
TECHNOLOGY AND SAUDI BANK EMPLOYEES: COVERING THE PITFALLS THROUGH AN EMPIRICAL STUDY OF PERCEPTIONS

Dr. Ibrahim Al-Taweel,

Assistant Professor of Business Administration, Qassim University, Saudi Arabia

ABSTRACT: *The objective of this study is to examine the extent to which Saudi employees working in several banks in Al Qassim Region have applied and used various modern technological applications. The study also investigates the availability of a strategic relationship for effective training by senior management and its impact on the improvement of the job performance of employees of different sexes and grades within the banking institutions (Al Rajhi Bank, National Commercial Bank, Riyadh Bank and Bank Albilad), using a stratified random sample of employees of these banks (both male and female) and the field survey methodology using questionnaire as the main tool for collecting and analyzing the data. 420 questionnaires were collected from the employees in the banks selected for the study, from a community of 1,782 employees. The study reached several results, the most prominent are: The decision makers in Saudi banks should adopt a policy of attracting and empowering women from all vital functions in Saudi banks. As well, the study stressed the importance of training in the use of information technology in banks in improving the abilities and technological skills of employees. The study showed that there are statistically significant differences between females and males, the impact of the foregoing on staff satisfaction with the training strategy, and the importance of involving them in assessing the strategic vision of banks in the application and use of information technology. Moreover, the study found a statistically significant positive correlation between the extent to which senior management in these institutions adopted an effective training strategy on the use of information technology and the improvement of the level of the employees' performance. The conclusion of the study is that the senior managements of the banks are not sufficiently keen for the fair distribution of training programs. As well, they are not keen on motivating the employees to use the IT.*

KEYWORDS: Saudi Banks; IT in Saudi Banks; IT training in Saudi Banks; Management Training; Human Resources.

INTRODUCTION

A group of studies discussed the importance of training in general in raising the level of skill in different organizations, including the banking sector. Training is an indispensable function in providing employees with new skills and experiences in the field of work they perform using IT tools (Klein 2018). In addition, IT is an influential and effective factor in achieving the organization's strategic objectives and moving from a specific state of production capacity to a renewed and advanced state in providing good service in the market (Gekara, V 2014). Based on the foregoing, training and interest in its tools such as the use of information technology, is a major end in the work of institutions in order to achieve its objectives in all human and material areas.

Study Issue

Many specialized studies in human resources management have addressed effective training in modern technologies as a key element in the development of individuals, especially in the banking sector. The scientific progress in IT has forced the Saudi banks to adopt a clear strategy for effective training in undertaking its banking activities. There is no place in the market for institutions that do not use and seek to acquire and train on modern technologies. The effective training in these technologies is achieved through the design and implementation of training programs that meet the needs of banks and customers, enabling them to achieve their profitability objectives.

Study Objectives

Through the above mentioned in the Study Issue, this study aims at achieving several main objectives which can be summarized as follows:

- The extent to which a specific sector of Saudi banks -as a benchmark- has applied the IT training strategy among the employees' sector.
- The extent of the senior management's commitment, adoption and support of the training in using information technology strategy in the Saudi banks subject matter of the study.
- To which extent the Saudi banks subject matter of the study adopt the IT tools for training among its employees.
- The impact of the training in using information technology on the degree of job satisfaction among the employees' sector.

Research Questions

Through this study, the researcher seeks to answer the main research question:

- What is the availability of a statistically significant measurable relationship between the implementation of training in using information technology strategy in Saudi banks and the improvement in the level of the staff performance?

Through the outcomes of the study, we can answer many of the sub-questions related to the study's main question, the most important of which are the following:

- Is there a relationship between the quality of the training programs and the improvement in the level of staff performance?
- To what extent do demographic variables (gender, level of education, degree of employment) affect trainees' ability to understand and use IT tools?
- Is there a relationship between different IT tools and the level of improvement in the staff performance?
- Is there a relationship between the improvement in the level of staff performance and the commitment of senior management to the policy of effective training in the IT use?

Scope of the Study

It is known that studying all banks will lead to better results in the statistical analysis. However, due to lack of time, this study is fixed to spatial limits as this study will be applied in Al Qassim Region only.

- There is a group of small banks operating in Al Qassim and it is best to be included in the research sample. However, from the procedural point of view, this study will be applied to

employees and trainees in Al Rajhi Bank, National Commercial Bank, Riyadh Bank and Bank Albilad due to their large size and availability of financial and technical capabilities.

Saudi Banking and Saudi Arabian Monetary Authority (SAMA)

SAMA supervises and controls the banking sector, strengthens its power and financial solvency, and raises the level of banking and financial services it provides to customers. Hence commercial banks continued to maintain their financial positions in 2017. Commercial banks recorded a good performance in 2017 as a result of the increase in their overall activity and financial capacity. Their total assets increased by (2.2%), bank deposits grew by (1%), and capital and reserves increased by (6.3%).

By the end of 2017, the number of commercial banks in the KSA was (25) local operating banks and only one (1) foreign licensed bank (SAMA, 2018). In the same year, the number of branches of commercial banks increased by a total of 2,038 branches in the end of 2017, serving customers in various regions of the KSA, including Al Qassim Region, which has more than 170 operating branches of different banks (SAMA, 2018).

Number of employees in the Saudi banking sector

The number of employees in the banking sector reached (49,335) male and female employees, 44,852 of whom were Saudis. The number of females was 9.7% of the total number of employees in the Saudi banking sector (SAMA, 2018).

There is no doubt that the banking sector with this number of employees constitutes an important part of the national economy, especially in the development of national human resources and providing them with training in modern banking technology, as well as reducing unemployment, which is a big problem in Saudi Arabia.

Importance of Saudi banking activity

The total assets of commercial banks increased by (2.2%) to reach SAR (2,305.8) billion at the end of 2017. Banking deposits also grew by (0.1%) to reach SAR (1,619.6) billion. The capitals and reserves of commercial banks increased by (6.3%) to reach SAR (317.6) billion. The profits of banks increased by (8.2%) to reach (43.7 billion). The consumer loans and loans of credit cards issued by Saudi banks recorded the highest level of SAR (330.4) billion in 2017 by an increase of (0.4%) over the previous year (SAMA, 2018).

All the foregoing indicates the importance of Saudi banks' remaining in an advanced state technically and technologically that allows employees of these banks to maintain these positive results and achieve future profitability increases, as evidenced by these figures in the annual report of the Saudi Arabian Monetary Authority.

TECHNICAL DEVELOPMENTS OF SAUDI BANKS

Checks Clearing

The banking technology of the Saudi banks evolved in 2018. The number of checks processed in the clearing houses decreased to (13.2%); i.e. by (674.2) thousand checks less than 2017. The average value of the check decreased by (1.1%) so the check value becomes SAR (72.5) instead of SAR (82.6) in 2017. This decrease is attributed to the expansion of the banking technology use, including point-of-sale devices. The decrease in the clearing house of Buraidah in Al Qassim (subject matter of this study) recorded (10.6%) to reach (202.7) thousand checks (SAMA, 2018).

Saudi Payment Network (Mada)

Mada achieved progressive growth in all its operations. In 2017, the number of ATMs rose to (18,333); i.e. 2.5% over the previous year. That increase required the issuance of ATM cards amounted to about (28.4) million cards in 2017. They will, of course, serve customers in withdrawals and deposits as well as payment of purchases in shops, in addition to helping the customers to reduce their visits to the branches of banks and waiting and standing before the banks' staff. The growth rates in the number of ATM cards and operations on ATMs and point-of-sale machines reflect the customer's increasing reliance on mada services, the enhanced confidence of using modern banking technology, the emphasized continuous need for modern technology and providing staff with training and developing their technical, administrative and scientific skills in the use of modern technology (SAMA, 2018).

The Saudi Arabian Riyal Interbank Express (SARIE)

The total number of transactions executed through SARIE increased to 15.9% in 2017 to reach 103.5 million transactions, with an increase of 9.5% over the previous year. (SAMA, 2018)

SADAD PAYMENT SYSTEM (SADAD)

SADAD System facilitates for the corporate and governmental authorities' clients payment through their bank accounts without visiting offices or carrying money. The number of payers linked with the SADAD from various commercial and governmental sectors reached (157) in 2017 compared to (148) payers in 2016. These sectors included various authorities such as electricity, water, telecommunications, airlines, insurance, ministries and universities. The number of transactions executed through this system amounted to 218.4 million transactions with a total amount of 250.5 billion. SAMA statistics confirm that corporate billing is constantly increasing (SAMA, 2018).

Based on the above, the importance of technology in the development of services provided by the Saudi banks to the customers, government and foreign partners is evident, which in turn confirms the importance of adopting the effective training, updating its tools and strategies, and creating cumulative experience capable of building in the future.

STUDY METHODOLOGY

The researcher applied the field study methodology (survey methodology), which aims to assessing the reality of training in using information technology in Saudi banks in Al Qassim, Kingdom of Saudi Arabia during the second half of 2018 to measure the impact of effective training in improving the staff performance and raising their level of satisfaction at work.

Study Community and Sample

The study was conducted through the branches of the large banks and their regional administrations in Qassim Region. Qassim Region is geographically located in the middle of the Kingdom of Saudi Arabia, so it is one of the important areas in which the trade and labor movement is active. To achieve the best results, we have chosen the widely spread banks, whose branches are located in all the small and large cities of Al Qassim and are approached by most of the customers. They also have diversified integrated banking services in terms of opening

accounts, depositing, managing credit operations, providing personal and real estate lending, and various integrated banking services.

Table (1) shows the size of banks selected in terms of the number of branches and services provided to the customers by the bank.

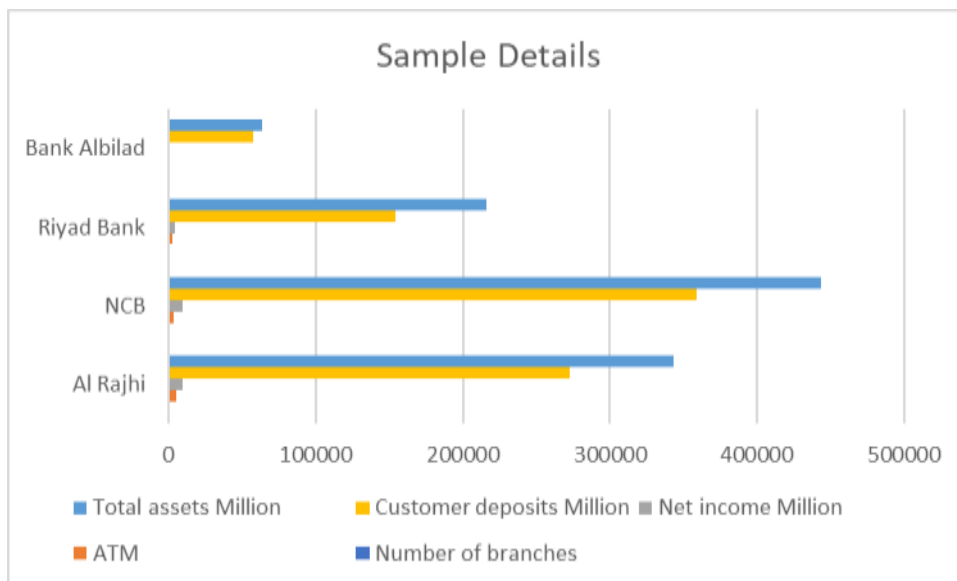
Table (1) Importance of banks of the research sample in terms of number of branches and ATMs

Bank name	Number of branches	ATM	Net income Million	Customer deposits Million	Total assets Million
Al Rajhi	700	4853	9121	273000	343000
NCB	400	3488	9320	359000	444000
Riyad Bank	340	2592	3946	154000	216000
Bank Albilad	150	900	942	57176	63208

Source: Bank reports in (2017)

Representing the Sample Data Graphically:

Figure 1



Hence, the research sample consists of four banks in Al Qassim Region, which -according to their size in terms of the number of employees and their various services- are as follows:

Al Rajhi Bank

Al Rajhi Bank was established in 1957. It is the largest Saudi bank in Qassim according to its size and the services provided in the number of branches. According to the regional administration, its branches in Al Qassim is (79) branches, in which around 1,123 female and male employees operate. These branches include a wide administrative area, such as Hail and North Saudi Arabia in addition to Sudair and Al Washm. (Al Rajhi Bank Report, 2017).

NCB

The National Commercial Bank was established in 1953. It is the largest bank in the KSA in terms of capital by about SAR 30 billion and the second largest bank by size and number of branches. It has (37) branches in Qassim in which about (259) female and male employees operate. These branches serve the administrative areas adjacent to Al Qassim such as Hail, Arar, and Al Jowf in addition to the Sudair and Al Washm. (National Commercial Bank Report, 2017)

Riyad Bank

Riyad Bank was established in 1958. It is one of the largest banks in the KSA in terms of its capital, which amounted to SAR 30 billion. Further, it is the third largest bank by size and number of branches in the KSA. It has 11 branches in Al Qassim only, with 150 female and male employees serving most of the cities of Al Qassim and its government departments. (Riyad Bank Report, 2017)

Bank Albilad

Bank Albilad is a Saudi Islamic bank headquartered in Riyadh, the capital of Saudi Arabia and was established in 2004. Despite its recent establishment, it has been able to spread in many regions of the KSA. The bank has adopted the Islamic methodology in its banking operations. According to the regional administration, it has (33) branches in Al Qassim, with a total (250) female and male employees. These branches include a wide administrative area such as Hail and Northern Saudi Arabia, as well as Sudair and Al Washm.

Based on the above, the study was conducted through a community of 160 branches of the said banks in which about 1,782 female and male employees work in Al Qassim Region.

To ascertain having a sample that represent the research community and can be mainstreamed, (surveysystem) and (raosoft) software were used to calculate the sample representing the research community according to the statistical standards. The results showed that the sample size of this community consisting 1,782 individuals should be 317 reviews at a confidence interval of 5% and confidence level of 95%. After distributing the questionnaire to employees in the previous banks according to their grades, the researcher obtained responses from (420) employees of both categories, females and males. They represent the total number of valid analyzable measurable questionnaires out of the distributed questionnaires, which can be statistically described as follows:

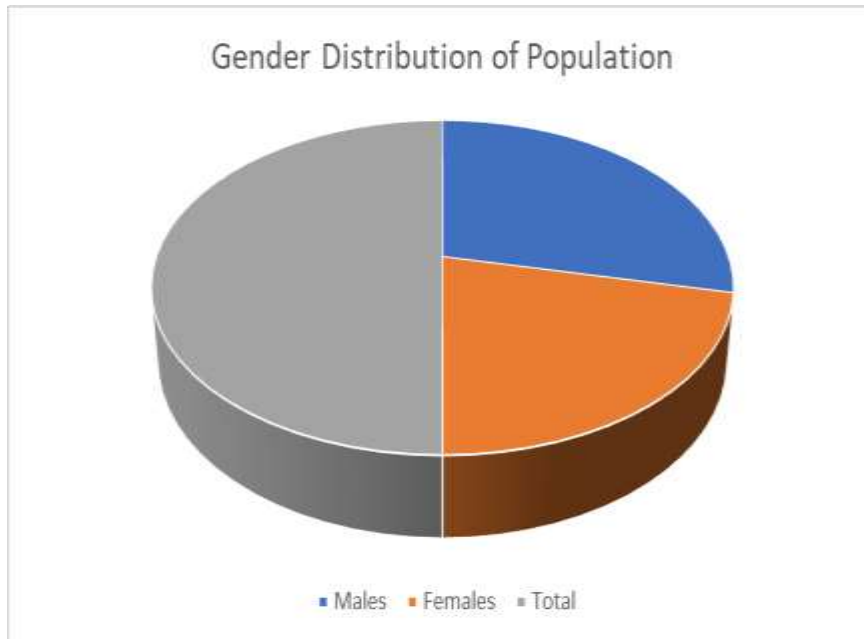
First: In terms of gender:

Table (2) shows the distribution of the individuals of the study sample by gender

Gender	Frequencies	Percentage %
Males	239	57
Females	181	43
Total	420	100

Representing the data graphically:

Figure 2



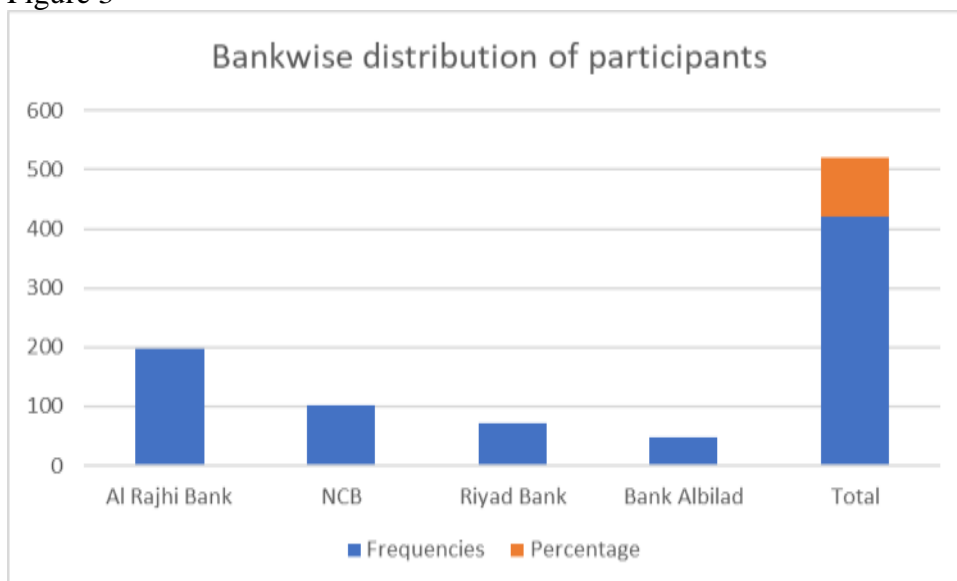
Second: In terms of distribution by banks:

Table No (3): shows the distribution of the individuals of the study sample by banks

Bank	Al Rajhi Bank	NCB	Riyad Bank	Bank Albilad	Total
Frequencies	197	102	71	47	420
Percentage	47%	24.2%	17%	11.2%	100

Figure below depicts the data graphically:

Figure 3



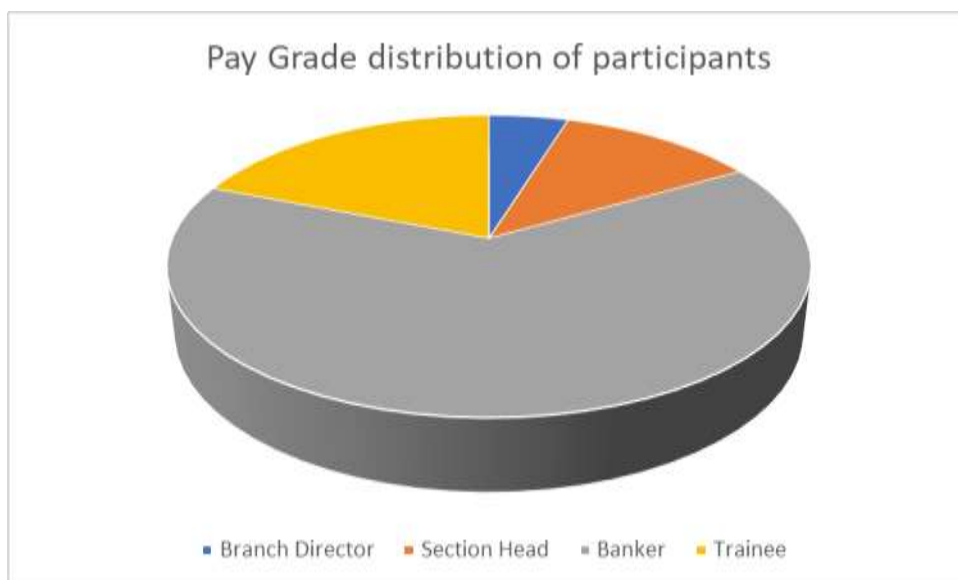
Third: In terms of distribution by job grade:

Table No. (3): shows the distribution of the individuals of the study sample by job grade

Position	Frequencies	Percentage %
Branch Director	20	4.7
Section Head	50	11.9
Banker	270	64.3
Trainee	80	19.1
Total	420	100

Figure 4 shows the occurrence of frequency of the participants according to their pay grade.

Figure 4



Main Study Tool

A questionnaire consisting of three main parts was designed. The first part dealt with the characteristics of the sample members. The second part dealt with the feasibility of applying and using training in information technology to improve the performance of Saudi employees within the banking institutions in Al Qassim Region. Further, the third part discussed the feasibility and commitment of the senior management of the banks to use training in information technology among all staff and in a fair manner, and the feasibility of this commitment to improve the work level.

To identify the results taken from the information included in the questionnaires and the accuracy of the data collected therefrom, the researcher used the Statistical Package for the Social Sciences (SPSS) by applying the following statistical tests:

- Pearson correlation coefficient to calculate the accuracy of the questionnaire.
- Cronbach's alpha coefficient to calculate the reliability of the questionnaire.
- Frequency tables to calculate the percentage of each statement and to determine the degree of approval of each statement.

- Chi Square test to calculate the moral differences between the answers and the impact factor of the variable on the answer.

Previous Studies

Sandram Ajithi (2018), in a study conducted on a group of Indian IT companies, examined the development of a scale for measuring the importance of training in Capability Maturity Model (CMM) through a survey using questionnaire as well as structured interpersonal interviews. The study found that training is one of the most important duties for personal and professional development through the process of training and continuous learning. The study confirmed that training increases the level of knowledge, skills, attitudes and behavior of the staff, and fills the gap between the job requirements and the current staff capacities. Training not only increases productivity but also stimulates the staff by conveying the vital information they need to carry out the duty.

Hence, the need for training must be analyzed to identify current problems and to design training programs according to organizational objectives and staff needs to address the current challenges faced by institutions using IT, taking time and expenditure into consideration. Osha Anantha (2018), in a study about the challenges of regulatory, technological and human resources to enhance the effectiveness of Indian banks, stressed that the global banking scene has changed rapidly. Hence, the Indian banking industry needs transformation to cope with changes in the overall environment. Now, the study suggests that risk management should be integrated into decision making processes, taking regulatory changes in banking into account (e.g. Basel III standards applied globally). The study showed that the technology used in banks will certainly help meet formal requirements of the financial transactions and reduce cyber threats and security risks in information technology. According to the study, the higher leadership has a strategic importance and it is important to understand and provide the higher leadership with its training requirements.

Sara Anjim and Ali Taher (2018) examined the role of training programs in the effective development in the achievement of the high professional performance in the Asian banking industry. The study aimed at identifying the importance of human resource development, in light of the global perspective, and the need for it in Asian countries through the study of training and development that play a key role in the banking industry that focuses on customer satisfaction through the use of advanced technology. The research applied the integrated approach. It reviewed and analyzed various researches and reports on the global banking sector and banking sector in Asian countries. The study concluded the importance of effective training and that the training and development are of the administrative work required to improve the performance of bank staff in these countries and to remain informed of technological progress. Training in technology as a tool for human resources development has helped to improve the talent acquired by banks in these countries and to know the state-of-art technologies to deal with the new market challenges.

Khan study (2018) surveyed a targeted sample of 110 respondents. They were selected by taking stratified random samples from 30 branches of a leading bank in South Africa. The study emphasized that the sustainability and development reports of the banks indicate that the investment rates are steadily increasing through the continuous training and development processes. Hence, reinventing renewed processes of training within the banks so that they will be more efficient and appropriate in the probability of applying modern technologies, the effect of

technology on the training and development time, the possibility of access using various learning platforms, return on investment, support the organizational and educational structure in the banking environment, will help achieving the training set goals.

Alia study (2016), conducted by the Iraqi Vegetable Oil Company, emphasized the relationship between training and the development of organizational commitment. Using a questionnaire, a random sample was taken from different levels in the company, where the number of analyzable questionnaires reached about 33 questionnaires. The study reached several conclusions, most of which confirmed the existence of a relationship of correlation and direct impact between training and organizational commitment. The researcher recommended paying more attention to training which increases the worker's skills and work experiences. The study also recommended developing a clear strategy on specialization and division of labor based on the qualifications of the workers and their mental and physical abilities.

Dirar Al-Otaibi and Yassin Al-Taher (2015), in a study entitled Effect of Training Strategies on Employee Performance, used Al-Rajhi Bank as a case study. The study targeted the category of managers and employees in Al-Rajhi Banking Corporation. The researchers used the questionnaire as a data collection tool. They got (160) analyzable questionnaires. One of the important conclusions of this study is that there is a positive correlation between the application of the training process from a strategic perspective and the level of performance of the employees. As well, there is a positive correlation between the senior management's adoption of the training strategy and the level of performance of the employees. The study also emphasized the importance of using modern technology as the basis for the implementation of training strategy programs and the level of performance of employees. Furthermore, the study stressed the need to diversify the training programs offered to its members and to follow different methods of training. The study recommended the need for a specialized unit in the corporation to carry out the tasks related to training, planning, implementation and follow-up of the training programs provided by the corporation.

Karasan study (2013) was conducted on a sample of staff of a foreign-owned bank in Izmir, Turkey. The study focused on the training and Internet use in the bank as a new opportunity to create a work force consistent with new technology and increase the productivity, which provides the staff of the bank the possibility of individual learning. However, the study showed that the level of benefit that the bank's staff obtain from educational opportunities is changing on the basis of certain demographic characteristics. Therefore, gender, age and type of education may affect benefiting from training.

Kelesiv study (2016) aimed at conducting the research by intensifying the processes of innovative information and communication services in the modern economy and the banking sector particularly. Consequently, the study focused on the development of systematic methods to evaluate the impact of e-banking service on the economic standards of the bank's activity. The study concluded the development of a complex formula in the method of evaluating electronic banking services based on internet technology and its impact on the economic development standards of the banking structure.

Effective Training Strategy

Effective training is a planned process based on the use of methods and tools aimed at improving and refining the skills and abilities of the individual, and expanding the scope of knowledge through learning, to raise the individual's level of efficiency and thus the efficiency of the establishment in which he works as a working group based on the provision of a continuous amount of information, in addition to the creation of specific skills for a group of trainees through modern means of communication and management training methods. Further, training provides the individual with knowledge, skills and behavior directly related to his functional role and organizational level, which increases his productivity. (Politis, 2016).

Based on the studies made by Osha Anantha (2018), Sarah Anjim and Ali Taher (2018), Alia (2016), Dirar Al-Otaibi and Yassin Al-Taher (2015), it is concluded that effective training is a process that aims at:

- Providing the employees of different grades with unavailable skills, information and experiences.
- Providing the employees in the various departments with new trends and behavioral patterns.
- Improving the functional capacities, refining administrative and technical skills and increasing the competitiveness of the organization.
- Emphasizing the importance of linking senior management to training processes.

By focusing on the fact that the individual is an important asset of the organization's and the human resources department is a real and important partner in the overall strategic planning and its work is no longer confined to managing the daily business of individuals within the institution (Amayah, 2014).

Certain HR strategies can be identified as follows:

1. Adopting and investigating justice in dealing with all employees in the areas of performance evaluation.
2. Adopting development and training programs for all levels of management in the institution in a manner that ensures raising the skills of the employees so that the followed training strategy be derived from the functional strategy of human resources department and accomplishes its objectives. (Al Sharah and Tarawneh, 2011)

Information technology in banking institutions

Now, all Saudi banks have mobile phone applications through which their customers can access and review their bank accounts, with many banking services, and represent the account statistically in terms of expenses, revenues, bill payment, transfer, loan application and all mobile banking services (Bhattacharya, 2017). The IT philosophy addresses the cultural challenge in all fields. It is the common denominator in all methodologies of developing work systems and environment and improving the effective training processes (Fitzgibbons, 2010) (Munn, 2017). The distinction between technology tools and means will inevitably become less important when they all become integrated into one mechanism (Northcraft, 2017). Our world is increasingly moving towards the integration of information and communication technology into one system (Tella, 2018). The following phenomena have transformed technology to forces leading a profound change in the economy:

Mobile Technology

It is a technology that allows individuals to free themselves from the constraints of being in a particular place to communicate, access, possess and manage information. It has made it possible for individuals in remote areas to access all institutions (Eutsler, 2018), as mobile technology provides Short Message Service (SMS) and (WAP), which unifies the access of the wireless devices to the Internet (Gaile, 2017), and facilitates the transfer and exchange of data and benefit from the rest of its various services such as e-mail (Bolliger, 2017). Moreover, mobile technology provided the general packet radio service (GPRS), which allows the mobile phones to access the Internet at high speed and receive, store, retrieve and exchange files wirelessly at high speed (Goklp, 2013). The user can access the Internet at anytime and anywhere to browse the Internet and read and reply to email (MMS) (Putro, 2016).

Personal Digital Assistants (PDAs)

Personal Digital Assistants (PDAs) are handheld devices or pocket PCs that are useful in writing notes.

or task lists (Germany, 2012; Mechling, 2011), downloading audio and video files, viewing video clips, accessing and browsing Internet, and reading email using wireless modems. As well, they allow accessing intranet and extra-net. (Yang, 2017; Fritz, 2010)

Benefits of using mobile technology in banks

Digital devices, mobile phones, and Tablet PCs can be used to perform many financial tasks as illustrated below: (Naylor, 2018)

- Enable senior management in the institution to participate collectively with employees or to choose specific individuals for direct communication and implementation of banking transactions and all tasks in teamwork (participatory) action.
- SMS services can be used to get information faster and easier than phone calls or e-mail such as transaction execution schedules, currency rates and financial trading strategy, especially with emergency adjustments to these tables (Olufunmilola Ogulande, 2016).

ANALYSIS AND RESULTS**Tool validity: the researcher used two methods to verify the validity of the tool****Virtual Validity**

After designing the questionnaire, the researcher presented it to a group of HR professionals. It included the following: The association between the questionnaire's statement and the study's objectives and questions, the quality of each statement's wording, and gradient in the questionnaire. Their comments and corrections were received. The researcher carried out them fully in terms of modifying the wording, deleting certain statements, adding certain explanatory statements, deleting and replacing words from the statement with other words for illustration. The professional nearly agreed on the quality and thoroughness of the questionnaire compared to the study's objectives and questions. Only one arbiter objected to the final formula, but it was approved by the other arbiters.

Validity of Internal Consistency

After ensuring the virtual validity of the study tool, the researcher distributed and applied the questionnaire in the field through personal interviews and distribution via e-mail to a stratified

random sample of employees with total (500) questionnaires. After collecting the questionnaires, (80) of them representing 16% of the distributed questionnaires were invalid. SPSS was used in calculating Pearson correlation coefficient to figure out the validity of the internal performance, as the correlation coefficient between the degree of each statement of the questionnaire and the total degree of the related part was calculated. Table (4) shows Pearson correlation coefficient for each statement of the second part of the questionnaire, noting that if the correlation coefficient value is less than (0.25), it is low, if the value is (0.25 – 0.49), it is considered medium and if the value is (0.50 – 0.75), it is considered high and strong. If the value is higher than the foregoing, it is considered very strong.

Table (4): Pearson correlation coefficient (high/low) for statement of the questionnaire

Statement	Pearson correlation coefficient (PCC)
Evaluation of the feasibility of training in the use of information technology in the exchange of experiences among the staff sector of the banks	**0.471
Banks senior management's keenness to stimulate the staff to use the information technology	**0.297

The above Table (4) shows that all the questions of the questionnaire are of medium positive relationship, with a correlation ratio of 0.297 to 0.471, indicating that all statements are valid in what they measure, represent the part to which they belong, and achieve the questionnaire internal validity characteristic.

Tool Reliability

The researcher measured the reliability of the study tool (questionnaire) using Crnobach's Alpha to ensure the reliability of the study tool. Table (5) shows the reliability coefficient of the study tool:

Table (5): shows the reliability coefficient of the study tool

Axis	Reliability coefficient
First axis: Contribution of training in the use of information technology in banks to improve staff performance	**0.436
Second axis: Facilities for senior management of banks to mainstream training in the use of information technology	**0.311

The above Table (5) shows that the values of the reliability coefficient of the questionnaire parts are medium, indicating that the study tool (questionnaire) has a good degree of consistency and can be relied upon in the field application of the study.

Analyzing and discussing the results related to the study questions

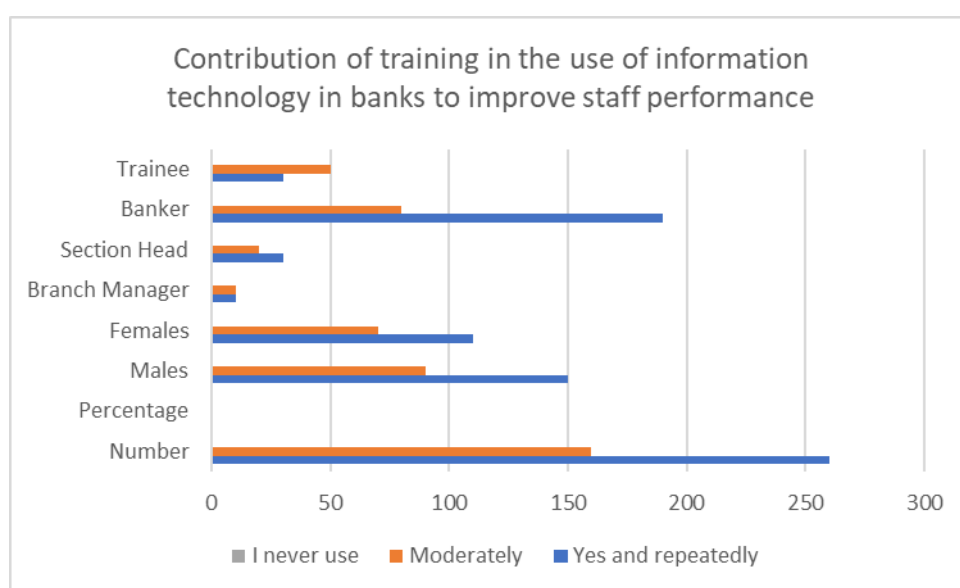
First axis: Contribution of training in the use of information technology in banks to improve staff performance

Table (6) shows the distribution of the employees' responses to the question relating to the extent of feasibility of training in the use of information technology in banks in improving the technological abilities and skills of the employees.

Response type	Number Responses	Percentage	Males	Females	Branch Manager	Section Head	Banker	Trainee
Yes and repeatedly	260	62%	150	110	10	30	190	30
Moderately	160	38%	90	70	10	20	80	50
I never use	0	0%	0	0	0	0	0	0
Total	420	100%	240	180	20	50	270	80

The above data is represented graphically in Figure (i).

Figure (i)



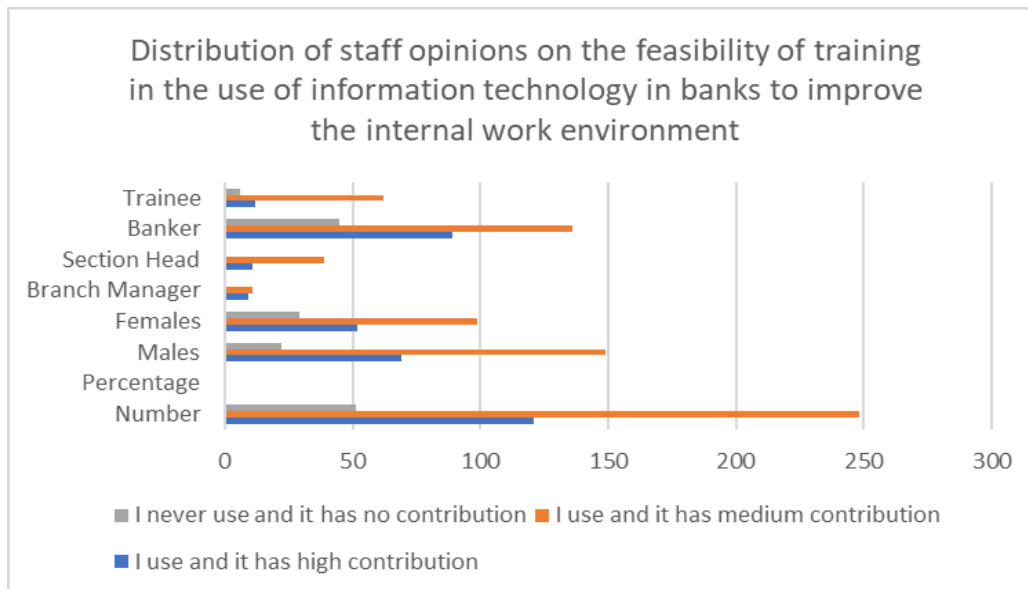
The analysis shows that there is an increase in the feasibility of training in the use of information technology in banks in improving the technological abilities and skills of employees. 260 employees answered yes and repeatedly, and 160 employees answered moderately, both representing 420 employees; i.e. 100% of the sample. No employee answered I never use, representing 0% of the sample, indicating that training is one of their requirements. Having conducted χ^2 test on gender (sex) factor, it was found that $P=0.037$; i.e. less than $P=0.05$. It means that the differences in ratios are significant; namely, gender factor affects the extent of feasibility of training in the use of information technology in the banks in improving the technological abilities and skills of the employees. Having conducted χ^2 test on the job grade factor, it was found that $P=0.071$; i.e. over $P=0.05$. It means that job degree factor doesn't affect the extent of feasibility of training in the use of information technology in the banks in improving the technological abilities and skills of the employees.

Table (7) shows the distribution of staff opinions on the feasibility of training in the use of information technology in banks to improve the internal work environment

Response type	Number Responses	Percentage	Males	Females	Branch Manager	Section Head	Banker	Trainee
I use and it has high contribution	121	28.9 %	69	52	9	11	89	12
I use and it has medium contribution	248	59,0 %	149	99	11	39	136	62
I never use and it has no contribution	51	12.1 %	22	29	0	0	45	6
Total	420	100 %	240	180	20	50	270	80

These findings are represented at a glance in Figure (ii).

Figure (ii)



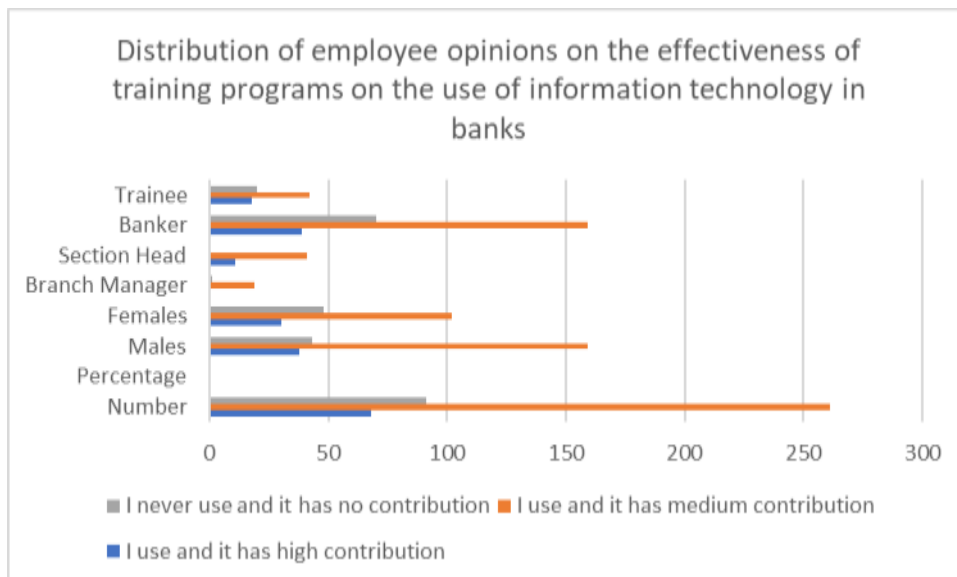
Analyzing the employee responses reveals that there is a variance about the feasibility of training in the use of information technology in banks in improving the internal work environment. The responses were distributed by the relative order as follows: (I use and it has medium contribution) was answered by 59.0% of the study sample and (I use and it has high contribution) was answered by 28.9% of the study sample. (I never use and it has no contribution) was answered by 12.1% of the study sample. χ^2 test on gender factor showed that $P=0.045$, i.e. less than $P=0.05$. It means that the differences in ratios are significant; namely, gender factor affects the feasibility of training in the use of information technology in the banks in improving the internal work environment. Having conducted χ^2 test on the job grade factor, it was found that $P=0.063$; i.e. over $P=0.05$. It means that job degree factor doesn't affect the feasibility of training in the use of information technology in the banks in improving the internal work environment.

Table (8) shows the distribution of employee opinions on the effectiveness of training programs on the use of information technology in banks

Response type	Number Responses	Percentage	Males	Females	Branch Manager	Section Head	Banker	Trainee
I use and it has high contribution	68	16,1 %	38	30	0	11	39	18
I use and it has medium contribution	261	62,2 %	159	102	19	41	159	42
I never use and it has no contribution	91	21,7%	43	48	1	0	70	20
Total	420	100 %	240	180	20	50	270	80

Graphically,

Figure(iii)



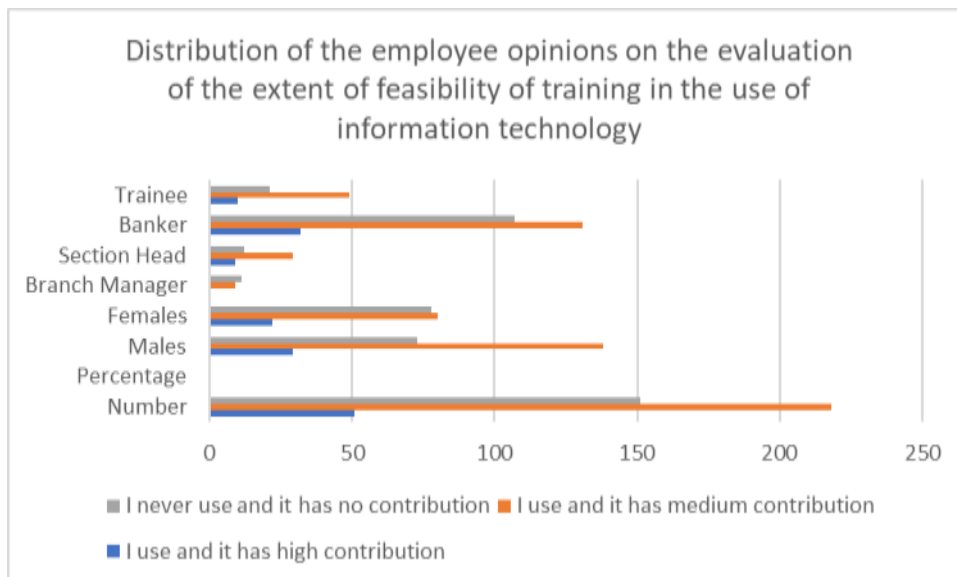
Analyzing the employee responses shows the employee opinions on the effectiveness of training programs on the use of information technology in banks. The responses were distributed by relative order as follows: (I use and it has medium contribution) was answered by 62.2% of the study sample. (I never used and it has no contribution) was answered by 21.7% of the study sample. (I use and it has high contribution) was answered by 16.1% of the study sample. Therefore, the employee opinions on the evaluation of the effectiveness of training programs on the use of information technology in banks were positive. Having conducted χ^2 test on the gender factor, it was found that $P=0.053$; i.e. over $P=0.05$. It means that the differences in ratios are not significant; namely, the gender factor doesn't affect the evaluation of the training programs on the use of information in banks. Having conducted χ^2 test on the academic degree factor, it was found that $P=0.069$; i.e. over $P=0.05$. It means that the academic degree factor doesn't affect the evaluation of the training programs on the use of information in banks.

Table (9) shows the distribution of the employee opinions on the evaluation of the extent of feasibility of training in the use of information technology in exchanging experiences among the staff sector in the banks.

Response type	Number Responses	Percentage	Males	Females	Branch Manager	Section Head	Banker	Trainee
I use and it has high contribution	51	12.1 %	29	22	0	9	32	10
I use and it has medium contribution	218	52.0 %	138	80	9	29	131	49
I never use and it has no contribution	151	35.9 %	73	78	11	12	107	21
Total	420	100 %	240	180	20	50	270	80

Representing the data graphically,

Figure (iv)



Analysis of the employee responses reveals that there is a variance about the contribution of the feasibility of training in the use of information technology in exchanging experiences among the staff sector in banks. The responses were distributed by relative order as follows: (I use and it has medium contribution) was answered by 52.0% of the study sample. (I don't use and it has no contribution) was answered by 35.9% of the study sample. (I use and it has high contribution) was answered by 12.1% of the study sample. The high use of (I don't use and it has no contribution) with 35.9% can be interpreted that only the senior staff of the banks or those who have long experiences in working in banks are involved in exchanging experiences between banks. χ^2 test on gender factor inevitably showed that $P=0.037$, i.e. less than $P=0.05$. It means that the differences in ratios are significant; namely, gender factor affects the feasibility of training in the use of information technology in the banks in exchanging experiences among staff sector in banks. χ^2 test on job degree factor showed that $P=0.042$, i.e. less than $P=0.05$. It means that the job degree factor affects the evaluation of the extent of feasibility of training in the use of information technology in the banks in exchanging experiences among staff sector in banks.

Table (10) shows the distribution of employee opinion on employees' satisfaction with the strategy of training in the use of information technology in banks

Response type	Number Responses	Percentage	Males	Females	Branch Manager	Section Head	Banker	Trainee
I use and it has high contribution	19	4,5 %	10	9	7	4	6	2
I use and it has medium contribution	161	38,4 %	121	40	11	41	84	25
I never use and it has no contribution	240	57,1 %	109	131	2	5	180	53
Total	420	100 %	240	180	20	50	270	80

(I don't use and it has no contribution) was highly answered by 57.1% of the study sample.

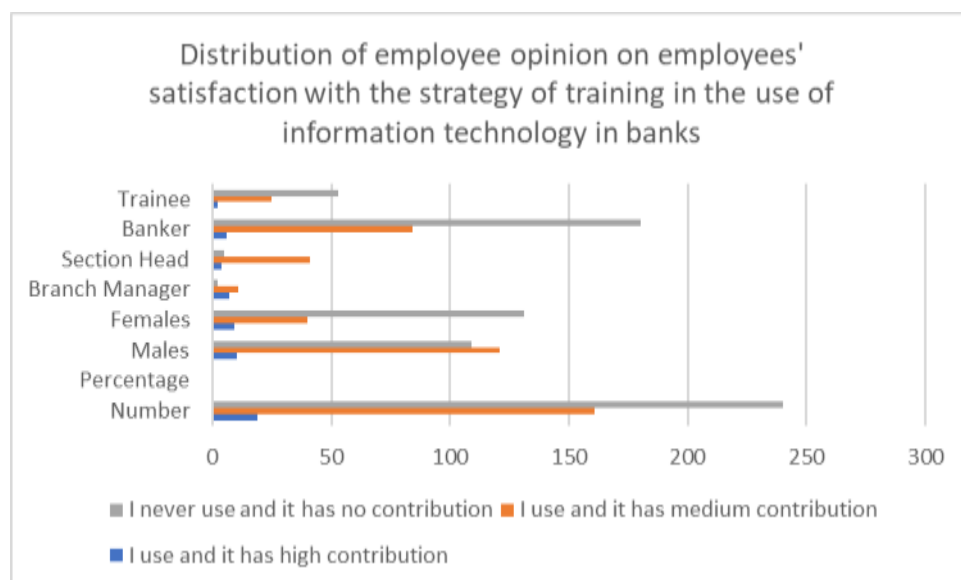
(I use and it has medium contribution) was moderately answered by 38.4% of the study sample.

(I use and it has high contribution) was lowly answered by 4.5% of the study sample.

It indicates that the bank's management is still failing to seek greater bank employees' satisfaction with the training strategy. χ^2 test on gender factor showed that $P=0.026$, i.e. less than $P=0.05$. It means that the differences in ratios are significant; namely, gender factor affects the extent of employees' satisfaction with the strategy of training in the use of information technology in banks. χ^2 test on job degree factor showed that $P=0.036$, i.e. less than $P=0.05$. It means that the job degree factor affects the extent of employees' satisfaction with the strategy of training in the use of information technology in banks.

These responses are represented diagrammatically below.

Figure (v)



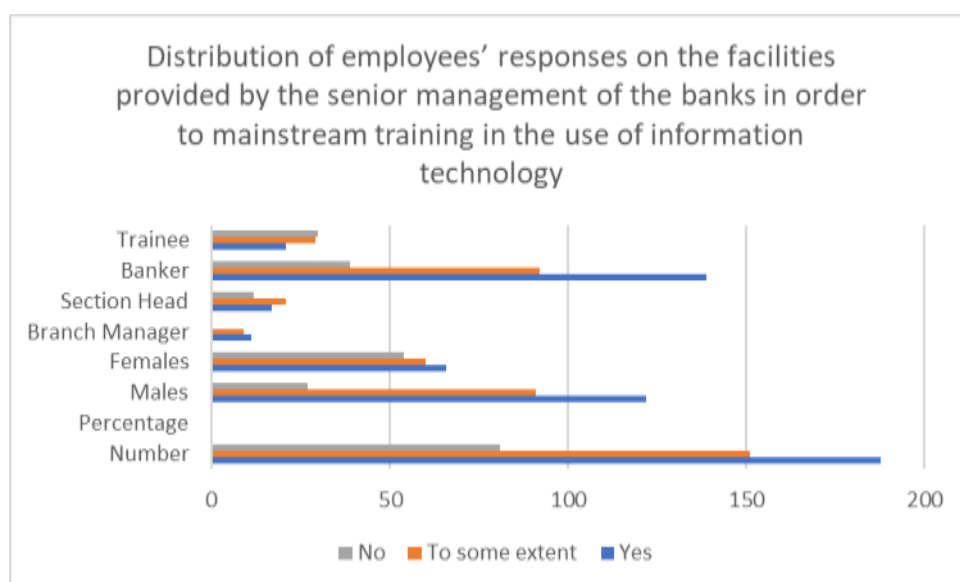
Second axis: Facilities for senior management of banks to mainstream training in the use of information technology.

Table (11) shows the distribution of employees' responses on the facilities provided by the senior management of the banks in order to mainstream training in the use of information technology

Response type	Number Responses	Percentage	Males	Females	Branch Manager	Section Head	Banker	Trainee
Yes	188	45.3%	122	66	11	17	139	21
To some extent	151	35.7%	91	60	9	21	92	29
No	81	19 %	27	54	0	12	39	30
Total	420	100 %	240	180	20	50	270	80

Graphically,

Figure (vi)



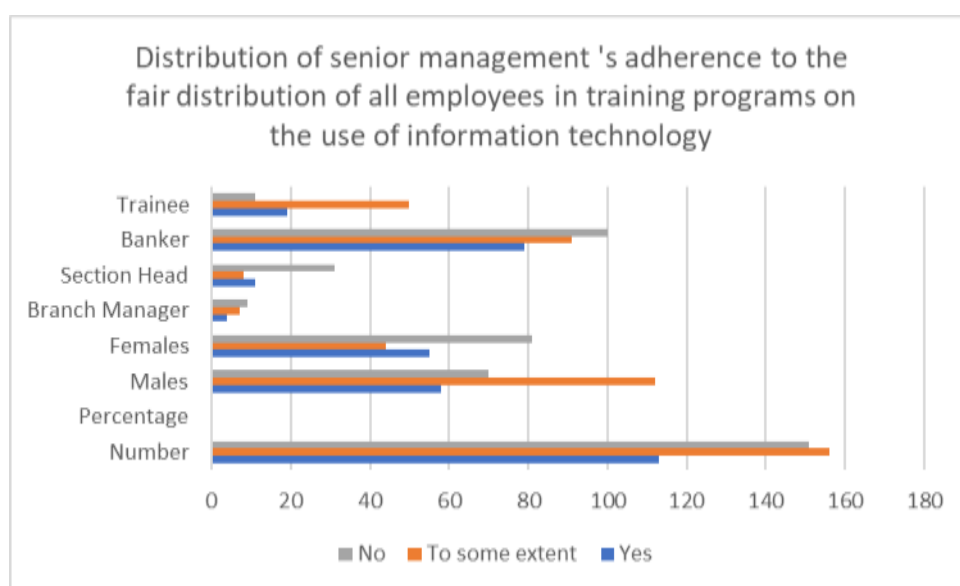
As for the extent of the banks' senior management commitment and adherence to mainstreaming the training in the use of information technology, we note a good rise in those responses, as 188 employees answered yes and 151 employees answered to some extent. Both represents 339 of the banks' staff with 80.9%. Only 81 employees answered no with 19%. It means that the bank's senior management is keen to mainstream training in the use of information technology. χ^2 test on gender factor showed that $P=0.046$, i.e. less than $P=0.05$. It means that the differences in ratios are significant; namely, gender factor affects the extent of the banks' senior management commitment to mainstream the training in the use of information technology. χ^2 test on job degree factor showed that $P=0.041$, i.e. less than $P=0.05$. It means that the job degree factor affects the extent of the banks' senior management commitment and adherence to mainstreaming the training in the use of information technology.

Table (12) shows the distribution of senior management 's adherence to the fair distribution of all employees in training programs on the use of information technology

Response type	Number Responses	Percentage	Males	Females	Branch Manager	Section Head	Banker	Trainee
Yes	113	26.9%	58	55	4	11	79	19
To some extent	156	38%	112	44	7	8	91	50
No	151	37.1%	70	81	9	31	100	11
Total	420	100 %	240	180	20	50	270	80

The data is represented below.

Figure (vii)



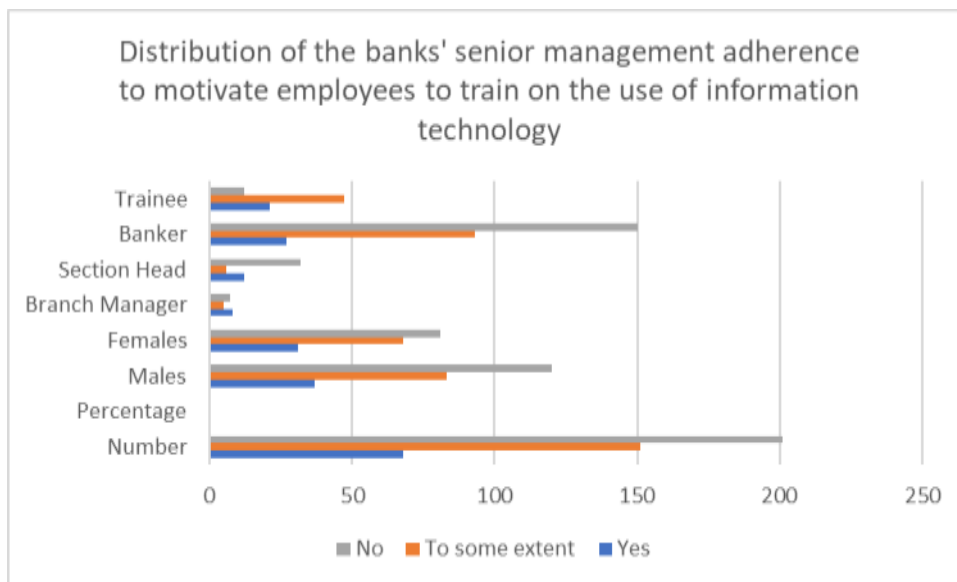
It is noted that there is a low ratio of the employees who answered yes or to some extent about the banks' senior management adherence to the fair distribution of all employees in the training programs, as: 113 employees answered yes and 156 employees answered to some extent. Both represents 269 employees with 64.9%. 151 employees answered no with 37.1%. It indicates that the banks' senior management are not sufficiently keen for the fair distribution of training programs (12). χ^2 test on gender factor showed that $P=0.071$, i.e. over $P=0.05$. It means that the differences in ratios are not significant; namely, gender factor doesn't affect banks' senior management adherence to the fair distribution of all employees in the training programs. χ^2 test on job degree factor showed that $P=0.064$, i.e. over $P=0.05$. It means that the job degree factor doesn't affect banks' senior management adherence to the fair distribution of all employees in the training programs.

Table (13) shows the distribution of the banks' senior management adherence to motivate employees to train on the use of information technology

Response type	Number Responses	Percentage	Males	Females	Branch Manager	Section Head	Banker	Trainee
Yes	68	16,2%	37	31	8	12	27	21
To some extent	151	35.9%	83	68	5	6	93	47
No	201	47.9%	120	81	7	32	150	12
Total	420	100 %	240	180	20	50	270	80

We present the results at a glance:

Figure (viii)



There is a huge decline in the staff responses about the banks' senior management adherence to motivate employees to train on the use of information technology, as: 16.2% of the employees answered yes and 35.9% of the employees answered to some extent, while 47.9% of them answered no. Accordingly, there is a significant imbalance in the senior management's performance with respect to the banks' senior management adherence to motivate the staff to train on the use of information technology, Table (13). χ^2 test on gender factor showed that $P=0.069$, i.e. over $P=0.05$. It means that the differences in ratios are not significant; namely, gender factor doesn't affect the banks' senior management adherence to motivate the staff to train on the use of information technology. χ^2 test on job degree factor showed that $P=0.059$, i.e. over $P=0.05$. It means that the job degree factor doesn't affect the banks' senior management adherence to motivate the staff to train on the use of information technology.

Table (14) shows the extent of employees' evaluation of the banks' strategic vision in applying the use of information technology in banks

Response type	Number Responses	Percentage	Males	Females	Branch Manager	Section Head	Banker	Trainee
Yes	54	12.8%	32	22	11	9	13	21
To some extent	129	30.7%	78	51	3	18	67	41
No	237	56.4%	130	107	6	23	190	18
Total	420	100 %	240	180	20	50	270	80

The results of the employees' responses with respect to their involvement in the evaluation of the banks' strategic vision in the application of the use of information technology reflect a very negative situation, as 54 employees answered yes and 129 of them answered to some extent, both representing 183 of the employees with 43.6%. 237 employees answered no, with 56.4%. Therefore, it is concluded that there is a clear deficiency in the development of the programs and plans related to the banks' strategic vision and in the application of the use of information technology in banks. Having conducted χ^2 test on the gender factor, it was found that $P=0.033$; i.e. less than $P=0.05$. It means that the differences in ratios are significant; namely, the gender factor affects the banks' strategic vision in the application of the use of information technology. Having conducted χ^2 test on the job degree factor, it was found that $P=0.047$; i.e. less than $P=0.05$. It means that the job degree factor affects the banks' strategic vision in the application of the use of information technology.

These results are represented in Figure (ix).

Figure (ix)

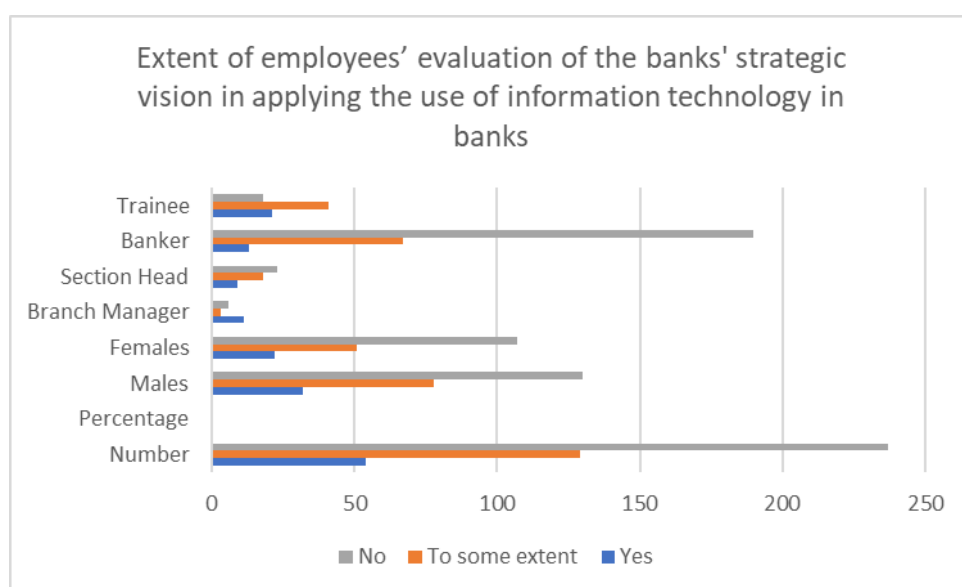
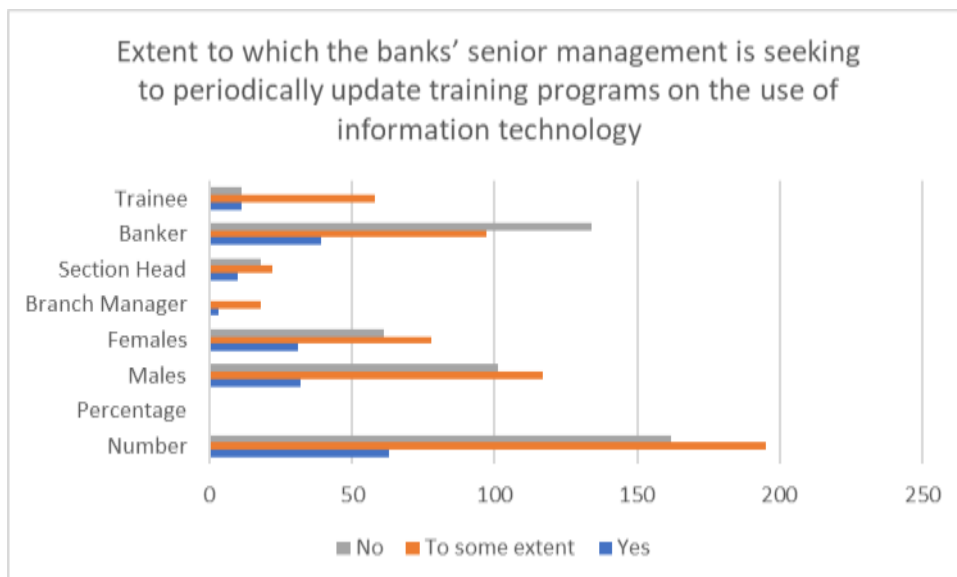


Table (15) shows the extent to which the banks' senior management is seeking to periodically update training programs on the use of information technology

Response type	Number Responses	Percentage	Males	Females	Branch Manager	Section Head	Banker	Trainee
Yes	63	15%	32	31	3	10	39	11
To some extent	195	46.4%	117	78	18	22	97	58
No	162	38.6%	101	61	0	18	134	11
Total	420	100 %	240	180	20	50	270	80

Graphically represented as,

Figure (x)



The responses reflect an intermediate form of the results connected with the bank's senior management procedures towards the periodic update of the training programs on the use of information technology, as: 63 employees answered yes and 195 of them answered to some extent, both representing 258 employees with 61.4%. 162 employees answered no with 38.6%. Therefore, there is deficiency in the banks' senior management to periodically update training programs on the use of information technology. χ^2 test on gender factor showed that $P=0.029$, i.e. less than $P=0.05$. It means that the differences in ratios are significant; namely, gender factor affects the periodic update of the training programs on the use of information technology. χ^2 test on job degree factor showed that $P=0.041$, i.e. less than $P=0.05$. It means that the job degree factor affects the periodic update of the training programs on the use of information technology.

DISCUSSION

The study proved the significance of training in the use of information technology in banks in improving the internal work environment. It indicates that training fosters morale

and self-confidence of the banks' staff (Table 6 & 7), which is consistent with Alia study (2016). The statistical analysis proved the effectiveness of training programs on the use of information technology in banks. It indicates that employees in banks have the ambition to train on technology that contributes to raising their functional and practical level (Table 8) and Khan (2018). Therefore, the application of training strategies in the use of information technology in Saudi banks improves performance of employees as explained (Table 9). The exchange of experiences between banks may involve only senior staff or those with long experience in the banking business, as it was confirmed by χ^2 test on the gender and job degree factors. It was found that the two factors affect the feasibility of training in the use of information technology in exchanging experiences among the staff sector in banks and the need to focus on the modern training methods associated with information technology in innovative ways. The results showed (Table 10) that the staff satisfaction with the training strategy is poor and the banks' senior management should seek to increase the bank's staff satisfaction with the training strategy. Table (14) shows a clear deficiency of the programs and plans related to the strategic vision of banks and the application of the use of information technology in banks, with the banks' senior management failure to carry out the periodic updating of training programs in the use of information technology, Table (15). The senior management must correct the vision, mission and strategy of training in banking technology and introduce it to bank employees to address this deficiency. The senior management of Saudi banks should adopt a policy of continuous strategic training and should be aware of the importance of using information technology intensively by the employees in banks. It consists with all foregoing studies, that all employees of different functional degrees need training (Osha Anantha, 2018). Table (11) showed that the banks' senior management is keen on mainstreaming the training in the use of information technology with the reliability of the gender and job degree's impact on all variables. However, the banks' senior management are not sufficiently keen for the fair distribution of the training programs, Table (12). As well, they are not keen on motivating the employees to use the information technology, Table (13). Tables 7, 8, 9, 10, 14 and 15 showed the impact of the gender and job degree factor on training in the use of information technology in banks, improving the internal work environment, employee satisfaction with the strategy of training in the use of information technology in banks, and the evaluation of the banks' strategic vision in the application of the use of information technology in banks. As well, the gender and job degree affects carrying out periodic update of the employees' training programs in the use of information technology. This is interpreted by Section (7.1) of this research, as women represented 9.7% of the total number of employees in Saudi banks. This percentage is very low and reflects that the Saudi banking is a male based community with 90.3% of the employees in the banks. Therefore, the decision makers in the SAMA should exert more effort to urge Saudi banks to adopt a policy of attracting and empowering women in all vital jobs in Saudi banks. All the foregoing indicates that the application of the strategy of training in the use of information technology improves the level of performance of the employees of both genders. As well, attention should be paid to effective training of staff at close intervals and a detailed study should be carried out to identify the most significant constraints that limit the ability of employees to use information technology.

RESULTS

The study helps conclusively establish the importance of on-job training of employees in the use of new technologies that help make the banking operations smoother and faster. Employees are positively disposed towards getting trained in these software as they understand that it will go a

long way in boosting their efficiency and hence, functionality. However, the employees do not feel satisfied with the training strategies as the programs are seen as outdated and not useful. They also feel demotivated as the much required updation of their learning lags behind. Gender bias is also clearly visible in the study with women representing a meagre 9% of total employee figures. This certainly does not agree with the vision of the administration as laid out in V2030 wherein women's economic participation in all fields is one of the goals. Finally, employees are unhappy with the poor communication channel between the old and new workers as they feel that the new workforce can benefit greatly from the knowledge and experience of the older one.

Recommendations

It is recommended that training be integrated into employee development programs not just to meet administrative targets but with well laid out aims and objectives. Instead of training banking staff in spurts, convenient and accessible electronic communication channels with older employees can be opened for hands-on training of the newer staff. Updation of learning as much as learning itself should be the target of the administration as technological tools are nothing if not in tune with the latest findings. There is need for honest and in-depth assessment of factors that are keeping women out of the banking sector. For this, other sociological research needs be encouraged and an evaluation of banking sector also needs to be undertaken.

References

- Amayah, A.; Gedro, J. (2014). Understanding Generational Diversity: Strategic Human Resource Management and Development across the Generational "Divide". *New Horizons in Adult Education & Human Resource Development*, 26(2), 36-48.
- Bhattacharya, S. [et. Al] (2017). A Comparative Study of Learning Organization Practices of Indian Businesses. *International Journal of Learning and Change*, 9 (2), 145-169.
- Bolliger, D. U.; Shepherd, C. E. (2017). An Investigation of Mobile Technologies and Web 2.0 Tools Use in Outdoor Education Programs. *Journal of Outdoor Recreation, Education, and Leadership*, 9(2), 181-196.
- Cuhadar, Cem. (2014). Information Technologies Pre-Service Teachers' Acceptance of Tablet PCs as an Innovative Learning Tool. *Educational Sciences: Theory and Practice*, 14(2), 741-753.
- Eutsler, L. (2018). Predictors of Portable Technology Adoption Intentions to Support Elementary Children Reading International. *Journal of Information and Learning Technology*, 35(1), 29-42.
- Fitzgibbons, M.; Meert, D. (2010). Are Bibliographic Management Software Search Interfaces Reliable?: A Comparison between Search Results Obtained Using Database Interfaces and the EndNote Online Search Function. *Journal of Academic Librarianship*, 36(2), 144-150.
- Fritz, J. (2010). Video Demo of UMBC's "Check My Activity" Tool for Students. *EDUCAUSE Quarterly*, 33 (4).
- Gaile-Sarkane, E. [et. Al]. (2017). Internet Banking Adoption: Case of Lithuania and Latvia. *International Journal of Learning and Change*, 9(1), 46-58.
- Gekara, V. [et. Al]. (2014). Meeting Skills Needs in a Market-Based Training System: A Study of Employer Perceptions and Responses to Training Challenges in the Australian Transport and Logistics Industry. *Journal of Vocational Education and Training*. 66(4). 491-505.

-
- Germany, L. (2012). Beyond Lecture Capture: What Teaching Staff Want from Web-Based Lecture Technologies. *Australasian Journal of Educational Technology*, 28(7), 1208-1220.
 - Hays, H.; Ward, G. (2011). Understanding Market Concentration: Internet-Based Applications from the Banking Industry. *Journal of Instructional Pedagogies*, 5.
 - Karaaslan, I. (2013). The Effect of Banking Personnel's Access to E-Learning Opportunities on Their Professional Achievement. *Turkish Online Journal of Educational Technology - TOJET*, 12 (2).269-280.
 - Khan, R.; Pramjeeth, S.; Kader, A. (2018). The Impact of Educational Technology on Training and Development in the Banking Sector. *Africa Education Review*, 15(1). 85-107.
 - Klein, A. [et. Al] (2018). Cognitive Bias Modification Reduces Social Anxiety Symptoms in Socially Anxious Adolescents with Mild Intellectual Disabilities: A Randomized Controlled Trial. *Journal of Autism and Developmental Disorders*. 48(9). 3116-3126.
 - Maclaren, P.; Wilson, D.; Klymchuk, S. (2017). I See What You Are Doing: Student Views on Lecturer Use of Tablet PCs in the Engineering Mathematics Classroom. *Australasian Journal of Educational Technology*, 33(2), 173-188.
 - Mechling, L. C.; Savidge, E. J. (2011). Using a Personal Digital Assistant to Increase Completion of Novel Tasks and Independent Transitioning by Students with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 41(6), 687-704.
 - Munn, J. E. (2017). Information Technology Certification Training Implementation: Exploratory Case Study of Air Force and Civilian Leaders Experiences. *ProQuest LLC*, DM/IST Dissertation, University of Phoenix. ISBN: 978-0-3555-9841-4, 158 pages.
 - Naylor, A.; Gibbs, J. (2018). Deep Learning: Enriching Teacher Training through Mobile Technology and International Collaboration. *International Journal of Mobile and Blended Learning*, 10(1). Article 5, 62-77.
 - Northcraft, T. G.(2017). A Qualitative Study of the Relationship between a Banking IT Troubled Project and the Executive Project Sponsor's Project Management Maturity Level. *ProQuest LLC*, D.M. Dissertation, Colorado Technical University. ISBN: 978-1-3696-3052-7, pages 181.
 - Olufunmilola, O.; Oladimeji Olafare, F.; Ayuba Sakaba, D. (2016). Individual and Technological Factors Affecting Undergraduates' Use of Mobile Technology in University of Ilorin, Nigeria. *Digital Education Review*, 29,124-133.
 - Politis, J.; Politis, D. (2016). The Relationship between an Online Synchronous Learning Environment and Knowledge Acquisition Skills and Traits: The Blackboard Collaborate Experience. *Electronic Journal of e-Learning*, 14(3), 196-222.
 - Pu, Y. [et. Al]. (2016). The Design and Implementation of Authentic Learning with Mobile Technology in Vocational Nursing Practice Course. *British Journal of Educational Technology*, 47(3), 494-509.
 - Putro, S. [et. Al] (2016). Improvement of Human Resources Quality through Vocational Training in Tourism in Karimunjawa Islands (Central Java, Indonesia): A Pro-Economical Tourism Approach. *International Education Studies*, 9(8), 28-35.
 - Tella, A.; Orim, F.; Ibrahim, D. M.; Memudu, S. A. (2018). The Use of Electronic Resources by Academic Staff at the University of Ilorin, Nigeria. *Education and Information Technologies*, 23(1), 9-27.
 - Yang, H.; Wu, W. (2017). Effect of Flow Frequency on Internet Addiction to Different Internet Usage Activities. *International Journal of Information and Communication Technology Education*, 13(4), Article 3, 28-39.