International Journal of Computer Trends and Technology
ISSN: 2231 – 2803 / https://doi.org/10.14445/22312803/IJCTT-V69I5P103

Volume 69 Issue 5, 13-21, May 2021

Original Article

An Analytical Study on Information Technology and Functionality

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Received Date: 01 April 2021
Revised Date: 09 May 2021
Accepted date: 11 May 2021

Abstract *- Information technology benefits different organizations, and it allows organizations to work more efficiently and maximize productivity. The aim of this study is to evaluate the relationship between the use of information technology and the functionality of the organizations. In order to evaluate the items belong to information technology use in organizations and to examine the research hypotheses, the survey data of 243 participants in Alkhoms were analyzed. Results indicate that the use of information technology within organizations has an impact on the quality of performance. In addition to this, it was observed that the demographic characteristics of the participants did not have an effect on the functionality of organizations.*

Keywords *- Information technologies, Organization functionality, Exploratory factor analysis, Cronbach alpha.*

I. INTRODUCTION

Information technologies (IT) play an important role in societies at the individual group or organizational levels. IT has a significant impact on the business economy, lifestyle, culture, and productivity of different types of organizations. IT has a clear-cut impact on the performance of administrative or production departments. IT improves public services, increases productivity, and increases efficiency and effectiveness. The information provides competitive advantages to the organization. If an organization uses this very important resource through new technologies, knowledge will increase important changes that occur in this organization. In addition, the importance of information technology as a strategic and tactical resource in the organization provides improvements to the performance of the organization [1]. Moreover, information technology has a significant effect in improving performance in organizations and individuals, as presented in some studies [2], [6], [7].

The success of the business depends on the effective use of technologies and determines the future economic competitiveness of these companies; therefore, the development of technologies and competitiveness determines the business success rate. For example, the use of the internet worldwide has caused organizations and companies to update their business proposals and designs, improve their existing products, services, and restructure existing business processes [3]. Recently, researchers have conducted research on the effects of IT on the performance and functionality of organizations, as it is important for improving the performance of organizations [4]. IT also has a huge impact on human resource management in workplaces. Human resources managers use IT not only to gather information but also to store information effectively. This not only increases the efficiency of the organization but also increases the management functionality [5]. The quality of the performance of the organizations plays an important role in the continuity at the work level of the organizations. Understanding the impact of demographic characteristics such as gender, age, and education level on the quality of the organization's performance and functionality is thought to play a vital role in promoting the use of information technologies, especially in developing countries.

The importance of many organizations where surveys are conducted depends on the provision of services and the smooth running of their operations. However, some researchers have stated that IT applications do not guarantee productivity and increase performance [6], [7].

A. Information Technologies

The use of technology is considered to be one of the main subjects of organizational success [8], [9]. Many definitions have been made about IT in the literature. Some of these are: IT is a generic term that describes any technology that helps generating, processing, storing, communicating, and\or disseminating information [10]. Generally referring to a set of methods, processes, tools and

techniques, machinery, equipment's and skills that can be offered to people through technology, products, and services[11].

IT is the ability to easily disseminate or support various hardware, software, communication technologies, data, basic applications, skills, and competencies [12]. IT is defined as a mechanism through which companies strive through innovative approaches and knowledge transfer to achieve economic gains [13]. According to Daft (1997), IT is everything related to hardware, software, networking, the internet, and implementing and managing these technologies and computing technology. With this perspective, IT can be defined as a system that emphasizes the use of software, hardware, database management, telecommunication, and information processing technologies to be used to store, process, and communicate information [14]. Hobday (2000) stated that information technology acts as a central key for innovation and creativity [15]. Shelly and Cashman (2004) stated that IT includes hardware, software, databases, networks, and other related components used to create information systems [16]. Moreover, it has been very important and useful for managers in allocating the resources they need in coordination with the various departments of the organization for the success and completion of various projects [17].

The use of IT is increasingly being applied to organizations, considering that IT greatly facilitates effective communication and increases efficiency [18]. It is a proven fact that IT-based changes occur as firms grow in order to compete and survive in a competitive market [19]. Gust and Marquez (2004) stated that relying on information technology generally saves costs in product management, increases revenue, overall operational efficiency, and competitiveness that improves marketing as well as information qualitatively and quantitatively that reduces transaction costs [20]. In addition, Nakata, Zhu, and Kraimer (2008) stated that all organizations with information technology features carry out studies where the customer is at the center, which has a positive effect on the market and financial performance [21].

B. Informatics in Libya

In developing countries such as Libya, innovative programs are underutilized, and the number of Arabic programs is not sufficient. On the other hand, due to insufficient system support networks, it is increasing day by day that organizations are constantly postponing their work and transactions [22].

According to Hamdy (2007), there is little awareness of innovations in education and basic computer skills in Libya, and this is the biggest obstacle in front of the studies involving IT [22]. Nasra Amur, Said Alhabsi (2017) stated that IT systems used in the university are predominantly desktop computers and that these devices are also used to a great extent [23].

C. The importance of the Study

It is important to investigate the relationship between the use of information technologies and the quality of organizational performance in today's world. Especially the historical development stages in production experienced by developed countries industrially are very important for their economy flourishing. This study is a keystone step to encourage more comprehensive studies showing the importance of information technologies in terms of organizational performance. The results of the present study will then serve as examples of useful studies for measuring the performance of universities, higher institutions and banks, and other organizations in Libya and other similar countries. It is very important for the organization to show quality performance, in other words, to increase the awareness of the importance and impact of IT at the point of the functionality of the organization. This research will be useful as there is little research done in this area in Libya.

In this study, a quantitative research method-based questionnaire technique was used to analyze and evaluate the quality of organization performance. Quantitative methods are methods based on numbers and frequencies. This scale was applied to 243 participants. Explanatory factor analysis was performed on the data in order to adapt the scale to evaluate the factors, and also ANOVA and t-tests were used. Tukey's test was applied for post-hoc analysis. In addition, regression models that estimate establishment functionality were formed, and the results obtained were discussed.

D. The Aim of the Study

The main aim of this research is to evaluate the relationship between IT use in Libyan organizations and organization performance quality. The data obtained from the participants from Libyan organizations in Alkhoms city were collected. In this context, the effect of IT usage within organizations was investigated. Moreover, the performance quality level of the organization was examined according to the demographic characteristics of the individuals participating in the survey evaluation, such as gender and marital status.

E. The Research Hypothesis

Hypothesis 1 (H1): Participants' evaluation levels for the use of IT in the organizations and the quality of the organization's performance are moderate.

Hypothesis 2 (H2): There is a significant correlation between IT use in the organization and the quality of organization performance.

Hypothesis 3 (H3): There are significant differences in functionality level according to the demographic characteristics of the participants.

F. Research Organization

Participants from Al Mergeb University, Higher Institute of Technology, and Alkhums Jumhouria Bank were taken part in the survey study. In this context, this study consists of five sections, and brief information about them was given below. The first section provides the introduction whereas, the second section includes the studies in the literature. The third section includes the methodology of the study. The fourth section examines the validity and reliability of the data collection tool that followed by presenting and discussing the results. Finally, the fifth section presents the outcome of the research and provides recommendations for future work.

II. LITERATURE REVIEW

In this section, studies examining the effects of technology and information technologies in the literature on the performance of organizations are reviewed. For instance, Stone et al., (2006) stated that ease of use of technology plays an important role in creating perceived improvements in individual performance as well as increasing satisfaction in the use of the system and ultimately contributing to a perceived improvement in corporate performance [5]. Sarv Devaraj. Rajiv Kohli (2003) investigated the effects of information technology on performance. This research has shown that the driving force of IT impact is the actual use of technology rather than investment in technology [8]. Nasra Amur Said Alhabsi (2017) conducted a study to determine the relationship between IT use and organizational performance and investigated which of the IT usage variables was significantly associated with corporate performance according to the determined variables and evaluated the effects of IT [23]. Johnston et al. (2007) stated that technology increases the profit rate while saving on the cost of products and other expenses [24]. Raymond et al. (2005) showed that the growth of small and medium-sized industrial organizations is based on their use of the Internet and in collaboration with industry partners [25]. Mahmood and Mann (2005) stated that companies that invest more in information technology achieve higher performance and productivity [26].

Sulieman Ibraheem Shelash Al-Hawary (2017) stated that information technology elements have a statistically significant effect on the employee performance of the Ministry of Internal Affairs of the State of Kuwait. The author also stated that technology components are an important tool to increase productivity in IT investment as they help to minimize repetitive and erroneous processes in administrative functions, contributing to higher productivity within the framework of better and efficient administrative decisions [27].

Abdaoui Hana (2016) conducted a survey of 84 participants aimed to state the important role of information and communication technology in providing a competitive advantage to a mobile phone company in Algeria and at the same time contribute to the definition of its role. It has been observed that there are statistically significant differences in terms of the level of use of information and communication technologies in the surveyed company according to the gender and education level of the respondents [28].

Kariuki A. Kimani (2015) investigated the effect of information technologies on organizational performance in the Kenyan case. A descriptive questionnaire was applied to achieve the aims of the study. The results showed that most of the participants had a variety of IT devices to perform their tasks. In addition, the author showed that there is a positive relationship between the level of IT usage in population services and organizational performance [29].

Shaukat & Zafarullah (2009) carried out a study that aimed to examine the effect of IT on organizational performance in terms of the increase and decrease in corporate income and IT expenditures of organizations working in manufacturing and banking sectors in Pakistan during 1994-2005. According to the authors' study, IT has a positive impact on the corporate performance of all organizations [30].

Finally, Sharif and Odeh (2016) examined the importance of information technology in achieving business performance and its impact on the Iraq banking sector. In order to develop a model to measure information technology and job performance variables in a reliable and accurate way, they collected data with a questionnaire method, and in their analysis, they showed that there was a relationship between information technology use and functionality for employees [31].

III. METHODOLOGY

This section describes data collection tools and methods. Moreover, it covers reliability, validity testing, and data analysis techniques on the population and sample of the study. Figure 1 shows the conceptual framework of the study.

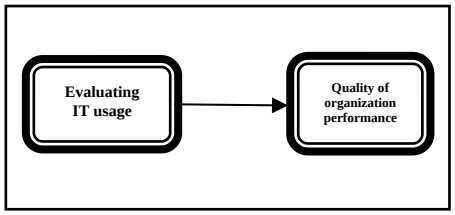

Fig. 1 Conceptual Framework of the Study

A. Quantitative Data Collection Tool

In line with the aim of this research, many studies in the literature have been reviewed in order to design the data collection tool. The questions prepared by ([31], [32] [33], [34], [29]) were collected in this study and also modified according to the thesis subject. This work used the Questionnaire-based data collection method.

After the questionnaire was updated in accordance with the aims of the research, it is finally divided into two parts. The first part consists of the demographic characteristics of the respondents, such as gender, status, age, education level, and years of experience. The second part consists of the subtitles "IT use in the organization" and "the functionality of the organization." The first is labeled as the independent variable, and the second is a dependent variable in order to evaluate the functionality of the organization.

Participants answered the questions in the questionnaire, which was conducted to evaluate the impact of IT in various Libyan organizations, with five options according to the Likert scale [23] such as Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. Scores between 1 and 5, respectively, were assigned to these five options.

B. Research Design

In this study, a statistical research method based on a questionnaire was used. The purpose of using this method is to evaluate the individuals' thoughts for the variables determined in the study. Descriptive research, also known as statistical research, is expressed as studies on the population data and characteristics studied [35]. A brief informative text explaining how to answer each question of the questionnaire was provided in this study as a cover letter.

C. Statistical Tests Used for Analysis

Statistical Package of Social Science (SPSS) Statistics 22.0 was used to analyze the survey data. In this section, research population and data collection, analysis techniques, validity, and reliability tests were explained. Cronbach Alfa is widely used to assess the internal consistency of a questionnaire study consisting of multiple Likert-type scales and items [36], [37]. In addition, statistical methods (normality test, percentages, frequencies, explanatory factor analysis, Tukey HSD test, t-test, ANOVA) used to analyze the performance quality of the organization according to demographic characteristics were explained.

D. Data analysis

In the survey study used in this article, e-mails were sent to a total of 300 people from AlMergeb University, Alkhums Jumhouria Bank, and Institute of Technology in Libya Alkhoms between February 6 and April 28, 2020. Only 243 completed questionnaires data that constitute 81% of the questionnaires send were analyzed. It should be noted that the research environment plays a role in determining the population of the study sample.

The distribution of 5 demographic characteristics of 243 participants, including gender, social status, age, qualification, and experience, is presented in Table 1. A dataset was prepared based on the questionnaires. Frequencies and distribution were used to analyze the demographic characteristics of the participants.

Table 1. Frequency distribution of sample on the demographical variables

	Frequency	Percent
Gender		
female	110	45.3
male	133	54.7
total	243	100.0
Social Status		
single	171	70.4
married	72	29.6
Age		
less than 25	38	15.6
25 to less than 35	68	28.0
35 to less than 45	105	43.2
45 and above	32	13.2
Qualification		
secondary education	36	14.8
undergraduate	97	39.9
masters	91	37.4
doctorate	19	7.8
Experıence		
5-10 years	42	17.3
11-15 years	57	23.5
16-20 years	73	30.0
20 years and above	71	29.2

It is seen that 45.3% of the participants are female, and 54.7% accounts are male. It is seen that 29.6% of the participants of them are married, and 70.4% are single. 15.6% of the participants are under the age of 25, 28.0% are in the 25-34 age range, 43.2% are in the 35-44 age range, and 13.2% are 45 and above. The education level of 36 participants is at the secondary level; The education level of 97 participants is at the undergraduate level; The education level of 91 participants is at the master level; and finally, the level of education of 19 of the participants is at the doctorate's level. 17.3% of the participants have between 5 and 10 years of work experience. 23.5% of the participants have 11 to 15 years of work experience. 30.0% have 16 to 10 years of work experience. And finally, 29.2% of the participants have more than 20 years of experience.

E. Reliability of the Scale

Scale reliability presents the reliability of the scale of variables or structures compatible with the value desired to be measured [38]. For instance, the ability of employees to use IT is related to the homogeneity of sub-items. The Cronbach Alpha coefficient of 0.70 and above indicates that there is sufficient internal consistency, and thus the items in the questionnaire are sufficient to measure the structures and

concepts subjected to examination [39]. It also shows that the items in this scale are compatible with each other, and the items measuring the same property are together [40]. For this reason, the Cronbach Alpha technique was used to evaluate the reliability of the scales used in this study.

F. Validity of the Scale

First of all, the superficial validity of the questionnaire was checked, and then the items in the questionnaire were analyzed for the aim of the study. Secondly, construct validity was checked using Exploratory Factor Analysis (EFA). EFA is done to determine factor loads and eliminate any questions that do not represent the factor of interest. Accordingly, EFA was performed for each subscale. Before performing EFA, Kaiser Meyer Olkin KMO value was calculated. The closer the KMO value to 1, the better. This value shows how suitable the data are for factor analysis [41]. Hair et al. (2009) claimed that EFA is valid if the KMO value is higher than 0.60, is considered to be a good fit and acceptable [42].

IV. STATISTICAL TESTS AND RESULTS

In this part of the study, evaluation of participants' responses to questionnaire questions for two scales, normalization of three scales data, validity and reliability tests, and the results of research hypotheses are presented.

A. Normality Tests

Table 2. Normality test results for raw data

Variable	Tests of Normality					
	Kolmogorov-Smirnov			*Shapiro-Wilk*		
	Statistic	*df*	*Sig.*	*Statistic*	*df*	*Sig.*
IT.use	,145	243	,000	,953	243	,000
Quality. Performance	,168	243	,000	,931	243	,000

a. Lilliefors Significance Correction

In order to use the parametric tests on the data, the study made the normality test to make sure that the distribution of the data is normal to use the parametric tests, which is shown in Table 2.

The data did not follow the normal distribution in cases where the p values of normality tests (Kolmogorov-Smirnov and Shapiro-Wilk) were below 0.05 regarding the IT usage and organizational functionality, as shown in Figures 2 and 3.

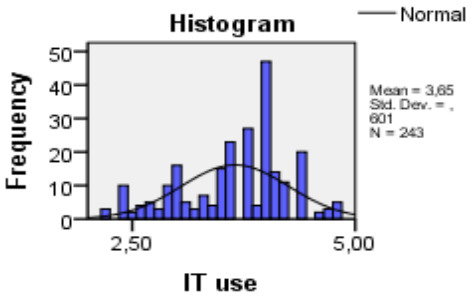

Fig. 2 Data distribution of IT use a variable before normalization

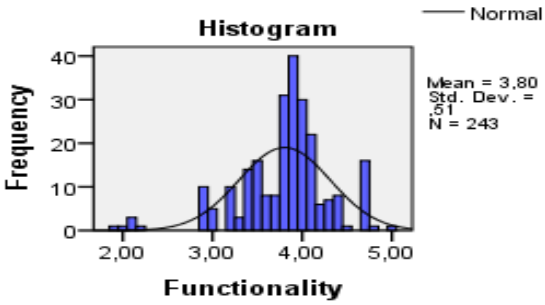

Fig. 3 Data distribution of functionality variable before normalization

The distribution of each of the two variables has been transformed into normal distributions by using transform computing. Accordingly, the distribution of two variables is presented in Table 3. Obviously, Figures 4 and 5 show the data were normalized, which supports normalizing data in the distribution curve.

Table 3. Normality test results for normalized data

Variable	Tests of Normality					
	Kolmogorov-Smirnov			*Shapiro-Wilk*		
	Statistic	*df*	*Sig.*	*Statistic*	*df*	*Sig.*
IT.use	,024	243	,200*	,997	243	,901
Quality. performance	,038	243	,200*	,994	243	,471

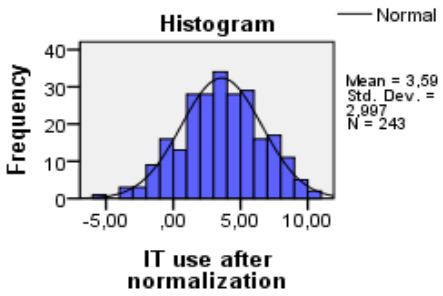

Fig. 4 Data distribution for IT use after normalization

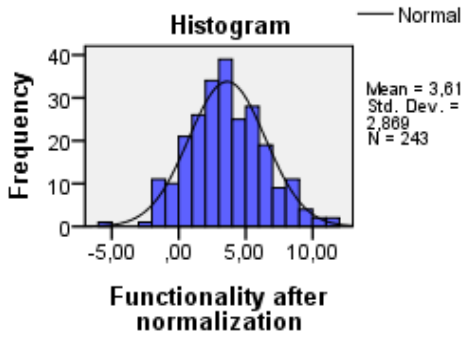

Fig. 5 Data distribution for functionality after normalization.

For the IT usage variable, the Shapiro-Wilk test has a 0.901 significance value, and the Kolmogorov-Smirnov test has a 0.200 significance value. The quality performance variable has a 0.471 significance value for the Shapiro-Wilk test, and the Kolmogorov-Smirnov test has a 0.200 significance value. (For both scales; p value> 0.05). The alternative hypothesis is rejected, and it can be concluded that the data come from a normal distribution. The normal distribution of the data enables the researcher to use parametric statistics.

According to EFA results regarding the answers given by the participants to the questionnaire questions in the organization performance quality subscale, the results show that all factor loadings are above 0.40. The total explained variance shows that this component explains 72.891%. The KMO value is above the threshold value with 0.738, indicating that the sample size is suitable for factor analysis. With Bartlett's Test of Sphericity significance value of 0.000, the institutional performance quality subscale is appropriate within the framework of structural validity ($p < 0.05$). The Cronbach alpha coefficient is 0.782, indicating a good internal consistency for the scope of quality of organizational performance subscale. In addition, it is seen that the reliability of a total of 20 scale questions in the two scales in the questionnaire is really high, with a Cronbach alpha coefficient value of 0.877.

B. Results

H1: “Participants' evaluation levels are moderate for the use of IT in the organizations, and the quality of the organization's performance.” For H1, Descriptive statistics for an overall assessment of IT usage and quality of the organization’s performance showed in Table 4. These results show that evaluations of the participants regarding IT usage positively. Also, this view of the participants may affect the quality of the organization’s performance.

Table 4. Normalized and non-normalized descriptive statistics

Variables	Normalized data			Non-normalized data	
	N	Mean	Std. Devi	Mean	Std. Devi
IT Use	243	3.5928	2.996	3.650	.601
Quality Performance	243	3.6130	2.869	3.803	.506

H2: "There is a significant correlation between IT use in the organization and the quality of organizational performance." To measure the strength of the relationship between the two variables and their relationship with each other, the Pearson correlation coefficient was used.

Table 5. Correlation result between scales

variables	IT Usage
Quality performance	.154**
	.008

**. The correlation is significant at the 0.01 level.

The results in Table 5 show that there is a significant positive correlation coefficient with a value of 0.154 between IT use and the quality of organization performance with significant at the 0.008 level. This supports the second hypothesis.

Multiple linear regression analyses of the IT use of participants that affect the quality of organization performance were presented in Table 6.

Table 6. Multiple linear regression analysis of IT usage

Ind-variables	β	Std. Error	t-test	P
Constant	2.**66**	.381	6.982	.000
IT usage	.157	.061	2.568	.011

Ind-variables	r	R^2	f-test	P
Constant	.186	.035	4.31	.014
IT usage				

In order to investigate the relationship between participants' IT use and the quality of the organization's performance, a multilinear regression analysis was performed. According to the data in Table 6, the IT use variable has a unique and statistically significant contribution to the organization's performance ($p<0.05$). The R^2 value is .035, which means that the independent variables explained 35.0 % of the variance of the dependent variable organization performance. When a regression model accounts for more of the variance, the data points are relatively close to the regression line. Concerning the results of the ANOVA test,

f = 4.314, the test value is significant. It indicated that the linear regression model provided a better fit to the data than a model that contains no independent variable. The value of the t-test for the IT usage is 2.568 is significant. Thus, the independent variable IT usage is a significant variable in this equation. These results support the hypothesis that IT usage affects organization performance.

H3: "There are significant differences in functionality level according to the demographic characteristics of the participants."

As shown in Table 7, the 2.058 value of the t-test shows significant differences between participants on the first variable, IT usage. Difference for females with mean = 4.024 and males = 3.235. However, no significant difference was found in quality performance according to the gender of the participants.

Table 7. t-test result for Gender

Variables	Gender	N	Mean	Std. Dev	t-test	sig
IT Use	Female	110	4.024	2.94	2.058*	**.041**
	Male	133	3.235	3.00		
Quality Performance	Female	110	3.295	2.58	1.572	.117
	Male	133	3.875	3.06		

T-test results to examine functionality according to the marital status of the participants as explained in Table 8. The t-test had significant differences were found among the participants for the Quality performance variable. Single participants have a higher average than married participants, with a score of 3,866 and a t-test value of 2.138 (p-value: 0.034< 0.05). However, no significant difference was found in the other variable according to the marital status of the participants.

Table 8. t-test result for Marital Status

Variables	Marital Status	N	Mean	Std. Dev	t-test	sig
IT Use	Single	171	3.620	3.01	.224	.832
	Married	72	3.526	2.97		
Quality Performanc	Single	171	3.866	2.86	2.138*	.034
	Married	72	3.011	2.80		

ANOVA f-test was conducted to examine the functionality according to the four age categories of the participants and presented in Table 9. The mean scores of the participants have close values. The mean scores of the participants are close to each other, and the results of the f test are insignificant.

Table 9. F-test results for Age

Variables	Age Categories	N	Mean	Std. Devi	f-test	sig
IT Use	less than 25	38	3.907	2.77	1.980	.118
	25 to less than 35	68	2.871	3.09		
	35 to less than 45	105	3.951	2.99		
	45 and above	32	3.574	2.90		
Quality Perform	less than 25	38	3.264	2.70	.559	.643
	25 to less than 35	68	3.436	3.13		
	35 to less than 45	105	3.723	2.61		
	45 and above	32	4.041	3.28		

ANOVA test was conducted to investigate functionality according to the qualifications of the participants, and the results are presented in Table 10. There are four groups of qualification levels. Participants had average scores close to each other in the variables. Tukey HSD tests were not performed since there was no difference between the categories. As an independent variable on the quality of organization performance, the qualification of the participants has no effect.

Table 10. F-test results for qualifications

Variable	Qualification	N	Mean	Std. Devi	f-test	sig
IT Use	Secondary Education	36	3.315	2.78	1.966	.120
	Undergraduate	97	3.286	3.11		
	Masters	91	3.730	3.01		
	Doctorate	19	5.021	2.36		
Quality Perfor	Secondary Education	36	2.814	2.89	1.511	.212
	Undergraduate	97	3.986	2.93		
	Masters	91	3.560	2.81		
	Doctorate	19	3.475	2.63		

ANOVA was conducted to investigate the functionality according to the experience of the participants, and the results are presented in Table 11. There are four experience categories: 5-10 years, 11-15 years, 16-20 years, and 20 years and above. Participants had approximately close average scores in other variables, except the IT use variable, with the f-test value of 3.663, with the p-value of .013 that there is a significant difference.

Table 11. F-test results for experience

Variable	Experience	N	Mean	Std. Dev	f-test	sig
IT Use	5-10 Years	42	4.602	2.86	**3.663***	**.013**
	11-15 Years	57	2.721	3.13		
	16-20 Years	73	3.395	2.64		
	20 Years and above	71	3.897	3.14		
Quality Perform enc	5-10 Years	42	3.880	2.80	2.236	.085
	11-15 Years	57	3.210	2.58		
	16-20 Years	73	3.166	3.05		
	20 Years and above	71	4.236	2.85		

Multiple comparison Post Hoc Tukey HSD tests were conducted to investigate the tendency in the differences in average scores according to experiences, and the results are presented in Table 12. There is a significant difference with the value of 1,88126 between an average score of 4,602 for participants with 5-10 years of experience and an average of 2,721 points for participants with 11-15 years of experience. No other differences were found between the mean scores of the participants from other experience categories.

Table 12. Tukey HSD Post Hoc test differences according to experiences

Age categories		Mean differences	Sig.
5-10 Years	**11-15 Years**	**1,88126***	**,010**
	16-20 Years	1,20712	,152
	20 Years and above	,70583	,609
11-15 Years	5-10 Years	-1,88126	,010
	16-20 Years	-,67414	,568
	20 Years and above	-1,17543	,115
16-20 Years	5-10 Years	-1,20712	,152
	11-15 Years	,67414	,568
	20 Years and above	-,50129	,738
20 Years and above	5-10 Years	-,70583	,609
	11-15 Years	1,17543	,115
	16-20 Years	,50129	,738

V. CONCLUSION AND RECOMMENDATIONS

IT has the effects on the performance of the organization is doing the job correctly and quickly, preventing mistakes at work, processing data and information in a timely manner. Adoption of information technology increases the speed of doing business with the least time and effort. The use and requirements of information technology guarantee the quality of the service provided. This study revealed that Libyan organizations are embracing and using IT to a large extent and that IT has a significant impact on performance and functionality. Data analysis with SPSS confirmed that there is a positive relationship between IT use and organizational performance and functionality. Participants positively assessed the use of IT in organizations in the Libyan city of Alkhoms and the quality of organization performance. There is a positive correlation between participants' use of IT and the quality of organizational performance. Female participants scored higher in using IT than male participants. There is no difference between male and female participants in terms of the participants' use of IT and the quality of organization performance. In terms of the quality of organization performance, single participants score a higher average than married participants. There is no difference in the IT usage and IT usage skills of the participants according to the marital status of the participants. The experience variable has little effect on the organization functionality assessment of the participants.

The results obtained in this study reveal several important practical applications for the future. In this context, it is recommended to be examined by senior executives in Libyan state organizations within the framework of the following questions that related to the state of IT in other organizations, the current IT experts in Libyan organizations.

- Organizations have to invest in human resources with great emphasis on intellectual capital.
- Organizations should have highly qualified employees in order to benefit from IT in technical and administrative affairs and thus gain efficiency in their operations.
- Organizations must invest in various components of information technology.
- Organizations should work to spread the information technology culture among their employees.
- Organizations should increase the level of awareness of managers and employees by organizing courses, seminars, and workshops on these issues and the advantages and benefits of information technologies.

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