opposite direction from the customer to the marketing (Hadj Aissa & Thabit, 2019, p. 602). Such work may be easy to say, but it is difficult to do it, and it will shift from focusing on selling products to focusing on profitability and customers, and so on, where the issue will lead to the rewards system in force in the organization and its goals according to the customer perspective.

- Cultural Challenges:

The application of CKM requires a change in the culture of the organization (Mohsan, Nawaz, Khan, Shaukat, & Aslam, 2011, p. 265), and the philosophy of the organization is directed towards increasing the organization's knowledge about customers and opening channels of interaction with them (Thabit & Raewf, 2018, p. 103). So, It can be a process that requires a change in the behavior of employees and reflects internally (within the organization) and enhances its culture towards the customer.

- Competencies Challenges:

Orientation towards the customer and changing the internal and cultural processes requires several things, such as the goals of understanding customers and a behavioral process that includes deep-rootedness and positive interaction with them (Raewf, Mahmood, & Jaafar, 2021, p. 51). Also, transforming this understanding into knowledge requires skills, in addition, the use of information technology to adapt, develop and transform information needs other technical skills (Thabit & Jasim, 2017, p. 37). Thus, the application of CKM requires an integrated set of skills, as organizations may obtain a competitive advantage through the knowledge that they possess (Lu, Harncharnchai, & Saeheaw, 2021, p. 54).

- Confidentiality Challenges:

Organizations should take into account the feelings of customers and their private information, and this requires them to study the legal aspects in the nature of their dealings with their customers (Raewf, Mahmood, & Jaafar, 2021, p. 205). Some

customers, for example, do not feel comfortable with the organization knowing information about them (Reddy, Reddy, & Jonnalagadda, 2022, p. 3995). Therefore, building trust in the relationship with each customer and dealing with it according to its specifics is very important and needs to formulate effective work policies that respond and take into account the above considerations (Miake, Carvalho, Pinto, & Graeml, 2018, p. 139).

### **2.3 The Future Trends of Developing CKM:**

Many scholars and researchers have proposed some future directions for CKM as following (Rollins & Halinen, 2005, p. 241), (Thabit, Hadj Aissa, & Harjan, 2016, p. 123), (Charoensap & Saeheaw, 2022, p. 123), (Raewf, Thabit, & Jasim, 2021, p. 52):

- Increasing patterns of cooperation between organizations and their customers, which helps to create new knowledge. This knowledge becomes the leader of creative production processes.
- Forming work teams from the organization and customers and have an impact through the reflection of the results of the work of these teams on the internal operations of the organization.
- Increasing the use of technology in strengthening communications with customers, especially electronic communications, whose impact will increase, which will positively enhance the internal operations of the organization.
- Increasing the capabilities of learning from customers, as organizational learning will be the key to formulating new strategies for the organization.
- The emergence of trends among organizations to achieve strategic alliances between these organizations and in specific areas of the growing markets and customers.
- The expansion of the customer pattern from the individual pattern to the collective pattern, as it will include collective entities such as professional associations, lobby groups, which will become valuable and generate knowledge about markets.
- Reconsidering the existing organizational structures in the organizations at the present time and in force, and they will turn into structures that support creativity and are able to contain customers within them, and help to establish knowledge through them and to work with contemporary structures such as web work teams and its reflection on the powers and responsibilities and ways of distributing them among employees.

### **2.4 The CKM Model:**

Garcia-Murillo and Annabi (2002) suggested CKM model that consists of four main stages, as follows (Garcia-Murillo & Annabi, 2002, p. 877):

- Revealing Knowledge:

At this stage, the interaction of salesmen with the customer together, face to face, encourages the customer, and through this interaction, the customer is attracted more than asking questions, and good listening here plays a major role in obtaining this information.

- Sorting Knowledge:

At this stage, the salesmen make a map of the user's needs and determine the type of knowledge that is useful in setting the map and the dimensions of other knowledge, and from this information, information about general problems, maintenance, quality records, competitive products, options, to help in decision-making processes.

- Leveling Knowledge:

At this stage, the customer has obtained information about the product, service, and organization, and the seller has obtained the customer's choices and needs. Through this interaction, the choices of the customer and the seller may change. In the end, the seller will get a clear, integrated and modified idea of the customer's needs. It is important for the customer to have obtained Get information about the organization, which makes him/her a registered member of the organization.

- Recording Knowledge:

In this stage, the final knowledge obtained is recorded in the organization's records and databases, and thus it serves all sections of the organization.

## **2.5 The Dimensions of CKM:**

CKM can be represented by the following dimensions (Zhang, 2011, p. 91), (Garcia-Murillo & Annabi, 2002, p. 879):

- Knowledge of Customer:

It is a type of knowledge that the organization obtains about the customers in order to provide what they desire, fulfill their needs and provide their preferred characteristics in its services and products. Data and information about the customers can be obtained through databases, questionnaire platforms, or the complaints department.

- Knowledge for Customer:

It is a type of knowledge that the organization provides to its customers in order to provide everything it has of what customers need, and often this data and information

can be obtained by the organization's customers, private sources for the organization, information, consultancy institutes or competitors.

- Knowledge from Customer:

It is a type of knowledge or data and information that can be analyzed, interpreted and converted into accumulated knowledge that the organization obtains from its customers in order to enhance its products and services.

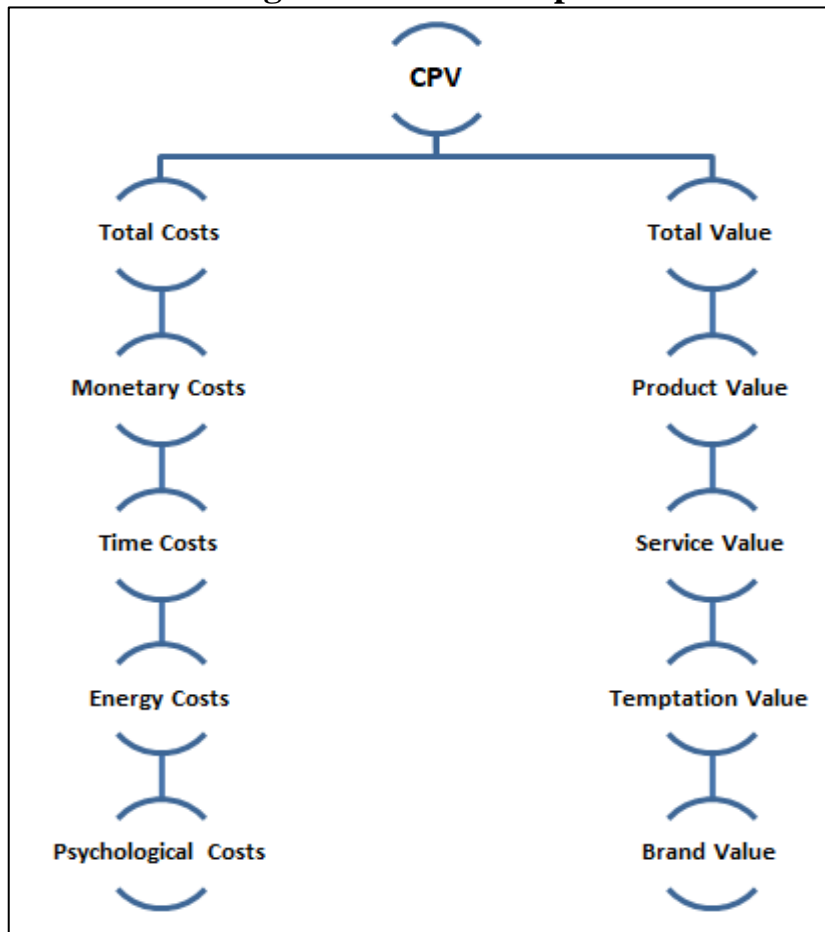
## **2.6 The Customer Perceived Value:**

The best thing that organizations use in their changing economic environment is providing value that distinguishes their products or services from their competitors to maintain their current customers and attract new customers, but the customer's perception of the value achieved in the product or service varies from one customer to another, according to each customer's point of view (Vulder, 2011, p. 34).

The customer perceived value (CPV) can be defined as the general assessment of the extent of the usefulness of the product by the customer on the basis of what he/she perceives and what he/she obtains from the products or services (Virvilaite, Saladiene, & Skindaras, 2009, p. 98), and it can also be defined as the customer's goals, personal needs, and benefits that he/she seeks to obtain (Silva & Yapa, 2009, p. 4). Generally, CPV is a variable that increases with the satisfaction of the customer's needs or the decrease in the cost of the product or service.

Figure (1) illustrated that CPV is an important element that affects the level of value provided to the customer or it is the cost that the customer incurs to obtain the product or service.

**Figure 1. The Concept of CPV**



### 3. THE PRACTICAL PART

#### 3.1 Population and Sample of the Research:

The study population represents the total number of individuals benefiting from insurance services in the National Insurance Company in Algeria, which is 389,000 individuals. As for the research sample, it was calculated according to the Yard equation as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where,

n = Sample size

N = Population = 389000

e = margin of error which is 0.05

Therefore, the total sample size is approximately 400 individuals, and the researchers added 50 individuals to the analysis to enhance the results, so the total sample size is 450 individuals.



### 3.2 Tool of the Research:

In order to obtain the necessary data to perform the statistical analysis, the researchers designed a questionnaire that includes the various axes that explain the independent variables (CKM), as well as, the dependent variable (CPV), as shown in Table (1):

**Table 1.** The Structure of Questionnaire

Variables		No. of Paragraphs
CKM	Knowledge of Customer	3
	Knowledge for Customer	3
	Knowledge from Customer	3
CPV		3
<b>Total</b>		<b>12</b>

Source: Prepared by the researchers

### 3.3 The Validity and Stability:

#### - The Tool of Research Validity

In order to find the internal consistency of the study tool, the correlation coefficient was calculated between the study variables and their measurement indicators. Table (2) shows that the correlation coefficient between the scores of each item (indicator) and the total score for all items of the axis (variable) related to Knowledge of Customer was positive and between (0.658 - 0.740). In addition, all the items of this variable were statistically significant at the level of ( $\alpha \leq 0.05$ ). The table also shows that the correlation coefficient between the scores of each item (indicator) and the total score for all items of the axis (variable) related to Knowledge for Customer was positive and between (0.743 - 0.725). In addition, all the items of this variable were statistically significant at the level of ( $\alpha \leq 0.05$ ). While the table shows that the correlation coefficient between the scores of each item (indicator) and the total score for all items of the axis (variable) related to Knowledge from Customer was positive and between (0.732 - 0.595). In addition, all the items of this variable were statistically significant at the level of ( $\alpha \leq 0.05$ ). The table also shows that the correlation coefficient between the scores of each item (indicator) and the total score for all items of the axis (variable) related to CPV was positive and between (0.674 - 0.686). In addition, all the items of this variable were statistically significant at the level of ( $\alpha \leq 0.05$ ).

**Table 2.** The Internal Consistency of the Research Variables

<b>Knowledge of Customer</b>	Indicator 1	Indicator 2	Indicator 3
<b>Correlation Coefficient</b>	0.740	0.658	0.735
<b>Knowledge for Customer</b>	Indicator 1	Indicator 2	Indicator 3
<b>Correlation Coefficient</b>	0.725	0.742	0.743
<b>Knowledge from Customer</b>	Indicator 1	Indicator 2	Indicator 3
<b>Correlation Coefficient</b>	0.732	0.595	0.688

<b>CPV</b>	Indicator 1	Indicator 2	Indicator 3
<b>Correlation Coefficient</b>	0.674	0.679	0.686

Source: Prepared by the researchers

- The Tool of Research Stability:

To test the stability of the research tool, the researchers calculated Cronbach's alpha coefficient for each of the research variables, and the stability coefficient values were acceptable as shown in Table (3).

**Table 3.** Cronbach's alpha Coefficient Values

<b>Variables</b>	<b>Paragraphs</b>	<b>Stability Coefficient</b>
Knowledge of Customer	1-3	0.514
Knowledge for Customer	4-6	0.451
Knowledge from Customer	7-9	0.445
CPV	10-12	0.540
		<b>0.578</b>

Source: Prepared by the researchers

### 3.4 The Descriptive Statistical Analysis of Independent and Dependent Variables:

- The Independent Variable of the Research:

Table (4) shows that the sample items have significantly approved for all indicators of knowledge of customer, the total results show that the knowledge of customer obtained (3.5937) for arithmetic average, and (0.81174) for standard deviation.

**Table 4.** The Indicators of Knowledge of Customer

	<b>Arithmetic Average</b>	<b>Standard Deviation</b>	<b>Approval Degree</b>
The company seeks to create a large balance of information about its customers.	3.46	1.210	Significantly
The company electronically documents all data related to its customers.	3.60	1.092	Significantly
The company periodically seeks to collect sufficient information about its customers.	3.73	1.100	Significantly
Knowledge of Customer	3.5937	0.81174	Significantly

Source: Prepared by the researchers

While Table (5) shows that the sample items have significantly approved for all indicators of knowledge for customer, the total results show that the knowledge for customer obtained (3.5896) for arithmetic average, and (0.88597) for standard deviation.

**Table 5.** The Indicators of Knowledge for Customer

	<b>Arithmetic Average</b>	<b>Standard Deviation</b>	<b>Approval Degree</b>
The company deals with customer inquiries in a professional	3.59	1.177	Significantly

manner			
The company solves the problems of its customers effectively and definitively	3.48	1.287	Significantly
The company provides the necessary information to its customers immediately and quickly	3.70	1.144	Significantly
Knowledge for Customer	3.5896	0.88597	Significantly

**Source:** Prepared by the researchers

Table (6) shows that the sample items have significantly approved for all indicators of knowledge from customer, the total results show that the knowledge from customer obtained (3.6948) for arithmetic average, and (0.73065) for standard deviation.

**Table 6.** The Indicators of Knowledge from Customer

	<b>Arithmetic Average</b>	<b>Standard Deviation</b>	<b>Approval Degree</b>
The company works to listen to the problems and suggestions of its customers	3.68	1.174	Significantly
The company is working to provide multiple means to communicate with it	3.83	0.955	Significantly
The company provides an opportunity for interactive communication to its customers	3.59	1.081	Significantly
Knowledge from Customer	3.6948	0.73065	Significantly

**Source:** Prepared by the researchers

- The Dependent Variable of the Research:

Table (7) shows that the sample items have significantly approved for all indicators of CPV, the total results show that the CPV obtained (3.3274) for arithmetic average, and (0.80787) for standard deviation.

**Table 7.** The Indicators of CPV

	<b>Arithmetic Average</b>	<b>Standard Deviation</b>	<b>Approval Degree</b>
The company's values are consistent with the daily values that the individual aspires to in his/her daily life	3.21	1.193	Significantly
The company serves the customer for a long-term relationship, not just for the first deal	3.44	1.188	Significantly
There are many benefits that the individual obtains by returning and repeating dealing with the company	3.33	1.186	Significantly
CPV	3.3274	0.80787	Significantly

**Source:** Prepared by the researchers

### 3.5 Hypotheses Test

$H_1$ : “There is no statistically significant effect at the level of ( $\alpha \leq 0.05$ ) for the knowledge of customer on the level of customer perceived value”

Table (8) shows the results of the simple regression analysis in order to test the hypothesis  $H_1$

**Table 8.** The Simple Regression of H<sub>1</sub>

Model	Atypical Transactions		Modular Transactions	T	Significance Level of T
	B	Standard Error	Beta		
Constant	2.718	0.171		15.922	0.000
Knowledge of Customer	0.170	0.046	0.170	3.662	0.000
R . Value	0.170 <sup>a</sup>				
R-square Value	0.029				
Adjusted R-Square	0.027				
F. Value	13.409				
Significance Level of F.	0.000				

Source: Prepared by the researchers

Table (8) shows that there is statistically significant effect of knowledge of customer on the level of CPV, as the calculated value of (F) reached (13.409), which is a function at the level of ( $\alpha \leq 0.05$ ), and R-square value is (0.029). This indicates that knowledge of customer explains only 0.029% of the changes in the dependent variable (CPV). The same table also confirms the results of the existence of an effect of knowledge of customer on the level of CPV by the value of (T), which equals (3.662) with a significance level of (0.000), which is a value smaller than (0.05).

H<sub>2</sub>: “There is no statistically significant effect at the level of ( $\alpha \leq 0.05$ ) for the knowledge for customer on the level of customer perceived value”

Table (9) shows the results of the simple regression analysis in order to test the hypothesis H<sub>2</sub>

**Table 9.** The Simple Regression of H<sub>2</sub>

Model	Atypical Transactions		Modular Transactions	T	Significance Level of T
	B	Standard Error	Beta		
Constant	2.624	0.156		16.868	0.000
Knowledge for Customer	0.196	0.042	0.215	4.658	0.000
R . Value	0.215				
R-square Value	0.046				
Adjusted R-Square	0.44				
F. Value	21.698				
Significance Level of F.	0.000				

Source: Prepared by the researchers

Table (9) shows that there is statistically significant effect of knowledge for customer on the level of CPV, as the calculated value of (F) reached (21.698), which is a function at the level of ( $\alpha \leq 0.05$ ), and R-square value is (0.046). This indicates that knowledge for customer explains only 0.046% of the changes in the dependent variable (CPV). The same table also confirms the results of the existence of an effect of knowledge for customer on the level of CPV by the value of (T), which equals (16.868) with a significance level of (0.000), which is a value smaller than (0.05).

H<sub>3</sub>: “There is no statistically significant effect at the level of ( $\alpha \leq 0.05$ ) for the knowledge from customer on the level of customer perceived value”

Table (10) shows the results of the simple regression analysis in order to test the hypothesis H<sub>3</sub>

**Table 10.** The Simple Regression of H<sub>3</sub>

Model	Atypical Transactions		Modular Transactions	T	Significance Level of T
	B	Standard Error	Beta		
Constant	2.329	0.191		12.206	0.000
Knowledge from Customer	0.270	0.051	0.244	5.337	0.000
R . Value	0.244				
R-square Value	0.060				
Adjusted R-Square	0.058				
F. Value	28.482				
Significance Level of F.	0.000				

**Source:** Prepared by the researchers

Table (10) shows that there is statistically significant effect of knowledge from customer on the level of CPV, as the calculated value of (F) reached (28.482), which is a function at the level of ( $\alpha \leq 0.05$ ), and R-square value is (0.060). This indicates that knowledge from customer explains only 0.06% of the changes in the dependent variable (CPV). The same table also confirms the results of the existence of an effect of knowledge from customer on the level of CPV by the value of (T), which equals (12.206) with a significance level of (0.000), which is a value smaller than (0.05).

## 4. CONCLUSIONS AND RECOMMENDATIONS

### 4.1 Conclusions:

This study focused on explaining the effective relationship between CKM and CPV. So, the researchers concluded the following:

- The level of dimensions availability for knowledge of customer was large by the individuals of sample. This indicates the company’s interest and keenness to implement this approach by searching for the necessary information about its customers and using it to understand their needs and desires.
- The level of dimensions availability for knowledge from customer was large by the individuals of sample. This indicates the company's interest in obtaining information from the customer, which contributes to strengthening the company's position in the changing environment and conditions of uncertainty and constantly developing its effective strategies in order to provide better services and products
- The level of dimensions availability for CPV was large by the individuals of sample. This indicates that the company contributes to providing services at

lower costs and seeks to achieve sustainable interaction with its customers, in addition to its keenness to manufacture strategies with a positive sustainable impact.

- The study showed a statistically significant effect of CKM (knowledge of customer, knowledge for customer, and knowledge from customer) separately on the level of CPV by the individuals of research sample.

#### 4.2 Recommendations:

Based on the previous conclusions, the researchers recommend the following:

- The company should continue to pay attention to CKM, as it is a strategic approach that contributes to promoting sustainable communication between the company and its customers.
- The need to search more for other dimensions than those mentioned in the research, which can explain the largest amount of variation in the CPV of the customer, especially since the research proved the influence relationship, but the explanatory power of the independent dimensions was very weak.
- The need to enhance the activity of CKM with other communication mechanisms especially with the growing use of social networking sites.

#### References

- Ahmad, A., Jameel, A. S., & Raewf, M. B. (2021). Impact of Social Networking and Technology on Knowledge Sharing among Undergraduate Students. *International Business Education Journal*, 14(1), pp. 1-16.
- Chaithanapat, P., & Rakthin, S. (2021). Customer Knowledge Management in SMEs: Review and Research Agenda. *Knowledge and Process Management*, 28(1), pp. 71-89.
- Charoensap, K., & Saeheaw, T. (2022). Customer Experiences Identification Process using Bloom Taxonomy and Customer Knowledge Management. *Joint International Conference on Digital Arts, Media and Technology with ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering (ECTI DAMT & NCON)*, (pp. 122-127).
- Feng, T., & Tian, J. (2005). Customer Knowledge Management and Condition Analysis of Successful CKM Implementation. *The Fourth International Conference on Machine Learning and Cybernetics Guangzhou*, (pp. 2239-2244).
- Garcia-Murillo, M., & Annabi, H. (2002). Customer Knowledge Management. *Journal of the Operational Research Society*, 53(8), pp. 875-884.
- Hadj Aissa, S. A., & Thabit, T. H. (2019). Modelling the Relevance between the Relationship Marketing and WOM Marketing through the Customer Satisfaction: Case Study in Algeria Telecommunications Corporation. *Tikrit Journal for Administration & Economics Sciences*, 15(45 Part 1), pp. 1-21.
- Hadj Aissa, S. A., & Thabit, T. H. (2019). The Effect of Sports Marketing on the Sports Institutions Performance: A Field Study. *Creativity Review*, 9(1), pp. 599-610.
- Hadj Aissa, S. A., Thabit, T. H., & Hanniche, H. (2018). The Impact of Customer Relationship Management on Customer Behavior: Case Study of Ooredoo for Telecommunications. *Revue Des Sciences Commerciales*, 12(1), pp. 67-78.
- Jameel, A. S., Hamdi, S. S., Kareem, M. A., Raewf, M. B., & Ahmad, A. (2021). E-Satisfaction based on E-service Quality among University Students. *Journal of Physics: Conference Series*, 1804, pp. 1-10.
- Kareem, M. A., Raewf, M. B., Thabit, T. H., & Shakir, R. M. (2022). The Factors that Influence Knowledge Sharing in Educational Institutions: An Empirical Study Using PLS-SEM Approach. , *Cihan University-Erbil Journal of Humanities and Social Sciences*, 6(1), pp. 69-74.

- Lu, W., Harncharnchai, A., & Saeheaw, T. (2021). Social Media Strategy For Batik SMEs Using Customer Knowledge Management. *Joint International Conference on Digital Arts Media and Technology with ECTI Northern Section Conference on Electrical Electronics Computer and Telecommunication Engineering*, (pp. 53-58).
- Madhoushi, M., Saghari, F., & Madhoushi, Z. (2010). Survey of Customer Knowledge Management Impact on Customer Relationship Management. *International Journal of Business and Social Science*, 2(20), pp. 215-226.
- Mahmood, Y. N., Raewf, M. B., & Hamadany, Z. S. (2019). A Study on the Perceptual Relationship between Overtime and Output: Case Study of Knowledge. *Cihan University-Erbil Journal of Humanities and Social Sciences*, 3(1), pp. 27-31.
- Mehri, P., Daneshgar, F., & Fattahi, R. (2009). A Theoretical Framework for Development of a Customer Knowledge Management System for Academic Libraries. *World Library and Information Congress: 75th IFLA General Conference and Council*, (pp. 1-16).
- Miake, A., Carvalho, R., Pinto, M., & Graeml, A. (2018). Customer Knowledge Management (CKM): Model Proposal and Evaluation in A Large Brazilian Higher Education Private Group. *Brazilian Business Review*, 15(2), pp. 135-151.
- Mohsan, F., Nawaz, M., Khan, M., Shaukat, Z., & Aslam, N. (2011). Impact of Customer Satisfaction on Customer Loyalty and Intentions to Switch: Evidence from Banking Sector of Pakistan. *International Journal of Business and Social Science*, 2(16), pp. 263-270.
- Peng, J., Lawrence, A., & Koo, T. (2009). Customer Knowledge Management in International Project: A Case Study. *Journal of Technology Management in China*, 4(2), pp. 145-157.
- Raewf, M. B., & Thabit, T. H. (2018). *Influencing Factors on Customer Satisfaction: Study on a Sample of Arab Restaurants in Malaysia*. Germany: LAP- Lambert Academic Publisher.
- Raewf, M. B., Hadj Aissa, S. A., & Thabit, T. H. (2021). The Impact of Quality, Cost, and Lead Time on Competitive Advantage: Case of SMEs Operating in Iraq. *Economic Studies Journal*, 15(3), pp. 568-575.
- Raewf, M. B., Mahmood, Y. N., & Jaafar, A. J. (2021). Influencing Factors on the Employees Cooperation of Private Sector. *3rd International Conference on Administrative and Financial Sciences (ICAFS 2021)* (pp. 204-207). Iraq: Cihan University-Erbil.
- Raewf, M. B., Mahmood, Y. N., & Jaafar, A. J. (2021). The impact of people in cooperation on cooperative management of the private sector. *UKH Journal of Social Sciences*, 5(2), pp. 50-57.
- Raewf, M. B., Thabit, T. H., & Jasim, Y. A. (2021). The Relationship between the Elements of Marketing Mix and Consumer Behavior during Environmental Uncertainty: The Case of the COVID-19 Pandemic. *Cihan University-Erbil Journal of Humanities and Social Sciences*, 5(1), pp. 50-55.
- Reddy, H., Reddy, R., & Jonnalagadda, R. (2022). Literature Review Process: Measuring the Effective Usage of Knowledge Management Systems in Customer Support Organizations. *International Journal of Research Publication and Reviews*, 3(7), pp. 3991-4009.
- Rod, M., Ashill, N., Shao, J., & Carruthers, J. (2009). An Examination of the Relationship between Service Quality Dimensions, Overall Internet Banking Service Quality and Customer Satisfaction. *Marketing Intelligence & Planning*, 27(1), pp. 103-126.
- Rollins, M., & Halinen, A. (2005). Customer Knowledge Management Competence: Towards a Theoretical Framework. *the 38th Annual Hawaii International Conference on System Sciences*, (pp. 240-245). USA.
- Rowley, J. (2002). Reflections on Customer Knowledge Management in e-Business, Qualitative Market Research. *An International Journal*, 5(4), pp. 268-280.
- Silva, K., & Yapa, S. (2009). Customer Retention: With Special Reference to Telecommunication Industry in Srilanka. *International Conference on Business and Information*, (pp. 1-15). Malaysia.
- Taherparvar, N., Esmailpour, R., & Dostar, M. (2014). Customer Knowledge Management, Innovation Capability and Business Performance: A Case Study of the Banking Industry. *Journal of Knowledge Management*, 18(3), pp. 591-610.
- Thabit, T. H., & Jasim, Y. A. (2017). *Applying IT in Accounting, Environment and Computer Science Studies*. Germany: LAP- Lambert Academic Publisher.
- Thabit, T. H., & Raewf, M. B. (2017). *Applications of Fuzzy Logic in Finance Studies*. Germany: LAP- Lambert Academic Publisher.
- Thabit, T. H., & Raewf, M. B. (2018). The Evaluation of Marketing Mix Elements: A Case Study. *International Journal of Social Sciences & Educational Studies*, 4(4), pp. 100-109.

- Thabit, T. H., Hadj Aissa, S. A., & Harjan, S. A. (2016). Evaluating the Role of Training Strategy in Enhancing the Training Effectiveness. *MECAS*, 13, pp. 4-18.
- Thabit, T. H., Hadj Aissa, S. A., & Harjan, S. A. (2016). Using Fuzzy Logic to Evaluate the Relationship between Designing Training Program and Level of Creativity and Innovation. *International Journal of Innovation and Scientific Research*, 25(1), pp. 121-129.
- Virvilaite, R., Saladiene, V., & Skindaras, D. (2009). The Relationship between Price and Loyalty in Services Industry. *Kaunas University of Technology*, 3, pp. 96-104.
- Vulder, J. (2011). Explaining Customer Perceived Value in Business to Business Services. *M.Sc. Thesis of Management*.
- Xiaofan, Z., & Saeheaw, T. (2020). Exploring Chinese Customers Experiences with Chiang Mai Guesthouse through Analytical Customer Knowledge Management. *Joint International Conference on Digital Arts Media and Technology with ECTI Northern Section Conference on Electrical Electronics Computer and Telecommunications Engineering (ECTI DAMT & NCON)*, (pp. 265-269).
- Zhang, Z. (2011). Customer Knowledge Management and the Strategies of Social Software. *Business Process Management Journal*, 17(1), pp. 82-106.