Reviewing the Effects of Knowledge Management and Information Technology on Organizational Performance with the Intermediary of Human Resources Strategies Approach (Case Study: Headquarter of the Agricultural Bank of Iran)

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Abstract

In the today’s business world, the organizations are performing their activities in a perfectly dynamic and competitive environment. In such challenging environments, the organizations are incumbrantly urged to create “sustainable competitive advantage” so as to survive and preserve their position. On the other hand, the prior empirical evidences and researches confirm the idea that the creation of sustainable competitive advantage in the organizations is per se suspended over their enjoyment of specialized and knowledge-oriented workforce, modern technologies in processes related to the added value chain as well as comprehensive and aligned strategies within the area of organization’s human resources management (HRM). In line with this, the present article deals with the investigation of the effect of aforementioned variables in the organizational environment of agriculture bank in Iran aiming at offering solutions for enhancing the level of organizational performance in the foresaid organization; parallel to this and after investigating the literature cited in this regard and the study background, the key indices were extracted and, finally, standard questionnaires were employed to design a comprehensive questionnaire to be administered to the study sample volume (over 248 bank headquarters managers and experts who were selected based on Morgan’s table) based on “stratified random” survey. To evaluate the validity and reliability of the questionnaire, there was made use of content validity, factorial validity and Cronbach’s alpha methods; also, structural equation models and Smart PLS software were utilized to analyze the collected data and examine the study hypotheses. The study results indicated that knowledge management (KM) and information technology (IT) directly and with no intermediary role of the human resources strategy approach influence the organizational performance of the bank’s headquarter offices by impact rates equal to 40% and 25%, respectively, and in case that an appropriate approach to the bank’s human resources strategy (intermediary role), the effects of KM and IT on the organizational performance will be considerably (60% and 35%, respectively) increased. Keywords: knowledge management, information technology, human resources strategies, organizational performance.

Introduction:

Nowadays, managers are performing their activities in a completely competitive and dynamic environment. According to the fact that the continuation of the sustainable competitive advantage in the organizations leans on their enjoyment of knowledge-oriented, creative and innovative workforce, one of the most important strategic programs of the organizations is the “knowledge management” and the enjoyment of the hidden and clear organizational knowledge and experience. The human workforce can create sustainable competitive advantage for its corresponding organization through creativity and innovation via correcting the defects and bringing about creative changes in the products, services, processes and so forth. It is evident that the organizations have to equip their employees with knowledge so as to preserve themselves a competitive advantage (Ghalavandi and Abbaszadeh, 2015). While the preliminary researches emphasized in knowledge literature on technical issues, the attitude was fundamentally subjected to essential changes with the development of humanities in the course of time and the parallel creation of transdisciplinary relationships so that the “social” and “human” aspects and indicators are found increasingly penetrated and started showing off in KM in the present era (Obeidat, Masa’deh and Abdallah, 2014). In line with this and despite the pervasive acceptance of the importance of social and human indic es in KM and considering the superficiality and limitedness of the studies carried out in this area, it is necessary to investigate and explore the aspects of “human resources management strategies” in respect to knowledge in an effective and full-scale manner by the researchers from both of these areas. According to Stoner and Kaynas (2012), the academic researcher class has not been so far willing to simultaneously enter the foresaid fields due to the structural differences of them hence this part of the science suffers radical underdevelopment. On the other hand, the rapid development in IT and its effective functions in the increase in organizational productivity and the reduction in the organizations’ operating costs have caused the organizations to, meanwhile enhancing their staff’s performance level, develop relying thereon more effective and more optimized interaction with their customers, suppliers and business partners (Stern, 2006) thereby to increase the preservation and elevation of their competitive position in their activity areas. It is worth mentioning that taking advantage of IT in interdisciplinary interactions has subjected the “product development”, “marketing”, “distribution” and “providing service to customers” to essential changes (Tseng, 2007). It means that the IT does not solely support the business operations and work-related duties of the groups and their cooperation in the added value creation chain rather it even changes the business...
competition methods (Ruiz-Mercader, 2006). In this regard, the agriculture bank, as a “specialized state bank”, is in need of a highly competitive power in the today’s dynamic market of the country in order to preserve its financial resources so as to keep on striving in the country’s banking arena for such reasons as stated below:

- The requirements and limitations of the upstream supervisory areas indicating the prohibition of its pervasive entry to profitable and economy-generating areas (according to the specialized nature of the bank and its being required to do activities exclusively in the agriculture area)
- The domination of governmental, sometimes restrictive and devastating, bureaucracies in its organizational structure- in the entire managerial, specialized and operational ranks- and the subsequent lack of its enjoyment of organizational agility for making decisions and taking quick measures in the same direction as the occasionally instantaneous needs of the target bank population.

On the other hand, the economical and banking network activities (agricultural bank included) have been confronted with a lot of problems during the recent decade for the imposition of unjust nuclear embargo on the country and its subsequent influence on the country’s banking network, in general, and specifically on the agriculture bank as a state bank as a result of which the Iranian banks have lost a great many of their business relations with European, Asian and African banks and others and this has incurred to this area of the country’s economy with severe damages. From another perspective, with the embargo being lifted and the operationalization of Joint Comprehensive Plan of Action in 2016 and its subsequent reduction of the bank interest rate during the post-embargo era as well as the economic stagnation governing the society (for curbing the inflation by the monetary and banking supervising unit of the central bank), the threats and limitations in the face of the banks, including the agriculture bank, for expanding their market coverage and attraction of new financial resources have been intensively increased and by the same extent the banks’ activities in the area of loans as well as investment in the economy-generating sectors (for acquiring profit and getting benefit) has encountered serious challenges; moreover, some of the finance and credit institutions of the country have intensified the speed of the banks’ financial resources depletion through paying interests for sometimes uncommon and encouraging rates to the investors. Therefore, the agriculture bank intends to improve its organizational performance relying on its experienced and specialized human workforce and paying special attention to organizational knowledge management and information technology (for the purpose of designing unique banking systems) and subsequent adoption of strategies parallel and supportive strategies in the human capital area so as to be able to moderate the losses imposed by the exogenous as well as sometimes endogenous sources, the latter being the state-based and specialized nature of the bank. To resolve the problem, the current research paper tries making use of the model proposed by Aragón Sánchez, Sánchez Marín and Mueses Morales (2015) to investigate the relationship between components of “knowledge management”, “human resources strategy” and “organizational performance” in the central offices of agriculture bank (as headquarter units codifying, executing and supervising the bank’s strategic policies and programs); in line with this and through investigation of the extent to which KM and IT influence the approach factors of the human resources strategy and identifying their priorities, the amount of each of the foresaid indicators on the bank’s organizational performance will be studied and explored. In the meanwhile, with the clarification of the priorities influencing the organizational performance improvement, the bank can make not so huge investments on the most effective factor and rely on the synergy resulting from the correlation between the other factors to considerably enhance its organizational performance based on intra-organizational resources. In fact, the organization can improve its knowledge base when the human resources strategy becomes coordinated with the KM (determination of parallel approaches) thereby to elevate its performance level (Raja’ei and Mirza’ei, 2013).

Research Literature:

A) Knowledge Management: from the perspective of Koitz (2008), KM is the process through which the organization engages in creation of knowledge-based assets and capitals resulting from the thoughts and intellects of its members. The KM theories can be categorized into three groups that are classified differently (explicit and tacit knowledge) by Mark Koing, to content management by David Snoden and knowledge management offering by Mc O’Leary. Dymania and Oder (2014) pinpointed two factors of organizations’ downsizing and technology development as the most fundamental reasons giving rise to the formation of knowledge management school and the KM is also completing its evolution trend on the pivot of these two primary discussions; generally, nine models have been designed and utilized for KM (Fogit et al, 2015). In the studies and researches performed by Alavi and Leener (2011), “the concept “knowledge management” has been introduced as being comprised of three essential dimensions, namely “information”, “technology” and “culture”. From the viewpoint of Prosac (2015), KM is the creator of the strategies and processes that can produce and circulate knowledge so as to create and satisfy the needs of the organization, customers and users in the whole organization. Aragón Sánchez, Sánchez Marín and Mueses Morales (2015) have dealt in their study with the investigation of the intermediary effect of HR strategies on knowledge management and the sample company’s performance. They allegedly aimed at the investigation of the effect of human resources strategies, as catalysts boosting the effectiveness of KM, on the improvement of the organizational performance. Based on the results of their study, Km does not exert much of an appropriate influence on the organizational performance without the intermediary role of HR strategy because it is the HR, as a novel approach, that speaks the last word in KM. This is while the KM’s effect on the organizational performance will be increased by 24%, if the HR strategy, composed of absorption and employment as well as the instruction and development of the human resources, service compensation and performance management, is allowed to enter as an intervening variable into the study and this is expressive of the positive influence of HR strategies on the organizational performance. Al-Him and Hassan (2012) in a study on the investigation of the
relationships between KM processes in mobile telecommunication company level of Iraq figured out that the KM and its indicators, including knowledge creation, acquisition, registration, transfer and exploitation, have positive and significant effects on the organizational performance both directly and indirectly through “organizational innovation”. Robin (2011) concluded in a study called “knowledge management and human resources improvement” that there is a relationship between KM and HR improvement and that the organizational conditions and environment, knowledge creation and knowledge sharing and intellectual capitals are amongst the factors influencing the HR improvement. Husseinizadeh, Sayyed Abbaszadeh and Ghalavandi (2016) dealt in their study with the investigation of the relationship between KM and HR improvement from the perspective of Orumia University’s office workers. Their study was based on a survey method and 223 university employees were selected based on a stratified random method in regard of the service university. The data were analyzed based on the study hypothesis using Pearson correlation coefficient test, ANOVA, multiple regression and independent t-test. Their results showed that KM and HR improvement are correlated and that there is a positive and significant relationship between KM components with the entire aspects of HR improvement. Moreover, such indicators as knowledge creation, knowledge sharing and knowledge preservation, as well, were found in a positively and significantly predicting the HR improvement aspects, incorporating instruction, performance evaluation, occupational career, discipline and reward and punishment system. From the perspective of Sharon Lawson (2013), KM is consisted of three dimensions, namely “identification and creation of knowledge”, “goal-centeredness and dispersion of knowledge” and “knowledge application” and it is elucidated in line with the organizational objectives and it is a systematic process by means of which the knowledge required for the organization’s success is identified, produced, shared and, finally, exploited.

- **Identification and Creation of Knowledge**: in this stage of KM process, the organization’s specialized knowledge is created or identified from various resources like employees, customers, rivals, business environment and so forth and converted to tangible or intangible organizational assets.

- **Purposiveness and Dispersion of Knowledge**: in this stage, the acquired knowledge will be institutionalized in a specialized manner and meanwhile being dispersed in the body of the organization, it will be turned to an instrument for sustainable competitive value creation.

- **Knowledge Application**: in this stage, the specialized knowledge, created and dispersed in the preceding stage, will be pervasively used and exploited by the organization’s employees.

**B) Information Technology**: from the perspective of Leedler and Fletcher (2014), under the new conditions of the business environment, organizations are incurred by a threefold environmental pressure composed of “market” pressure, “information technology” pressure and “social” pressure. Heuslid, Jackson and Shuller (2007) have expressed that the HRM effectiveness is consisted of two essential dimensions: the first is technical aspect encompassing offering HRM services, such as employment, service compensation, separation and so forth, and the second is the strategic aspect embracing the offering of the set of services that directly support the execution of organizational strategy. Peter Drucker (2002) explicitly asserts that “the most valuable organizational asset in the 21st century is the knowledge worker and the knowledge they possess”. Nowadays, the traditional factors of production, i.e. land, workforce and capital, as compared to knowledge, are second in importance and knowledge and information technology are enumerated as the main factors of the novel global economy. Fletcher (2005) believes that if the HR role is supporting the workforce and management based on the organizational needs then technology would play an empowering role. The new features of the information and as a subsequence the corresponding technologies as Garson (2011) puts it are: vast inclusion of the non-informational areas, the expertise of the IT experts in a large scale, rapid growth and development of the modern information, creation of opportunities for qualitative changes, the growth in the hardware, software and integration trend and unified information environment. Information technology is the use of computer and the other technologies for processing and managing the information. Boswick and Ibgo (2010) found out in a study in the area of information and communication technology that ICT exerts a considerable influence on “communication”, “organizational structure” and “organizational management and efficiency”. In their mind, ICT causes changes in the organizational authorities’ domain thereby to influence the centralization or decentralization of organizational decision-making and control systems; moreover, the enjoyment of the information and communication technologies in an organizational level brings about an enjoyment of the staff capacity in the executive level for the performing of a vast array of activities.

Based on a comprehensive definition that was offered by the American association of information technology (ITAA, 2015), IT deals with the study, design, development, implementation, support or management of the computer-based information systems, especially software and hardware programs of the computers. In the aforesaid definition, IT is composed of two major dimensions: “information management systems” and “electronic document management”.

**Management Information Systems** deals with the study of the information systems in the organization. Information systems or MIS are systems comprised of a software and hardware networks that are per se constituted by communication channels used in an organization.

**Electronic document management or (EDMS)** are software systems for organizing and storing various types of computer documents that have either been seminally existent in an electronic format (computer file) or have been later on turned into electronic documents via various methods like being scanned from a seminal physical state (a paper).

**C) Human Resources Strategies Approach**: from the perspective of Desler (2014), by HR, the policies and measures required for the implementation of a part of management duties
in areas connected to aspects of the staff activities, particularly staff selection, instruction and organizational debriefing, performance evaluation, salary and reward grants and creation of a healthy and fair environment for the organizational staff, is intended. At present, the researchers have distinguished two major human resources strategies in the organizational level; these strategies are macro-level or roulette strategies (HRM explicates the organization’s general intentions regarding the staff development and administration; also it defines what stages should be passed to ascertain the retention and absorption of the demanders, arousal, commitment and optimum use of them) and the clear-cut human resources strategies (these strategies point to the organization’s intentions for the accomplishment of activities in the area of human resources). From the perspective of Garavan et al (2011) the role of HR development in the creation of a learning organization includes the followings: helping the employees create and apply knowledge, establishment of appropriate communication networks and getting involved in the double learning chains. Salman and Spon (2002) enumerate the followings as the role played by HR in the organizational knowledge management strategies: equilibrating the KM with the business guidelines, identification of the advantages of KM efforts, selection of a correct KM program, implementation of knowledge strategy, providing a supportive environment for the KM programs and the possibility to make use of technology for the implementation of KM programs, formation of KM teams and appointment of KM leader. From the perspective of Antonio Aragon Sánchez, Gregorio Sánchez Marin and Arleen Mueses Morales (2015), the HR strategies’ approach is composed of five essential aspects: “attraction and employment”, “instruction”, “participation and HR development”, “performance evaluation” and “service compensation” each of which having different and changeable effects on the organization depending on the conditions inside and outside the organization.

Jackson et al (2014) and Jiang et al (2013) in separate but similar studies dealt with the effects of HR strategies on the organizational performance and concluded that the elective selection of the staff for being assigned with special responsibilities and corresponding to their capabilities, compact training, staff encouragement to take effective part in the organizational processes, performing of perfect performance evaluation and creating motivation in the employees for doing high quality jobs all have positive and significant influence on the studied organizations’ performance. Abidat, Masadeh and Abdullah (2014) dealt in their article with the investigation of the relationship between the HRM methods, organizational commitment and processes’ knowledge management based on structural equation modeling approach. The results of their study on the active Jordanian counseling firms that had been selected as the study sample volume indicated that the HRM strategies (employment method, instruction and development, performance management and reward system) have an acceptable influence on the organizational commitment (affective commitment, continuance commitment and normative commitment) and that the KM process (knowledge acquisition, knowledge distribution, knowledge interpretation and the organizational memory) is directly associated with the HR strategies. They expressed that the design and creation of social capital is necessary for the organization and mentioned organizational culture and organizational architecture as two main principles in the process of organizational performance improvement.

D) Organizational Performance: Hanabas (2008) expresses that performance incorporates getting any work done through a given method via establishing a certain objective for it. Armstrong (2012) believes that performance is a function of “inputs” (competencies) and “outputs” (objectives); thus, the performance scales should be based on the outputs, like the volume and output of the work, as well as based on the inputs, to wit whatever the thing that the individuals have in the form of knowledge, skill and behaviors in playing their roles. From his viewpoint, performance evaluation methods are classified into three general sets: feature evaluation, behavior evaluation and result evaluation. Bernardin and Ivan Switch (2007) designed and expanded eleven methods for performance evaluation. From the perspective of Sanzberg (2012), the essential functions of performance evaluation can be elucidated in fourteen areas. From the viewpoint of Heresy and Goldsmith (2007), organizational performance is comprised of seven aspects: “ability”, “clarity”, “contribution”, “encouragement”, “evaluation”, “credibility” and “environment”. Boller and McIvy (2012) dealt in a study, titled “human resources management and performance”, with the investigation of the relationship between the company strategy and the HRM and the results of its performance in organizations. In their article, they offered a conceptual model to deal with the investigation of the general relationships between the organizational strategy, human resources, human resources performance management, human capital and social capital in regard of the organizational output and performance. They came to the conclusion that it is necessary for the HR experts to have sufficient knowledge and skill concerning the business strategy and apply them as an inseparable principle in the strategic management process. Also, it was demonstrated by them that the HRM measures can be accompanied by favorable results of the organizational performance through improving the qualifications in three areas of organizational design, management of change and performance evaluation. Nemli Keliscan (2010) has dealt with the investigation of the effect of HR strategies on the organizational performance. After underlining the idea that HR is one of the most important strategic resources for every organization and that it is a significant competitive source in his article, he deals with the investigation of the relationship between the HR and the organizational performance in a sample organization. The results of his studies indicated that the HRM methods have positive and significant effects on the organizational performance and the staff performance and, consequently, the organizational performance will take an ascending trend if the managers employ provoking plans to encourage their human resources. Cordor and Goni (2010) investigated the relationship between “comprehensive quality management” and “organizational performance” and found out that the enjoyment of “comprehensive quality management system” in the organizations causes improvement in the
“organizational performance”. Suzana and Kesim (2010) in a study under the title of “investigating the relationship between KM methods, organizational competency and performance” in the governmental Malaysian offices, concluded that there is a positive and significant relationship between KM and the performance of the studied offices.

Research Objectives:
- Investigation of the extent to which the KM influences the organizational performance in the central agriculture bank offices
- Investigation of the extent to which the IT influences the organizational performance in the central agriculture bank offices
- Investigation of the extent to which KM influences the organizational performance with an intermediary role given to HR strategies’ approach in the central agriculture bank offices
- Investigation of the extent to which IT influences the organizational performance with an intermediary role given to HR strategies’ approach in the central agriculture bank offices

Research Hypothesis:
- KM exerts a positive and significant influence on the organizational performance of the central agriculture bank offices.
- IT exerts a positive and significant influence on the organizational performance of the central agriculture bank offices.
- KM exerts a positive and significant influence on the organizational performance of the central agriculture bank offices through an intermediary role played by HR strategies.
- IT application exerts a positive and significant influence on the organizational performance of the central agriculture bank offices through an intermediary role played by HR strategies.

Conceptual model of research
The following combined model was utilized after the review of the documents, articles and international as well as some domestic authentic treatise regarding the present study’s research background:

Research Methodology
Since the objective of the present study is the systematic examination, description and analysis of a certain set of variables under the status quo of a research environment, the current research paper is enumerated amongst the descriptive-survey study types; in the meantime, according to the fact that the amount of each variable’s effect will be analyzed based on the study objectives via structural equation model (SEM) in the course of the study, thus it can be stated that the statistical analyses performed herein are of the correlation or covariance type. The information required for the study was collected through examining and referring to the documents and relevant articles extant on the main subject of the study in library and internet as well as through referring to the experts and specialists of this study field and also through administering questionnaires featuring accepted reliability and validity. The study was carried out in the second half of 2016 and the study population included the managers (senior and operating) and exerts (specialists and corresponding experts) of the bank for a total number of 675 individuals out of whom 248 individuals were selected as the study sample volume based on Krejsie and Morgan’s table to be subjected to further research; in the end, after the distribution of the questionnaires based on a stratified randomized method and their collection and control, there was made use of SPSS and PLS softwares as well as descriptive statistics and multiple regression tests to investigate the degree to which the KM and IT (independent) and HR strategies’ approach (intermediary) variables influence the organizational performance (dependent variable) of the bank.

Research Instrument:
The most important data collection tools used herein are as explained below:

Library research: it is carried out with the objective of investigating the literature existent on the study subject via
examining books and articles and performing internet searches in the authentic resources.

Field Study: questionnaire is used to collect the data and information to be subjected to further analysis.

The questionnaire used herein was composed of two sets of questions in the area of demographic study of the study subjects (including their gender, age, marital status, education and work history characteristics) and research-specific area (that was examined using 94 questions and items regarding the threefold study variable). The reliability and validity results of the questionnaire are given in the table below:

Reliability: to determine the questionnaire reliability, there was made use of statistical package for the social sciences (SPSS) software, version 22, (based on Cronbach’s alpha method) and the obtained results are summarized in table (1).

Table 1: Cronbach Alpha Cluster Results and Combined Reliability of the Hidden Variables of the Research and Their Dimensions in Final Mode

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Combined reliability coefficient (CR&gt;0.7)</th>
<th>Cronbach's alpha coefficients (Alpha&gt;0.7)</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>KM</td>
<td>0.805324</td>
<td>0.785324</td>
<td>Knowledge management</td>
</tr>
<tr>
<td>ID</td>
<td>0.887619</td>
<td>0.863746</td>
<td>Identify &amp; create knowledge</td>
</tr>
<tr>
<td>TA</td>
<td>0.818322</td>
<td>0.800918</td>
<td>Targeting &amp; transferring knowledge</td>
</tr>
<tr>
<td>EM</td>
<td>0.766990</td>
<td>0.745041</td>
<td>Employ knowledge</td>
</tr>
<tr>
<td>IT</td>
<td>0.753253</td>
<td>0.743253</td>
<td>Information Technology</td>
</tr>
<tr>
<td>DM</td>
<td>0.796856</td>
<td>0.788569</td>
<td>Electronic documents management</td>
</tr>
<tr>
<td>MIS</td>
<td>0.787708</td>
<td>0.781329</td>
<td>Information Management System</td>
</tr>
<tr>
<td>HRP</td>
<td>0.794521</td>
<td>0.782310</td>
<td>Human Resources Strategies Approach</td>
</tr>
<tr>
<td>AB</td>
<td>0.783660</td>
<td>0.783660</td>
<td>Staffing</td>
</tr>
<tr>
<td>ED</td>
<td>0.792211</td>
<td>0.790097</td>
<td>Training</td>
</tr>
<tr>
<td>AS</td>
<td>0.760436</td>
<td>0.722453</td>
<td>Performance appraisal</td>
</tr>
<tr>
<td>CO</td>
<td>0.838518</td>
<td>0.829983</td>
<td>Compensation</td>
</tr>
<tr>
<td>TAP</td>
<td>0.890675</td>
<td>0.887421</td>
<td>Participation</td>
</tr>
<tr>
<td>PE</td>
<td>0.832730</td>
<td>0.812730</td>
<td>Staff performance</td>
</tr>
<tr>
<td>PE₁</td>
<td>0.880132</td>
<td>0.860120</td>
<td>Ability</td>
</tr>
<tr>
<td>PE₂</td>
<td>0.801795</td>
<td>0.791256</td>
<td>Clarity</td>
</tr>
<tr>
<td>PE₃</td>
<td>0.960129</td>
<td>0.902125</td>
<td>Help</td>
</tr>
<tr>
<td>PE₄</td>
<td>0.799233</td>
<td>0.751410</td>
<td>Incentive</td>
</tr>
<tr>
<td>PE₅</td>
<td>0.790052</td>
<td>0.771252</td>
<td>Evaluation</td>
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<tr>
<td>PE₆</td>
<td>0.845391</td>
<td>0.826537</td>
<td>Validity</td>
</tr>
<tr>
<td>PE₇</td>
<td>0.842535</td>
<td>0.801252</td>
<td>Environment</td>
</tr>
</tbody>
</table>

Validity:
Content Validity: to perform content validity assessment of the questionnaires, there was made use of the ideas and notions of the experienced individuals and experts in this field following whose confirmation the information gathering items were codified in the questionnaires.

Factor analysis: Bartlett’s (KMO) test was used for factor analysis of the questionnaires, which was calculated to be 0.792, and given that the above number is more than 0.7, it can be concluded that the correlation between the data for Factor analysis is appropriate.

Research Findings
Table (2) reflects the descriptive findings of the Research.
Table 2: Descriptive Findings of the Research

<table>
<thead>
<tr>
<th></th>
<th>Percentage of cumulative frequency</th>
<th>Percentage of frequency</th>
<th>Frequency</th>
<th>Component</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>23.39</td>
<td>23.39</td>
<td>58</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>100</td>
<td>76.61</td>
<td>190</td>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>248</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>12.9</td>
<td>12.9</td>
<td>32</td>
<td>Single</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>100</td>
<td>87.1</td>
<td>216</td>
<td>Married</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>248</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 20-25 years</td>
<td>2.02</td>
<td>2.02</td>
<td>5</td>
<td>20-25 years</td>
<td></td>
</tr>
<tr>
<td>26-30 years</td>
<td>5.65</td>
<td>3.63</td>
<td>9</td>
<td>26-30 years</td>
<td></td>
</tr>
<tr>
<td>31-35 years</td>
<td>18.55</td>
<td>12.9</td>
<td>32</td>
<td>31-35 years</td>
<td></td>
</tr>
<tr>
<td>36-40 years</td>
<td>45.97</td>
<td>27.42</td>
<td>68</td>
<td>36-40 years</td>
<td></td>
</tr>
<tr>
<td>Over 50 years</td>
<td>100</td>
<td>54.03</td>
<td>134</td>
<td>Over 50 years</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>248</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td><strong>Organizational Category</strong></td>
<td></td>
<td></td>
<td></td>
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<td>Responsible expert</td>
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<td>32.66</td>
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<td>Total</td>
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<tr>
<td><strong>Years of Service</strong></td>
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<td>1-5 years</td>
<td>0.81</td>
<td>0.81</td>
<td>2</td>
<td>1-5 years</td>
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<tr>
<td>6-10 years</td>
<td>11.7</td>
<td>10.89</td>
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<td>11-15 years</td>
<td>40.33</td>
<td>28.63</td>
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<td>11-15 years</td>
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<tr>
<td>16-20 years</td>
<td>60.89</td>
<td>20.56</td>
<td>51</td>
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<td>Over 20 years</td>
<td>100</td>
<td>39.11</td>
<td>97</td>
<td>Over 20 years</td>
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<tr>
<td>Total</td>
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<td>248</td>
<td>Total</td>
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<tr>
<td><strong>Education</strong></td>
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<td>Associate Degree</td>
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To examine and analyze the study structural model and the codified hypotheses, the study variables’ path and the significance coefficients of their impacts on one another were evaluated using Smart PLS software (version 3) the results of which can be seen in table (3) as well as diagrams (2) and (3). The study variables’ z-statistical significance coefficients all of which were found larger than a 1.96 modulus confirm the structural model used in the study; thus, it is possible to analyze the study hypothesis. The first hypothesis was the direct and significant effect of KM on organizational performance. The factor loading outputs of the software (diagram (3)) affirms the direct and significant relationship between KM and organizational performance for which a value equal to 0.395 was obtained hence the first hypothesis is confirmed.
H₁: KM exerts a positive and significant effect on organizational performance. ✓

H₀: KM does not exert a positive and significant effect on organizational performance

The second hypothesis was the direct and significant effect of IT application on the organizational performance. The analytical results of factor loading outputted from the software confirms the direct and significant effect of IT on organizational performance for which a value equal to 0.247 was acquired hence the second hypothesis is confirmed.

H₁: IT exerts a positive and significant effect on organizational performance. ✓

H₀: IT does not exert a positive and significant effect on organizational performance

The third hypothesis pertained to the direct and significant effect of KM on the organizational performance with an
intermediary role played by HR strategies. In the first step, we need to prove the intermediary role of the intermediary variable. To do so, there is a need for four conditions to be actualized: firstly, the independent and dependent variables should be related to one another. Secondly, the independent and intermediary variables should be related to one another. Thirdly, the intermediary and dependent variable should be associated and related and finally the effect of the independent variable on the dependent variable should be changed with the presence of the intermediary variable. According to the actualization of all of the four conditions in the structural model of z-statistic significance coefficients (diagram 2), the intermediary role of “HR strategies’ approach” in the study structural model is confirmed and, in fact, part of the hypothesis that is the very existence of the relationship is confirmed. In a second step and for the determination of the type of the relationship (direct or inverse), the factor loading output given in the diagram (2) has to be analyzed and considering the positive values obtained for the factor loading, the existence of a direct relationship between the variables is confirmed and, in fact, the third hypothesis is confirmed. To calculate the general effect of the KM on the organizational performance with the intermediation of the HR strategies’ approach, the extents of the direct and indirect effects of the variables should be summed up and it was found equal to 0.583 according to the following computations.

The total effect of the KM on organizational performance: $0.395 \, (\text{direct}) + 0.188 \, (\text{indirect}) = 0.583$

Comparison of the effect rates of the independent variable on the dependent variable under the above conditions (presence of an intermediary variable) with the prior state (with no presence of the intermediary variable) confirms the idea that in the former state the amount of the impact increases by 33%. Thus, the most optimum state for the influence of KM on the organizational performance in the headquarter offices of the bank is the enjoyment of KM and IT through adopting HR strategies aligned with and supporting them.

$H_1$: KM exerts a positive and significant effect on organizational performance through an intermediary role played by HR strategies’ approach. ✓

$H_2$: KM does not exert positive and significant effect on organizational performance through an intermediary role played by HR strategies’ approach.

To determine the intensity of the intermediary variable’s effect on the relationship between the dependent and independent variable, a statistic called VAF was used that always takes a value between 0 and 1. The more the VAF is closer to unity, the more it is indicative of the greater strength of the intermediary variable’s effect. In the above hypothesis, the VAF was found equal to 0.3229 which is indicative of a relatively strong effect thereof on the relationship between KM and organizational performance.

$$VAF = \frac{a \times b}{(a \times b) + c} \quad (1)$$

a: is the path coefficient value between the independent and intermediary variables
b: is the path coefficient value between the dependent and intermediary variables
c: is the path coefficient value between the independent and dependent variables

$VAF_{KM} = 0.488 \times 0.386 / (0.488 \times 0.386) + 0.395 = 0.3229$

The fourth hypothesis was the direct and significant effect of IT application on the organizational performance with the intermediary role of HR strategies’ approach. According to the fact that the intermediary role of “HR strategies’ approach” was proved in the study structural model based on the abovementioned explanations, the existence of a relationship between the dependent and independent variables is confirmed. The investigation of the factor loading outputs presented in diagram (2) confirms the existence of a direct relationship between the variables hence the fourth hypothesis is confirmed. To calculate the general effect of IT on organizational performance in presence of HR strategies’ approach as an intermediary variable, the variables; direct and indirect impact rates should be summed up like the previous state. It was found equal to 0.321 according to the following calculations:

The total effect of IT on organizational performance: $0.247 \, (\text{direct}) + 0.074 \, (\text{indirect}) = 0.321$

Comparison of the effect of the independent variable on the dependent variable under the above condition (intermediary variable presence) with the prior state (absence of intermediary variable), as well, confirms this same idea that the presence of intermediary variable causes an increase in the abovementioned effect by 23%. Thus, the most optimum state for the IT to have an influence on the organizational performance in the Bank’s headquarter offices is the enjoyment of IT through adopting HR strategies parallel to and supporting them.

$H_3$: IT exerts a positive and significant effect on organizational performance through an intermediary role played by HR strategies’ approach. ✓

$H_4$: IT does not exert a positive and significant effect on organizational performance through an intermediary role played by HR strategies’ approach.

The VAF of the above hypothesis was found equal to 0.235 that is indicative of a relatively intermediate effect of HR strategies on the relationship between the dependent and independent variables.

$VAF_{IT} = 0.192 \times 0.386 / (0.192 \times 0.386) + 0.247 = 0.235$
Discussion and Conclusion:

An investigation of the results given in table (9) is suggestive of the idea that “KM” and “IT” both directly exert a positive and significant effect on the agriculture bank’s organizational performance in the absence of the HR strategies’ intermediary role for amounts equal to 0.395 and 0.247, respectively, in such a way that assuming the similar conditions and the lack of any intervening effect by the other influential variables, every unit change in the KM and IT of the bank causes a change by 39.5% and 24.7%, respectively, in the organizational performance. This finding is consistent with the results found in the literature on the same subject and complies with the findings of such researchers as Liao (2011), Wang et al (2012) and Chuang et al (2013) and there are many theoretical approaches that can be found supporting it like the approach proposed by Snell and Yundet (2002). Now, if the appropriate “HR strategies’ approach” is added to the model, the amounts of the total effects will be increased by 32% and 23%, respectively. Thus, the most favorable state for the influence of KM and IT application on organizational performance in the presence of the intermediary variable, to wit the HR strategies approach, is the use of KM and IT through adopting HR strategies in line with and supportive of them. There are several studies and researches, like the studies by Aragon Sanchez, Morales et al (2015) and Jackson et al (2014) also affirm that the KM and IT application by the organizations’ human resources are closely related to the strategic approaches of the Organizations’ HRM thereby to indirectly influence the organizations’ performance. In fact, the adoption of HR strategies are aligned with the IT application and KM in the organizations and they act as catalysts and facilitators to ease the establishment and implementation of the processes running in the organizations so as to bring about an enhancement in the organizations’ performance levels. Therefore, according to the fact that the effective roles of KM, IT application and adoption of coordinated HR strategies in the organizational performance were confirmed, it is suggested that the bank managers should create in their first step a specified procedure and mechanism for creating, classifying, dispersing and application of specialized organizational knowledge using various resources, like staff, customers and rivals in various areas of their performance. The holding of regular think tank sessions with the presence of the staff and customers, enforcement of work flow statute, recording of the best specialized experiences of the colleagues in the organization’s knowledge base, R&D unit performing of SWOT analysis for the identification of the rivals’ activities, creation of codes for the investigation of the suggestions and so forth are examples of organizational performance. It is evident that in order for the abovementioned cases to be actualized, the organization should take measures in line with enhancing all its software and hardware and other structures required for the storage, circulation and optimal and efficient exploitation of the information from various areas. In this regard, the programs should be made through designing and implementation of comprehensive and integrated electronic systems in the administrative automation section in such a way that there is brought about reductions in the need for the preparation of physical documents (paper and others of the like), inquiry for relevant evidences as well as acquiring unnecessary confirmations from the upstream authorities and superior units for the making of specialized decision making. In order to ascertain the establishment and implementation of the abovementioned topics and in regard of the supply of the specialist and technology-oriented workforce, it is suggested that the organization, meanwhile inquiring and acquiring its specialized needs in the executive-supportive areas, should make use of the experiences and advices of the experts of the filed so as to increase the effectiveness and efficiency of its programs. It
is clear that in the area of HR, the bank should take advantage of strategic, comprehensive and codified programs for the holding of general and specialized instructional courses fitting the needs and expertise of the staff and pivoting about the specialized knowledge and the required technologies of the units as well as defining an appropriate mechanism for granting salary, benefits and rewards in proportion to this area. The effective running of such programs has to be also assured.

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