INVESTIGATION THE RELATIONSHIP BETWEEN MAIN SOURCES KNOWLEDGE ACQUISITION AND OPEN INNOVATION AT THE SECOND MANAGERIAL LEVELS OF THE GENERAL DIRECTORATE OF TRAFFIC

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ABSTRACT

Purpose: This study aims to examine and investigate the main sources of knowledge acquisition for individuals at the middle management levels and determine the relationship (degree of correlation and influence) between the variables of the study

Theoretical framework: Recent and future studies literature reported the need for, knowledge acquisition takes place, and the best methods are those that come from outside sources such as partners, competitors, suppliers, and customers, as best practices when compared to other institutions.

Design/methodology/approach: this study used the scientific methodology based on knowledge analysis, it used a questionnaire that was created taking into account the scientific requirements, Two main hypotheses have been developed. And it consisted of a sample of individuals who depended on learning new things, most similar to knowledge processes. The second organizational level of the General Traffic Department and (63) other individuals were used to generate this sample and adopted computer statistics (SPSS. V. 24) to analyze and process data and information

Findings: The results concluded and found that the variables of acquiring knowledge and open innovation had a positive correlation and impact, as the variable (partners) obtained the highest correlation value.

Research, Practical & Social implications: Managers can find new visions and indicators for applying the knowledge acquisition system, and identifying their impact on achieving open innovation.

Originality/value: The value of the study is to enhance the understanding of the literature related to The Relationship Between Main Sources of Knowledge Acquisition And Open Innovation by analysis, and provides an applied conception.

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INVESTIGAÇÃO DA RELAÇÃO ENTRE AS PRINCIPAIS FONTES AQUISIÇÃO DE CONHECIMENTO E INOVAÇÃO ABERTA NOS SEGUNDOS NÍVEIS DE GESTÃO DA DIRECÇÃO-GERAL DE TRÁFEGO

RESUMO

Objetivo: Este estudo tem como objetivo examinar e investigar as principais fontes de aquisição de conhecimento para indivíduos nos níveis de gerência intermediária e determinar a relação (grau de correlação e influência) entre as variáveis do estudo

Referencial teórico: A literatura de estudos recentes e futuros relatou a necessidade, a aquisição de conhecimento ocorre e os melhores métodos são aqueles que vêm de fontes externas, como parceiros, concorrentes, fornecedores

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e clientes, como melhores práticas quando comparados a outras instituições.

Desenho/metodologia/abordagem: este estudo utilizou a metodologia científica baseada na análise do conhecimento, utilizou um questionário que foi elaborado tendo em conta os requisitos científicos. Duas hipóteses principais foram desenvolvidas. E consistia em uma amostra de indivíduos que dependiam de aprender coisas novas, mais semelhantes aos processos de conhecimento. O segundo nível organizacional do Departamento Geral de Trânsito e (63) outros indivíduos foram usados para gerar esta amostra e adotaram estatísticas de computador (SPSS. V. 24) para analisar e processar dados e informações

Resultados: Os resultados concluíram e constataram que as variáveis aquisição de conhecimento e inovação aberta tiveram correlação e impacto positivos, já que a variável (parceiros) obteve o maior valor de correlação.

Implicações de pesquisa, práticas e sociais: os gerentes podem encontrar novas visões e indicadores para aplicar o sistema de aquisição de conhecimento e identificar seu impacto na obtenção de inovação aberta.

Originalidade/valor: O valor do estudo é aprimorar a compreensão da literatura relacionada à relação entre as principais fontes de aquisição de conhecimento e inovação aberta por meio de análise e fornecer uma concepção aplicada.

Palavras-chave: Aquisição de Conhecimento, Clientes, Fornecedores, Concorrentes, Parceiros, Inovação Aberta.

INVESTIGACIÓN LA RELACIÓN ENTRE LAS PRINCIPALES FUENTES ADQUISICIÓN DE CONOCIMIENTO E INNOVACIÓN ABIERTA EN LOS SEGUNDOS NIVELES GERENCIALES DE LA DIRECCIÓN GENERAL DE TRÁFICO

RESUMEN

Propósito: Este estudio tiene como objetivo examinar e investigar las principales fuentes de adquisición de conocimiento para los individuos en los niveles de mandos medios y determinar la relación (grado de correlación e influencia) entre las variables del estudio.

Marco teórico: La literatura de estudios recientes y futuros reporta la necesidad de adquirir conocimiento y los mejores métodos son aquellos que provienen de fuentes externas como socios, competidores, proveedores y clientes, como mejores prácticas en comparación con otras instituciones.

Diseño/metodología/enfoque: este estudio utilizó la metodología científica basada en el análisis del conocimiento, utilizó un cuestionario que se creó teniendo en cuenta los requisitos científicos. Se han desarrollado dos hipótesis principales. Y consistió en una muestra de individuos que dependían de aprender cosas nuevas, más similares a los procesos de conocimiento. Para generar esta muestra se utilizó el segundo nivel organizacional de la Dirección General de Tránsito y (63) personas más y se adoptó la estadística computacional (SPSS. V. 24) para analizar y procesar datos e información.

Hallazgos: Los resultados concluyeron y encontraron que las variables adquisición de conocimiento e innovación abierta tuvieron una correlación e impacto positivo, siendo la variable (socios) la que obtuvo el mayor valor de correlación.

Implicaciones de investigación, prácticas y sociales: los gerentes pueden encontrar nuevas visiones e indicadores para aplicar el sistema de adquisición de conocimiento e identificar su impacto en el logro de la innovación abierta.

Originalidad/valor: el valor del estudio es mejorar la comprensión de la literatura relacionada con la relación entre las principales fuentes de adquisición de conocimiento y la innovación abierta mediante el análisis, y proporciona una concepción aplicada.

Palabras clave: Adquisición de Conocimiento, Clientes, Proveedores, Competidores, Socios, Innovación Abierta.

INTRODUCTION

Knowledge acquisition today is very difficult for organizations. This is a different issue and requires different aspects of the level of knowledge needed for organizations to analyze it. The level of knowledge of the second organizational level should include the ability of these levels to share the correct information about the inquiries raised by customers, suppliers, competitors, partners, everything related to the various variables, and the willingness to clarify

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or recommend the correct plans and knowledge of procedures to improve work. (Beula et al.2022), Open innovation was initially proposed by Chesbrough in 2003. Both internally and externally the company, useful ideas can be acquired, and the marketing process can be carried out either inside or outside the organization. According to the open innovation approach, external ideas and marketing avenues are just as important as internal ones in terms of importance, The open innovation paradigm allows for the permeation of organizational walls. The main sources of innovative ideas include research, development, and other departments within the business, The term "open innovation model" refers to a particular sort of innovation model in which a business engaged in technical innovation can simultaneously profit from complementing internal and external resources. The organization can commercialize in-house technologies inside and outside, and the business engages in complex and dynamic participation in various partner collaborations throughout the entire innovation chain. According to Chesbrough (2011), open innovation is a model for innovation in which businesses purposefully leverage incoming and outgoing knowledge flows to extend knowledge growth in external markets or speed up internal innovation. (Chesbrough et al.2011), Reengineering current platforms and localizing them through value-creation activities lead to the development of good enough innovations. We show that open innovations are built on innovative product architectures and applications that have the potential to build brand-new market niches that solely rely on input from customers, processors, or partners to compete. Open innovations with the highest level of market uniqueness are referred to as reverse innovations since they build new market segments in developed and developing countries. (Ratnasari et al,.2020)m Important information and Experience must be regularly acquired and distributed among personnel, and this need becomes urgent when a business considers establishing a knowledge acquisition plan and begins the process of gaining knowledge from customers, suppliers, competitors, or partners.

And when new inventions are found that are valuable and relevant to current and future needs, knowledge is gained. Through this study, the best learning methods are those that come from external sources such as partners, competitors, suppliers, and customers, Haddock et al., (2019) see these Methods as best practices when compared to other organizations, Especially when organizations are in the process of being formed in the process of forming partnerships, starting projects with partners, and communicating with experts. (Haddock et al. 2019), according to Dedah. (2020), managing open innovation is also resource-constraining from a business model point of view, particularly in terms of the ability to orchestrate innovation and build effective innovation. Innovation does not necessarily lead to new differences, but it is a

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way to achieve open innovation by reducing bureaucracy through the value-creation activities of the business model. (Al Dedah, 2020)

The entrance to justification for the current study is that companies take full advantage of the wealth of knowledge resources and external innovations, and search for appropriate external technologies to compensate for the scarcity of creative internal resources, and seek to integrate internal and external technologies, which leads to the development of the organization's operations, Accordingly, the problem of the current study is whether there are a correlation and influence relationship between the variables of knowledge acquisition and open innovation and whether there is an understanding among the members of the organization of the theoretical philosophy and intellectual goals of knowledge acquisition and open innovation, and knowledge acquisition as an intellectual framework and depends on a network of contacts with customers, suppliers And competitors and partners, who can generate a new ability through which the organization can achieve a competitive advantage based on open innovation Economy and information technology is the basis for change in business, as well as if access to knowledge acquisition Open innovation is based on the analysis and diagnosis of information.

LITERATURE REVIEW

Knowledge Acquisition

One aspect of knowledge management is knowledge acquisition (i.e. knowledge acquisition, knowledge dissemination, and response to knowledge). The process of converting individual knowledge into organizational knowledge is known as knowledge management (Rasula et al., 2012). Knowledge management's dimensions enable organizations to learn, think, eliminate learning, re-learn, build, maintain, and renew their core competencies (Fernandez et al.,2015). In light of this, externally generated knowledge and Experience must be regularly acquired and distributed among personnel, and this need becomes urgent when a business considers establishing a knowledge acquisition plan and begins the process of gaining knowledge from customers, suppliers, competitors, or partners.

Knowledge acquisition is the company's competitive advantage. The newly acquired knowledge will be coupled with previously known information to produce new knowledge, such as new procedures (Hajric,2018). A company's power to discover and acquire external information that is essential to its operations is enhanced by the complementing ability of knowledge acquisition (Kyeyagalire,2012). A company's "carrying capacity" is essential to its potential for innovation. A company's carrying capacity is its capacity to recognize, acquire, and apply fresh external information's value to its objectives.

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Carrying capacity is a company's capacity to recognize, acquire, and apply fresh external information's value to corporate goals. (Fernandez., 2015)

The knowledge that is new to an organization must be created internally or acquired from outside sources; numerous internal and external sources of knowledge are organized to benefit internally, so it must be discovered. Knowledge acquisition refers to the location, creation, or discovery of knowledge. Individual employee capabilities, skills, and experiences, how they are used, and how different internal data and information are analyzed and understood, are crucial sources of knowledge that can be abused. Similarly to this, customers and channel participants externally already have the knowledge that the business needs to obtain for decision-making. Additionally, information can be obtained from other members of the external environment, such as rivals and the general public (Fernandez., 2015). This knowledge is necessary for the company to build a long-lasting competitive advantage that will result in superior market performance. It also enables the business to take advantage of opportunities more quickly and respond to challenges with greater flexibility. Consequently, by super knowledge, Companies outperform their rivals in terms of speed, cost, and quality of goal achievement. When a corporation attempts to acquire knowledge from external sources, it is referred to as knowledge acquisition. (Majeed et al., 2022) (Al-Hafez et al., 2015) Sources of knowledge include suppliers, competitors, partners/allies, consumers, and outside specialists. Communities of practice can go well beyond the firm, thus it is necessary to take a broad picture of the value chain.

Detailed explanations of how to manage external relations are outside the purview of this topic because knowledge acquisition is a subject that could fill entire books and go far beyond knowledge management (KM). However, since knowledge management is closely related to strategic companies, of knowledge management. Hajric (2018), page 100 Getting information from specialists is not always simple, and this study contains several Among the variables this study depends on and which serve as primary sources of knowledge acquisition are:

Customers

Information about customers might take many different forms, (zbebek et al., 2011) distinguished three types:

- Knowledge of customers is information that they can gain from our company or other external sources, such as other customers and competitors, to satisfy their knowledge demands. This information may include knowledge about the product,

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market, and suppliers.

• Knowledge about the customer: This form of knowledge comprises requirements, expectations, and purchase behaviors.

• Knowledge from the customer: Information about goods, providers, and markets that can be applied to enhance our services and products.

These three areas relate to the actual acquisition of knowledge and the processing and use of data and information to produce knowledge. For instance, data on consumer behavior may be examined to provide knowledge that will help with marketing or design decisions.

Although knowledge acquisition can take many different forms depending on the organization, KM is especially crucial for B2B connections because buyers are typically more prominent (e.g., by purchasing a large number of products or expensive ones) and products are more essential. This can and frequently should result in a deeper relationship with more thorough discussions and feedback, where customers are included as partners when modifications and improvements are made, as it will likely be tailored to the customer's demands are discussed (zbebek et al. 2011,)

Consequently, the following are some potential approaches for acquiring consumer knowledge:

A: Collect notes

b- Collecting and process data linked to marketing

C - acquiring advice

D - development/design sharing

Dependent on **CRM**; in this context, IT can be used to obtain feedback and improve partner communication and collaboration. (Hajric .2018, 100–101) the firm can get a thorough grasp of its consumers and be better able to address their needs by adopting a customer-centric approach.

Demands, so it is crucial for the business to build a large knowledge database as well as ways to obtain, control, and distribute the information it contains. According to Al-Hafez et al. (2015), customer knowledge may be split into two categories:

- *Familiarity*: The breadth of product knowledge possessed by customers

- *Experience*: This indicates the customer's aptitude for carrying out tasks by utilizing the merchandise.

Consequently, to improve connections To obtain a more accurate picture of consumer behavior, the company must increase the quality of customer information. Additionally, customer knowledge management consists of several efficient procedures for collecting,

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growing, and maintaining advantageous combinations of customer experience and knowledge.

However, relying just on quantitative data collection and analysis will prevent you from developing a thorough understanding because obtaining data is simply the first stage in developing consumer expertise. Customer knowledge management, then, is the process by which a company deals with a variety of issues that are both explicit and implicit in customer information, extracts those issues, transforms them into strategies that can support operations and marketing, and increases the value of the company's knowledge.

Increased customer interaction is therefore advantageous.

The knowledge of the organization must be systematically organized into customer communication knowledge. It should be noted, however, that while the importance of customer knowledge in the product innovation process has been recognized for a long time, its potential has not been extensively researched. (Hajric (2018), p. 101)

Suppliers

(Albarracin etal.2018) gives a classification of supplier knowledge acquisition based on customer knowledge concepts identified. Here are some examples:

- *Supplier Knowledge*: This is the knowledge that suppliers require, which includes production demands, expectations, storge, goods, customers, and markets.

- *Supplier Knowledge*: This is the knowledge used to understand how a supplier can meet the organization's requirements, providing insights into quality, delivery, defects, financial risks, and so on.

- *Supplier Knowledge*: This refers to the information that suppliers have acquired as a result of their interactions with the company.

Complementary objectives, cultural fit, and dedication to leadership are listed by (Albarracin, et al. 2018) as the essential elements for lasting, fruitful collaborations. 102 (Hajric, 2018)

It's important to note that this is a rather simple part of knowledge management; it simply entails obtaining, organizing, and presenting data, information, and knowledge that a corporation has amassed so that it can be searched for, retrieved, and examined. Here, new and improved knowledge is important.

Competitors: examination knowledge acquisition systems are most pertinent in this situation because the sources are straightforward and likely to require frequent updating and processing. (2018) (Hajric, 102).

A country's competitive position in a global sector depends on other countries' relative

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strengths and weaknesses. Additionally, firms looking to build a global strategy must contend with both foreign and domestic challenges.

According to Hajric., (2018)The ability of a single firm to react to competitive moves on a global scale is determined by the amount, timing, and accuracy of competitors. Despite this, firms frequently use competitors as sources for benchmarking and the transfer of best practices, so knowledge of competitors includes the major capabilities of competing firms. Knowledge of the competitor is one of the market knowledge competencies needed to succeed in the market, and as with knowledge competence of the customer, it refers to the capacity to obtain, interpret, and integrate information about the global competitive environment. As a result, managers must thoroughly understand the competitor for the company to perform as expected. (Hajric., 2018)

Partnership

Knowledge-sharing partners allow employees to facilitate knowledge transfer through exchanges, joint ventures, and other regular interactions. (Maio. Et al.2018)

Gaining essential tacit knowledge and growing communities of practice outside of company borders require a strong focus on informal communication, collaboration, and socialization.

(Maio. Et al.2018) develops a list of action-based knowledge kinds, including:

- **Knowledge for a partner:** that satisfies their demands, such as "knowledge about products, markets, and suppliers.

- **Partner knowledge**: Partner knowledge focuses on comprehending the partners' capacity to carry out their responsibilities in the partnership. It encompasses things like products, services, and distribution methods.

- **Knowledge from partners**: information partners have learned via interactions with the organization.

In this instance, the approach utilized within the company for knowledge generation and exchange (including data/information analysis) can be used by partners to acquire knowledge in a very similar way. That is to say, the exact system must meet the nature of the relationship and business model.

The system must be protected in this scenario so that only the knowledge the corporation wants to share and joint ventures between US and Japanese enterprises are available.

Open Innovation

A Harvard University professor and Austrian-American named Joseph Schumpeter was the first scientist to establish the notion of innovation. Innovation is an extremely old English word that is derived from the Latin word "Innovation," which means to renew or make new things or alter (Fagerberg.2003). He systematically defined the term "innovation" as the introduction of a previously unheard-of "new set of factors of production" into the production system, innovation being carried out to obtain a potential profit, in the German edition of The Theory of Economic Development, published in 1912 (Chen Yin.,2019) Innovation is a change in how we approach a task or the successful implementation of new ideas or discoveries. It could be a drastic or progressive development.

Lee., (2016)The success of innovation processes in knowledge management has grown in popularity as a research issue over the past ten years, particularly about radical innovations in thinking, products, processes, or organizations (Lee., 2016)

According to Zia et al., (2017)Innovation is the "act of introducing something new and refers to novel ideas as well as novel products and procedures. Innovation also involves the release of novel and valuable ideas. (Zia et al., 2017)

Innovation Understanding the role of knowledge management in innovation is essential since it has significant implications for innovation.

Knowledge management capabilities and knowledge innovation have become essential subjects for enhancing corporate performance as firms work to develop creative knowledge techniques to increase competitiveness. (Okatan., 2021).

While innovation is cited as one of the main drivers of a firm's productivity, profitability, and competitiveness and is typically presented as an output of knowledge exploitation and integration, argues Feldman, 2000)) that innovations are nothing more than the creation of new knowledge is essential to economic activity, particularly in terms of a firm's ability to develop and exploit new ideas for future competitiveness while Bollisani et al., (2017) categorize innovation as discovery. and diffusion of new and economically valuable knowledge in the form of new goods, processes, and organizations. of information that is unknown to others. (Bollisani et al., 2017)

According to Zia et al., (2017)Knowledge can play a critical role in improving the creative capabilities of any organization. Knowledge management assists organizations in arranging and manipulating existing data to create new products and services. Changing customer needs, intense market dynamics, rapidly changing technology, and an ever-increasing amount of knowledge are some of the key enablers of innovation. Organizations are inspired to

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innovate and adapt to new, creative ideas. Organizations must be able to enhance the knowledge and skills of their human capital in a competitive market. the role that all knowledge management methods perform, as seen by the authors an important part of innovation, but organizational innovation is particularly connected to the process of knowledge creation. (Zia etal.,2017)

Supporting creativity, coming up with fresh ideas, and utilizing the collective wisdom of the business are all goals of knowledge management (Parlby et al.,2000,). the researcher described how knowledge, particularly tacit knowledge, is crucial to the creative process. By converting general knowledge into particular knowledge, new and useful knowledge is developed and transformed into products, services, and processes, and the properties of information and ideas that are important to all forms of innovation are described:

- Knowledge is not a conflict Unlike a consumer commodity or service, an idea only needs to be created once and can be applied numerous times without losing any of its value.

- Knowledge is continuous; present knowledge serves as the fertile ground from which new knowledge might be developed through future research.

- Knowledge is reproducible at a low cost, especially digital knowledge.

- Knowledge is Only a portion excluded. For instance, reverse engineering and reviewing patent filings can reveal the majority of knowledge on commercial developments.

- Knowledge is an intangible asset since it cannot be recovered by the investor in the same way that a machine or structure can.

There is intrinsic ambiguity involved in the creation of new knowledge. It expands our knowledge (Dehbani et al., 2022)

According Okpara etal. (2016) believed in the open innovation concept, which is defined as using an invention to develop a commercial good or service. It is the primary driver of fresh demand and hence new riches. As a result, entrepreneurs advertise inventions, and fresh demand is generated. By doing this, new markets are created, which in turn will be destroyed by newer goods or services. This destroys old markets. This process is known as "creative destruction" by Schumpeter (Okpara et al.,2016), Crossing organizational barriers is crucial for open innovation, in which businesses collaborate with other organizations and use their innovative resources and marketing channels to increase the effectiveness of their innovation processes. The way businesses obtain the resources required for cooperation has changed as a

result of the open innovation approach in public Permeable company boundaries in the innovation model. A vast network of information exchange links the internal corporate units with diverse external organizations since businesses cannot rely exclusively on their resources and must employ the innovative resources of the external environment. An organization can concurrently engage in exploratory and exploitative learning thanks to the properties of the open innovation model. The idea of open innovation is a tiny idea of an organization's innovative system. It is generated from an overview of innovation patterns that emerge from independent modifications businesses make to their innovative processes to account for the complexity of a knowledge economy that is both innovative and undergoing rapid change. Even businesses with the strongest reserves are struggling in the age of knowledge growth.

Since the application of knowledge cannot lead to self-sufficiency in all areas of technology, open innovation has emerged as the unavoidable option for successful innovation by individual firms. Enhance their capacity to seek out, obtain, acquire, and apply knowledge; increase the openness of the organization's innovation system. Achieving autonomous creativity and collaborative innovation requires giving feedback to improve internal R&D capabilities. Achieving synergy within the national innovation system requires open innovation as well. (Chen etal.,2019).

According Pohl etal. (2020).The development and implementation of innovations based on both internal and external ideas are referred to as "open innovation." Open innovation hence refers to open innovation procedures for businesses. Customers and outside parties are involved in the brainstorming and development stages of innovation, and certain circumstances in advertising (Pohl etal., 2020).

Open innovation is described as the utilization of intentional inward and outward flows of knowledge, to accelerate endogenous innovation and increase markets for external application of innovation externally.

DATA AND METHODOLOGY

This study aims to assist a company in comprehending the advantages of the investigation between traditional knowledge acquisition and open innovation. A significant correlation between these variables should also be looked into. In addition, to determine its impact on Public Innovation The relationship between the primary sources of knowledge acquisition and open innovation of people at the second organizational levels, of the General Directorate of Traffic, was investigated Out of (63)individuals who had been invited to participate, and responded to in this study using the descriptive-analytical technique

- **Data collected**

by using the following methods; personal observation, staff interviews, and the survey questionnaire. Ethics approval was obtained from the responsible authority to distribute the questionnaire forms to participants. Validity and reliability for the descriptive-analytical study methods were undertaken. Therefore, (72%) of the judgment, comity, and experts indicated that the questionnaire form is valid. The entire variables and factors do approve. In addition, the measuring methods are acceptable for investigation. The final questionnaire form was designed based on the recommendations referred red by the judgment comity in terms of adding, deleting, and correcting. Based on the reliability coefficient of the questionnaire form was (80.8%), according to the Cronbach Alpha equation .

- **Data Analysis**

The descriptive method was used to analyze the collected data. It has had various quantitative and qualitative methods to prove the validity of hypotheses and the study purposes. Study variables were classified as dependent variables referred in to the application of Open Innovation of individuals at the second managerial levels of the General Directorate of Traffic, and independent variables were the main Sources of Knowledge Acquisition, An investigation of the relationship between study variables and identify the level of its influence on Open Innovation were determined Sources Knowledge Acquisition by; SPSS v. 21.0 for Windows, Cronbach's alpha equation, Mean, Standard Deviation, Correlation Coefficient, Linear Regression, and Microsoft Excel .

- **Investigation Design**

Accordingly to figure.1, the study problem identified an understanding the members of the organization have of the elucidation of theoretical philosophy and intellectual goals of knowledge acquisition and Open Innovation., and the Correlation and effect Coefficient between the main source of Knowledge Acquisition And Open Innovation.

in this study, this investigation, a conceptual framework model based on the study questions and their hypotheses. This is to determine whether there is a significant relationship between independent variables represented by the main source of Knowledge Acquisition namely; (customers, suppliers, competitors, and partners), and open innovation and the application of the open innovation "at the second managerial levels of the General Directorate of Traffic" as a dependent variable. Additionally, to identify its influence on open innovation, the following model was designed in Figure.1

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Figure 1. A Conceptual framework of the correlation between the study variables
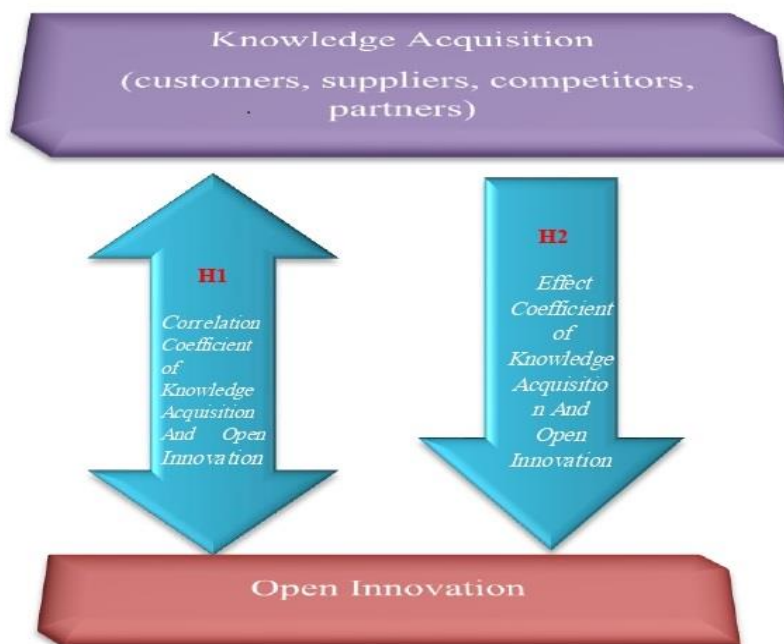
Source: Prepared by the authors (2022)

From the above model, a conceptual framework for the relationship between the study variables can be formulated in the form of two main hypotheses for the relationship between the study variable:-

The first hypothesis: there is a statistically significant correlation between Main Sources of Knowledge Acquisition And Open Innovation. ?

The second hypothesis: there is a statistically significant effect upon the Main Sources of Knowledge Acquisition And Open Innovation.

RESULTS AND DISCUSSION

The results of the knowledge acquisition variables:

Table (1) indicates the arithmetic means, standard deviations, and coefficients of variation related to the managers' viewpoint regarding knowledge acquisition. The table reflects a general arithmetic mean above the standard mean of (3.77) and high consistency in the answers confirmed by the standard deviation (0.64) and the low coefficients of variation (20.27%). These supplies are included.

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Customers (Human Characteristics)

The indicated table shows that the level of customers is above the average for the sample members, and this is confirmed by the general arithmetic mean for this variable, which is (3.79), which is higher than the standard mean of (3), with a standard deviation and a general coefficient of variation (0.77) and (20.35%), respectively, which are low reflecting the degree of Good consistency in the answers of the sample members.

As for the paragraphs, the arithmetic mean values ranged between the highest value achieved by paragraph (1) (enhancing work values and amounted to (3.89) and the least dispersion in the answers among all paragraphs, as the standard deviation and coefficient of variation were (0.62) and (15.93%), respectively. And between the lowest arithmetic mean value achieved by paragraph (3) (promoting knowledge growth), which amounted to (3.70), and the highest dispersion in the answers among the paragraphs, as the standard deviation and the coefficient of variation reached (0.87) and (23.51%), respectively, as the researcher noted the companies' dependence on Customer feedback in maintaining the level of good knowledge acquisition in the organization.

Suppliers

This variable shows the interest of managers in the research sample companies using the suppliers' systems clearly by achieving this variable a general arithmetic mean of (3.68) above the average and with little dispersion, as the general standard deviation and the general difference coefficient reached (0.68) and (18.47%), respectively, which is the matter Which indicates an interest in using the knowledge systems of suppliers when acquiring and managing knowledge.

As for the paragraphs, this variable was measured by paragraphs (4,5,6) of the questionnaire, as paragraph (5) (utilizing the expertise of the suppliers) achieved the highest value of an arithmetic mean (3.79) and the lowest value of dispersion in the answers, as the standard deviation and the coefficient of variation reached (0.60) and (15.83%), respectively. Paragraph (4) achieved the lowest mean value (3.59) and the highest dispersion of answers, as the standard deviation and coefficient of variation were (0.73) and (20.33%), respectively

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Table 1- Arithmetic mean, standard deviation, and coefficient of variation for the knowledge acquisition variable

Variables of the main sources of knowledge acquisition		M	S.D	Variation coefficient
Custo	Promote the value of working with customers	3.89	0.62	15.93
	Instilling trust with customers	3.79	0.82	21.63
	Promote the growth of knowledge relationships	3.70	0.87	23.51
	Mean, deviation, and general coefficient of variance	**3.79**	**0.77**	**20.35**
Suppli	Use of knowledge and learning systems	3.59	0.73	20.33
	Benefit from the expertise of suppliers	3.79	0.60	15.83
	Suppliers' side incentives and incentives	3.67	0.72	19.61
	Mean, deviation, and general coefficient of variance	**3.68**	**0.68**	**18.47**
Comp	Viewpoints control	4.03	0.73	18.11
	Clarify your problems	3.97	0.84	21.15
	Employees contribute to problem-solving	3.68	0.79	21.46
	Mean, deviation, and general coefficient of variance	**3.89**	**0.78**	**20.05**
Partners	Exchange of ideas and interaction between departments	3.78	0.81	21.42
	Possessing knowledge critical to the success of the organization	3.73	0.76	20.37
	Identify the bearers of valuable knowledge	3.68	0.89	24.18
		3.73	0.82	21.98
	Mean, deviation, and general coefficient of variance			
Mean, deviation, and coefficient of variation for total knowledge acquisition		3.77	0.64	20.27

Source: Prepared by the authors (2022)

Competitors (management position)

Table (1) reflects an arithmetic mean for this variable above the standard mean of (3.89) and with little dispersion, as the standard deviation and the general coefficient of variation were low (0.78) and (20.05%), respectively, which shows a level above the mean among managers in confronting competitors' forces.

As for the items included in this variable, it was measured by items (7, 8, 9) as paragraph (7) achieved the highest arithmetic mean by (4.03) and the least dispersion within these paragraphs, as the standard deviation reached (0.73) and the coefficient of variation reached (18.11%). Paragraph (9) achieved the lowest arithmetic mean and the highest dispersion value (3.68) and (21.46%). These results indicate the appropriate management orientations when facing some competitors .

Partners

This variable indicates the need for the estimated management to have the appropriate partners for the success of the organization. This variable reflects a general arithmetic mean that exceeds the standard mean, which amounted to (3.73) and less dispersion, as the standard deviation and the general coefficient of variation reached (0.82) and (21.98%), respectively.

As for the paragraphs of this variable, it was measured by paragraphs (10, 11, 12), and

paragraph (10) achieved the highest arithmetic mean of (3.78) and an acceptable dispersion shows the consistency of the managers' answers, as the standard deviation and coefficient of variation reached (0.81) and (21.42%) on the respectively, as the administration seeks to exchange views with its various partners. While paragraph (12) achieved the lowest arithmetic mean (3.68) and the highest dispersion through a standard deviation and coefficient of variation (0.89) and (24.18%), respectively, which means that the organization can determine the appropriate partners for it.

Testing the relationships between (knowledge acquisition and open creativity)

By testing the correlation hypotheses that were formulated as a guide to the results of the intellectual accumulation about the relationship between the study variables, in particular about the existence of a significant relationship between knowledge acquisition and open innovation in general and in detail.) only as follows:- table (2) shows the results of measuring the simple and multiple correlations between the variables of knowledge acquisition and open innovation at the general level of the sample as a whole. 0.54) which is a positive value indicating the existence of a positive relationship with a moral significance at (0.01)

Table 2-The values of the Spearman correlation coefficients between knowledge acquisition and open innovation

Open innovation ⟍ Knowledge Acquisition	Open innovation	Sig.	Total Index
Customers	** 0.40	0.001	**0.54
Suppliers	*0.27	0.034	
Competitors	**0.43	0.00	
Partners	**0.62	0.00	

N= 63   Sig.**0.05** *P   Sig.**0.01** ** P
Source: Prepared by the authors (2022)

• **There is a positive correlation** with statistical significance at the level (0.01) between customers and open innovation, as the value of the correlation coefficient was (0.40), a value that reflects the extent of the impact of customers' feedback in maintaining the level of good knowledge acquisition and open creativity.

• **There is a positive correlation** with a significant significance at the level (0.05) between suppliers and open creativity, as the value of the correlation coefficient reached (0.27), a value that reflects the strength of the relationship between the two variables and indicates that the study sample companies depend on the suppliers on open creativity.

- **The existence** of a positive correlation with a significant significance at the level (0.01) between competitors and open innovation, as the value of the correlation coefficient reached (0.43), which reflects the strength of the relationship between the two variables and the dependence of the companies under study on the participation of employees to achieve open creativity.

- **There is a positive correlation** with a significant significance at the level (0.01) between the partners and open innovation, as the value of the correlation coefficient is (0.62), a value that reflects the strength of the relationship between the two variables. The mission to the company's success is through open innovation.

The above confirms the acceptance of the first basic hypothesis, which states that ((there is a positive correlation with moral significance for the relationship between knowledge acquisition and open innovation)).

- **Testing the effect of knowledge acquisition variables on open creativity**

This topic aims to test the hypotheses of the effect between the study variables using the non-parametric simple linear regression model in an attempt to show the effect of the relationship between knowledge acquisition in open innovation.

The levels of analysis were taken at the total and sub-levels to know the significance of the effect of each sub-variable on the explanatory variables in the response variable, as the results, according to Table (3), indicate the effect of the relationship between the study variables, as the results were as follows-:

Table 3- Results of analyzing the effect of the relationship between knowledge acquisition in open innovation

Variables	R^2 Value	F Value	P. Value**	R.C Value	T Value	P. Value**
Knowledge acquisition in open creativity	0.77	107.45	0.00	0.46	2.61	0.05
				0.67	4.02	0.01

** $p < 0.01$ N=63
Source: Prepared by the authors (2022)

- The adjusted coefficient (R2) indicates that the percentage of the explained difference in open innovation due to the effect of the knowledge acquisition relationship is not less than (77%), which indicates that (77%) of the total differences in open innovation is determined by the interest of corporate management in knowledge acquisition The organization and that the remaining (23%) represents the percentage of the contribution of the variables that are not included in the study model and that cannot be controlled, The value of (F) reached (107.45), which is a statistically significant value at the level of significance (0.01), as this

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indicates that the regression curve is good in explaining the relationship between knowledge acquisition in open creativity, The significance of the regression coefficient that explains the influence relationship for each of the knowledge acquisitions in open innovation was (0.46), and the value of the (T) test was (2.61), which is significant at the level,(0.05) , From the result confirms the acceptance of the second basic hypothesis, which states that ((there is a significant effect of the relationship between knowledge acquisition in open innovation)).

CONCLUSIONS

Through the analytical view of the literature on knowledge acquisition and open innovation, which was reviewed previously. Its most important intellectual features can be identified in this The field is; There are a positive correlation and influence relationships between knowledge acquisition variables and open innovation, as the variable (partners) obtained the highest correlation value, and this indicates that these human resources represent the knowledge holders in the company and this indicates members of the organization have an understanding of the elucidation of theoretical philosophy and intellectual goals of knowledge acquisition and Open Innovation , The acquisition of knowledge as an intellectual framework deals more with the inherent strength of the organization and it is constantly evolving, relying on the network of communications with customers, suppliers, competitors and partners, which can generate a new ability through which the organization can achieve a competitive advantage based on open innovation The economy and information technology are the basis for the change in business, so those businesses must be based on knowledge acquisition, as they must be linked to the analysis and diagnosis of information for all the data generated to reach open innovation, so The acquisition of knowledge must be within the assumptions and strategy of the organization as it is affiliated with such a strategy, and According to the vision of this study; open innovation is the output of knowledge acquisitions for business processes, that open innovation enables the organization to discover and learn facts and models that create the first movement of the advantages enjoyed by the organization, as open innovation is derived through technology and scientific knowledge that leads to creativity in Creating successful products and through superior analyzes and inferences of the organization, and industrial organizations must take good care of the essential qualities of individuals and holders of unique skills who are able to innovate the new or develop the existing and they are the stars of the organization and the key to its development to create Open innovation, and they gives the organization a innovation for the long term, as organizations try to outperform others to get the added value of the organization through the trend towards customers and word of mouth and supply chains,

organizations tried to outperform, others to get the added value of the organization through suppliers and trying On the other hand, maintaining a certain level of information about competitors, and organizations trying to outperform others to obtain the added value of the organization through (skills attraction, promotions), which leads to the accumulation of weak ability over time, Managers face limitations in this concept because it needs further studies and how much-understanding individuals do not provide a picture of the company's ability to innovate. However, the concept of knowledge acquisition is not only a performance criterion but an indication of the organization's desire to develop through open innovation, Future studies can consider other indicators of applying knowledge acquisition to Increase the ability to innovate from knowledge enhancement processes. Because this process is a key mechanism for stimulating, measuring, and promoting innovation Use other metrics that rely on useful information about organizations' performance. yet they do not provide a picture of a company's ability to innovate. The concept of knowledge acquisition is not a performance criterion but an indication of the organization's desire to evolve through open innovation.

REFERENCES

Aldedah, H. Jabbar. (2020). Management of advanced knowledge organizations, Contemporary analytical approach in agreement with the leaders of the organization's management(Gareth Jones & Richard Daft((1st ed.). Al-Nahreen publisher.

Aldedah, H., & Kadhum, S. H. (2022). Exploration the Effect Factors in Applying the Knowledge Sharing System (Kss) in Food Industries.Co: (Estudio de análisis en Etihad Food Industries.co). *International Journal of Professional Business Review*, *7*(5), e0438. https://doi.org/10.26668/businessreview/2022.v7i5.e438

Albarracin, D. and Shavitt, S.(2018) Attitudes and Attitude Change,Annual Review of Psychology,Vol. 69:299-327 (Volume publication date January 2018),First published as a Review in Advance on August 25, 2017, https://doi.org/10.1146/annurev-psych-122216-011911.

Al-Hafez,T,A., Al-Mahdi, Y.F.(2015) The reality of the practice of knowledge sharing among faculty members: an empirical study at the colleges of education in some Arab universities, Pages p. 479-517, *Journal of Educational and Psychological Sciences*. Mg. 16, p. 4, December. http://dx.doi.org/10.12785/JEPS/160416

Beula, D. S. ., Velmurugan, V. P. ., & Janardhanan, K. A. . (2022). A Role of Knowledge Level of Employees in Customer Relationship Management With Special Reference to Lic. *International Journal of Professional Business Review*, *7*(2), e0436. https://doi.org/10.26668/business-review/2022.v7i2.436

Bolisani, E., Moffett, S., & Garcia-Perez, A. (2017). Guest editorial. VINE *Journal of Information and Knowledge Management Systems,* 47(4), 430–437. https://doi.org/10.1108/vjikms-06-2017-0037

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Chen, J., & Yin, X. (2019). Connotation and types of innovation. *The Routledge Companion to Innovation Management*, 26–54. https://doi.org/10.4324/9781315276670-3

Chen, Y., & Vanhaverbeke, W. (2019). Open innovation. The Routledge Companion to Innovation Management, 180–203. https://doi.org/10.4324/9781315276670-9

Chesbrough, H., & Euchner, J. (2011). The evolution of Open innovation: An interview with Henry Chesbrough. Research-Technology Management, 54(5), 13–18. https://doi.org/10.5437/08956308x5405003

Dehbani, M., Rahimi, M., & Rahimi, Z. (2022). A review on convective heat transfer enhancement using ultrasound. Applied Thermal Engineering, 208, 118273. https://doi.org/10.1016/j.applthermaleng.2022.118273

Fernandez, Irma Becerra and Sabherwal ,Rajiv (2015) Knowledge Management Systems and Processes, Second Edition

Haddock, G.,and Maio, G.R.(2019) Inter-individual differences in attitude content: Cognition, affect, and attitudes. In Advances in Experimental Social Psychology, vol. 59, pp. 53-102, Academic Press, https://doi.org/10.1016/bs.aesp. 2018.10.002

Hajric, Emil .(2018). Knowledge Management : System and Practices, A Theoretical and Practical Guide for Knowledge Management in Your Organization

Lee, S.-H. (2016). Epistemic asymmetry and accountability in service interaction. Accountability in Social Interaction, 175–206. https://doi.org/10.1093/acprof:oso/9780190210557.003.0006

Maio, G.R., Haddock, G.,and Verplanken, B.(2018) The psychology of attitudes and attitude change, Sage Publications Limited .

Majeed, hashim J. I. B. B. A. R. (2022). Exploration The Effect Factors In Applying The Knowledge Sharing System (Kss) In Food Industries.Co. *International Journal of Professional Business Review*, *7*(5).

Naaranoja, M., & Uden, L. (2016). Sense making in a small renovation planning process. Proceedings of the The 11th International Knowledge Management in Organizations Conference on The *Changing Face of Knowledge Management Impacting Society*. https://doi.org/10.1145/2925995.2926013

Okatan, K. (2021). Management and leadership type in automotive industry: view from Turkey. Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi. https://doi.org/10.16953/deusosbil.836709

Özbebek, A , Kılıçarslan Toplu, E . (2011). Empowered Employees' Knowledge Sharing Behavior . *International Journal of Business and Management Studies* , 3 (2) , 69-76 . Retrieved from https://dergipark.org.tr/tr/pub/ijbms/issue/26069/274724

Pohl, A., & Engel, B. (2020). Open innovation. Handbuch Digitale Wirtschaft, 933–958. https://doi.org/10.1007/978-3-658-17291-6_66

Ratnasari,SL., Sutjahjo,G., Adam (2020)The effect of job satisfaction , organization, culture,

and leadership on employee performance, Ann Trop Med & Public Health; 23(S13A): SP231329. DOI: http://doi.org/10.36295/ASRO.2020.231329.

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Shafiq, M., Shafiq, M. A., & Yousef, H. A. (2017). Stability and convergence analysis of direct adaptive inverse control Complexity, 2017, 1–12. https://doi.org/10.1155/2017/7834358

Shu-Mei Tseng.(2009). Using the knowledge chain model, a study on a customer, supplier, and competitor knowledge.International *Journal of Information Management*.