The Role of Learning Organization Dimensions on Enhancing Knowledge Creation: The Case of Commercial Banks Working in Jordan

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Abstract:

Nowadays, through the competitive business, creativity and innovation are essential elements that lead organizations to generate concepts of value, worth and be in the racetrack of worldwide competition. There was an urgent need to emerge new concepts that strengthen and fasten the speed of developing business. Important concepts are *Learning Organization* and *Knowledge Creation*, both together ensure acquiring life skills and professional stability and security through facilitating the learning process. The current study tries to seek answers that identify and explore the role of learning organization dimensions on enhancing knowledge creation. The sample consisted of all executives working in (10) commercial banks operating in Jordan featuring (134) individuals. The study found that learning organization dimensions have impact on enhancing knowledge creation. Thus, commercial banks seek to improve the team dynamics, build their skills and experiences, and builds a high performing team which reflects on the positively on the banks, and helping them to continue running effectively. The findings suggest further research must be considered about other units of analysis.

Keywords: learning organization, knowledge creation, commercial banks, Jordan

1. Introduction

Recently, new concepts have emerged due to the need of strengthening and fastening the speed of developing business. One important concept is learning organization that defines a perspective in which SME, huge companies and firms use to facilitate the learning process and reshaping the experiences of their working members (Ghaffari, Burgoyne, & Shah, 2017). In addition to, it explains the processes and practices that encourage learning in organisations and to create ongoing learning opportunities (Vince, 2018). Such perspective empowers teams to have better potential and be capable of developing their creativity to accomplish more and perform better to reach the levels of satisfaction their employers expect (Dekoulou & Trivellas, 2015; Örtenblad, 2018).

Organizations seek always the effective use of new knowledge and being able to develop new capabilities. Therefore, output or the final products of the knowledge created is not only organizational practices but managerial systems and new methods that characterize the knowledge about customers through knowing and exploring their needs and attitudes (Hislop et al., 2018). According to Grimsdottir and Edvardsson (2018) the initial starting point of knowledge management is Knowledge creation. Massaro et al. (2016) adds that Knowledge creation has a crucial impact on in developing and enhancing innovation. Therefore, knowledge creation and innovative organizations are quite interconnected; in other words, organization can be classified or seen as creative whenever it is able to create new knowledge and practices at the working environment (Jarvenpaa & Tanriverdi, 2018). The impact of creating new knowledge can be seen through organizations being able to improve internal management aspect new production that is concentrated mainly on customers' needs and preferences (Massaro et al., 2016).

In Jordan, banking sector is considered one of the most important and dynamic sectors that develops economy of the country as empowers it to have great potential and impact in the international market. In addition to, it represents an essential pillar that activates various sectors. Banking sector depends very much through achieving incomes on arranging priorities and techniques to reach the long-term goals (Hassan, Iqbal, & Ghias, 2017).

Therefore, knowledge management is important in enhancing and achieving competitive advantages (Hajir, et al, 2015) that is distinctive in order to target innovation, learning, and performance that emphasis and intensify development (Martineau, Knox, & Combs, 2014; Arijitsatien & Ractham, 2017).

The current study stems its distinguished aspects of being unique as there is a lack of studies and research that tackle the impact of learning organization dimensions on enhancing knowledge creation. Hence, applying the concept of learning organization enables banks to acquire information and comprehension through examination, investigation, and analysis in order to be prepared to all risks. This leads in turn to reduce and prevent eventually failure, and bring opportunities to be more organized. Unlike other research, the current study seeks answers that identify and explore the role of learning organization dimensions on enhancing knowledge creation. Thus, the researcher has generated the following hypotheses;

2. Hypothesis

1. Main Hypothesis (H01). There is no statistically significant of the role of learning organization dimensions on enhancing knowledge creation at the level ($\alpha \le 0.05$).

This hypothesis is divided into three sub-hypotheses:

- H01-1: There is no statistically significant impact of learning organization dimensions (Team learning System connection Continuous learning) on the socialization at level ($\alpha \le 0.05$).
- H01-2: There is no statistically significant impact of learning organization dimensions (Team learning System connection Continuous learning) on the externalization at level ($\alpha \le 0.05$).
- H01-3: There is no statistically significant impact of learning organization dimensions (Team learning, System connection, Continuous learning) on the internalization at level ($\alpha \le 0.05$).
- H01-4: There is no statistically significant impact of learning organization dimensions (Team learning, System connection, Continuous learning) on the combination at level ($\alpha \le 0.05$).

The current study shades the light on commercial banks working in Jordan. The researcher hopes to suggests insights that enrich the future research in this filed

3. Learning Organization

Conceptually, learning organization is described as an organization that facilitates the learning process and gaining experiences for all its members (Baldwin, 2016). Where it constantly changes and develops itself in order to achieve its strategic goals to become a learning unit in itself. Therefore, employees acquire skills and experiences in the workplace in an informal way instead of attending out-office learning methods (Ghaffari, Burgoyne & Shah, 2017). Organizations that follow such approach are capable of developing their teams' creativity to accomplish all the tasks required in high efficiency in order to reach the expected results and performance.

Learning organization approach aims to increase the well-being of the employees and motivate them to enhance performance (Örtenblad, 2018). Thus, it increases their competitive ability and performance, which reflect positively on achieving the objectives of organization and raise its efficiency. Moreover, it provides the knowledge to deal with emergencies that may occur at work in order to enhance employee's affiliation to the workplace and consciousness. In this context, McKenzie et. Al (2018) add further that the more employees feel comfortable and satisfied with their performance at work, the more self-confident, productive and effective became in achieving professional advancement especially middle managers. Such approach ensures acquiring life skills and professional stability and security.

Learning organization - as approach- supports the employees to expand the ability to to think creatively and improve their points of strength (Bryson, 2018). To apply that, organizations tend to involve employees in decision-making process and evaluating the workflow. This has been considered a great factor in increasing the production and the competitiveness (Nazari & Pihie, 2012). Therefore, learning organization relays on important dimensions that make such a goal achievable. The current study focuses on three main dimensions;

A. Team Learning: which refers to the use of the training methods within the team in order to urge the employees to cooperate and work within the team spirit (Watkins, 2018). In addition, the team learning stimulates them to help each other to overcome any problem that may disrupt the workflow. Consequently, this reflects positively on the public interest, vision and objectives of the organization (Song, Joo, & Chermack, 2009).

- **B.** Inquiry and Dialogue: employees learn the correct mechanism and methods to ask effectively the right questions. This allows them to express their opinion and listen to others in order to gain the skill of logical thinking according to Hussein, Mohamad, Noordin & Ishak (2014). Also, this dimension provides the mechanisms of effective dialogue between them and directors to be more involved in the decision-making process (Leufvén, Vitrakoti, Bergström, Ashish, & Målqvist, 2015).
- C. Continuous Learning: this refers to acquiring new skills to help employees at the workplace and personal life (Hallam, Hiskens, & Ong, 2015). Thus, employees can deal with all the changes in the work mechanisms and the new challenges that he may occur in the workplace (Dekoulou & Trivellas, 2015).



Figure 1: Learning organization's dimensions

Source: Leufvén, Vitrakoti, Bergström, Ashish, and Målqvist (2015).

3.1 Knowledge Creation

Knowledge creation is a new direction in knowledge management that is emerging from creativity and innovation (Yang, Fang, & Lin, 2010). Nowadays, through the competitive business, creativity and innovation are essential elements that lead organizations to generate concepts of value, worth and be in the racetrack of worldwide competition (Hong, 2010). In this context, knowledge management is extremely confirmed on spreading knowledge in order to obtain competitive advantage. Therefore, creativity or innovation is needed to generate new kinds of products, technologies, as well as managerial systems (Tan, 2014). Hence, knowledge management is vital to promote and develop the creation of knowledge in organizations in order to earn value, worth and achieve high quality of performance and efficiency (Pei, 2008; Räisänen, 2010).

The creation of effective knowledge has been described as a process of self-transcendence, in which older methods and techniques go beyond new approaches through which new contexts and perspectives are acquired outside and within the organization (Akhavan, Ghojavand, & Abdali, 2012). It also can be defined as the company's ability to generate new knowledge and spread it in different parts of the organization then present it through system, products, and services (Harris, 2009). Therefore, knowledge creation is an essential and important factor in enhancing and developing the performance of organizations, as well it contributes to improve the intellectual capabilities in order to create new knowledge that leads to increase the growth of competitive advantage throughout the organization (Nadayama, 2010).

Knowledge creation is derived from two dimensions; the first dimension demonstrates individuals, who can create knowledge, and the second shows the integration of explicit and tacit knowledge (Naicker, Govender, & Naidoo, 2014). These two dimensions shape the ground foundation for defining the processes of knowledge creation. Those processes are:

A. Socialization: this process refers to sharing tacit knowledge. In other words, to make experience as an open-book shared between the team, through brain storming, conferences, apprenticeships, and making suggestions (Chatterjee et al., 2018).

- **B.** Externalization: it's the process of transferring tacit knowledge to explicit knowledge, through the knowledge that has been shared through metaphors, figures, and ideas (Sánchez, Sánchez, Collado-Ruiz, Cebrián-Tarrasón, 2013).
- **C.** Combination: it's the process of combining different kinds of tacit knowledge and explicit knowledge. Hence, collecting explicit knowledge can happen in or out of the organization, then it can be shaped or edited to be processed into a new form.
- **D.** Internalization: this represent applying the principal of learning by doing, though, absorbing explicit knowledge to become within individual's knowledge (Chatterjee et . al, 2018).



Figure 2. Knowledge creation processes

Source: Niccolini, Bartolacci, Cristalli, and Isidori (2018).

4. Research Methodology

4.1 Population and Sampling

The current study population consists of all executives in (25) commercial banks operating in Jordan. Meanwhile, The study sample consists of all executives in (10) banks working in Jordan. The number of executives consisted of (134) individuals, illustrated in the table below:

Table 1. Sample description

	Banks name	Number of Executives
1	Bank of Jordan	13
2	Jordan Kuwait Bank	15
3	Investment Bank	13
4	Jordan Commercial Bank	13
5	Union Bank	15
6	Arab Investment Bank	12
7	Bank Audi	13
8	Blom Bank Blom Bank	12
9	Housing Bank	14
10	Capital Bank	14
Tota	al	134

4.2 Instrument Design

A questionnaire consisted of (21) items measuring learning organization dimensions on enhancing knowledge creation has been used to collect data. The researcher tended to collect data by distributed the questionnaire by hand on the sample. The questionnaire is designed to include: demographic variables, learning organization dimensions (team learning, inquiry and dialogue, continuous learning), and knowledge creation (socialization, combination, internalization and externalization).

4.3 Instrument Validity

Based on 5-point Likert scale, respondents were asked to read each item, and select a choice that represents their attitude, in which score 5 represents (strongly agree), score 4 represents (agree), score represent a (neutral) attitude, score 2 represents a (disagree) attitude and score 1 represent a (strongly disagree) attitude. To ensure the instrument validity, the researcher has relied on Cronbach's alpha test to insure the stability of the results as illustrated in table 2 below:

Table 2. Cronbach's alpha for the study fields

Field	Field	Value of (α)
Number		
Learning	Organization	
1	Team Learning	0.883
2	Inquiry and Dialogue	0.868
3	Continuous Learning	0.907
Knowledg	ge Creation	
1	Socialization	0.875
2	Combination	0.830
3	Internalization	0.854
4	Externalization	0.858

As shown from the table 2 that the total Cronbach's alpha for the study fields was above than (0.60) which will leads to the stability of the results for this study.

5. Data Analysis and Interpretation

To examine the study hypotheses, Statistical Package for Social Sciences (SPSS) is used to process the collected data. The following statistical techniques were needed:

- 1) Descriptive Statistical Techniques: including; means and standard deviations. These techniques were used to illustrate respondents to study fields.
- 2) Reliability Test: to check the reliability of the instruments and highlight the stability of consistency of instrument.
- 3) Frequencies and Percentages: to describe demographical variables.
- 4) Normality Tests.
- 5) Multiple Regression Test: to explore the direct impacts of variables.
- 5.1 Descriptive Statistics

5.1.1 Demographic Characteristics

The tables describe the participants demographically. The variables are (gender, academic level, and years of experience).

Table 3. Demographic characteristics based on gender

Gender	Sample		
	Frequency	Percentage	
Male	68	50.7%	
Female	66	49.3%	
Total	134	100%	

From the table 3 it shows that (50.7%) of participants were men, meanwhile (49.3%) were women.

Table 4. Demographic characteristics based on academic level

Academic Level	Sample						
	Frequency	Percentage %					
Bachelor (B.A)	23	17.2%					
Master (M.A)	104	77.6%					
Doctoral (PhD)	7	5.2%					
Total	134	100.0%					

For the variable (Academic Level), (17.2 %) of the participants hold B.A., (77.6 %) hold M.A.s. Meanwhile, (5.2 %) of the overall participants hold PhD.

Table 5. Demographic characteristics based on years of experience

Years of Experience	Sample		_
	Frequency	Percentage %	
1-3years	52	38.8%	
More than 3-5 years	56	41.8%	
More than 5 years	26	19.4%	
Total	134	100.0%	

5.2 Means and Standard Deviation

Means and standard deviation were calculated for each field in the study instrument and Table 6 shows the results.

Table 6. Descriptive Statistics for the Role of Learning Organization on Enhancing Knowledge Creation

field number	Field	Mean	Std. Deviation	Level
F1	Team learning	2.59	0.75	Medium
F2	Inquiry and dialogue	2.59	0.75	Medium
F3	Continuous learning	2.57	0.78	Medium
F4	Socialization	2.48	0.74	Medium
F5	Combination	2.45	0.71	Medium
F6	Internalization	2.51	0.73	Medium
F7	Externalization	2.55	0.75	Medium

As it seen above, when it comes to role of learning organization, the means were somehow close in which: *Team learning* field achieved mean reached (2.59) with standard deviation of (0.75), *Inquiry and dialogue* field achieved mean reached (2.59) with standard deviation of (0.75), and *Continuous learning* achieved mean reached (2.57), with standard deviation (0.78). Meanwhile, when it comes to Knowledge Creation processes, there was a tiny variation in the means, in which *Socialization* achieved mean reached (2.48), = with standard deviation of (0.74), *Combination* achieved mean reached (2.45), with standard deviation of (0.71), *Internalization* achieved mean reached (2.55), and a standard deviation (0.75).

5.3 Hypotheses

Main Hypothesis (H01). There is no statistically significant of the role of learning organization dimensions on enhancing knowledge creation at the level ($\alpha \le 0.05$).

To check validity of multiple regression for this model VIF and tolerance were calculated for each field for independent variables as the following table.

Table 7. VIF and tolerance for each field for independent variables

Field	Tolerance	VIF
Team learning	.397	2.517
Inquiry and dialogue	.466	2.145
Continuous learning	.512	1.954

As shown in the table 7, VIF values are (less than 10) which leads to the compatibility of using regression test. However, regression modelling to test the hypothesis can be used for those values that are more than (0.05).

We used Multiple Regression test to check the direct impact of learning organization on enhancing knowledge creation shown in the table 8.

Table 8. Multiple Regression test to check the direct impact of learning organization dimensions on enhancing knowledge creation

Dependent Variable	R	\mathbb{R}^2	F	Sig	DF	Coefficients			
						Predictor	В	T	Sig
knowledge creation	.871	.759	136.251	.000	3	Constant	.339	3.048	.003
						Team learning	.151	2.568	.011
					130				
						Inquiry and dialogue	.307	5.665	.000
					133	Continuous learning	.378	7.549	.000

The table above shows that there is significant effect for learning organization dimensions on enhancing knowledge creation. This is due to the significant value that was (0.000) which is less than (0.05). The value of R is the square root of R-Squared and is the correlation between the observed and predicted values of dependent variable was (0.871). As well, the coefficient of determination R2 (0.759). Moreover, about 75.9% of the variation in changing knowledge creation explained by learning organization. Restriction Parameter (F) was (136.251) of the learning organization on enhancing knowledge creation. Thus, we will accept the alternative the hypotheses "There is statistically significant of the role of learning organization dimensions on enhancing knowledge creation at the level ($\alpha \le 0.05$).

- Ho1-1: There is no statistically significant impact of learning organization dimensions (Team learning 'System connection' Continuous learning) on the socialization at level ($\alpha \le 0.05$)

We used Multiple Regression test to check the direct impact of learning organization dimensions on Socialization, table 9 illustrates that:

Table 9. Multiple Regression test to check the direct impact of learning organization dimensions on Socialization

Dependent Variable	D	\mathbb{R}^2	\mathbf{F}^2		DF	Coefficients			
Dependent variable	K	K		Sig	Dr	Predictor	В	T	Sig
					2	Constant	.431	2.518	.013
					3	Team learning	.354	3.906	.000
Socialization	.748	.559	54.393	.000	120				
					130	Inquiry and dialogue	.030	.357	.722
					133	Continuous learning	.409	5.296	.000

As it shown above, there is significant effect for learning organization on socialization; the significant value was (0.000) less than (0.05), the value of R is the square root of R-Squared and is the correlation between the observed and predicted values of dependent variable was (0.748), the coefficient of determination R2 (0.559). Therefore, about 55.9% of the variation in changing socialization explained by learning organization. Restriction Parameter (F) was (54.393) of the learning organization on socialization, and thus we will accept the alternative the hypotheses "There is statistically significant of learning organization dimensions (Team learning System connection." Continuous learning) on the Socialization at level ($\alpha \le 0.05$).

- Ho1-2: There is no statistically significant impact of learning organization dimensions (Team learning System connection Continuous learning) on the externalization at level ($\alpha \le 0.05$)

We used Multiple Regression test to check the direct impact of learning organization **dimensions** on externalization shown in the table 10.

Table 10. Multiple Regression test to check the direct impact of learning organization dimensions on externalization

Dependent Variable	ъ	D2	F	F Sig I	DF	Coefficients			
	K	\mathbb{R}^2				Predictor	В	T	Sig
					2	Constant	.182	1.297	.197
					3	Team learning	.189	2.543	.012
externalization	.826	.683	93.258	.000	120				
					130	Inquiry and dialogue	.322	4.698	.000
					133	Continuous learning	.367	5.784	.000

As it shown above, there is significant effect for learning organization on externalization; the significant value was (0.000) less than (0.05), the value of R is the square root of R-Squared and is the correlation between the observed and predicted values of dependent variable was (0.826), and the coefficient of determination R2 (0.683). Therefore, about 68.3% of the variation in changing externalization explained by learning organization. Restriction Parameter (F) was (93.258) of the learning organization on externalization. Thus, we will accept the alternative the hypotheses "There is statistically significant of learning organization dimensions (Team learning System connection." Continuous learning) on the externalization at level ($\alpha \le 0.05$).

- Ho1-3: There is no statistically significant impact of learning organization dimensions (Team learning System connection: Continuous learning) on the internalization at level ($\alpha \le 0.05$)

We used Multiple Regression test to check the direct impact of learning organization on internalization shown in the table 11.

Table 11. Multiple Regression test to check the direct impact of learning organization dimensions on internalization

Dependent Variable	D	\mathbf{D}^2	\mathbb{R}^2 F		DE	Coefficients			
	K	K		Sig	DF	Predictor	В	T	Sig
					2	Constant	.339	2.165	.032
					3	Team learning	.021	.258	.797
Internalization	.789	.622	71.266	.000	120				
					130	Inquiry and dialogue	.424	5.548	.000
					133	Continuous learning	.396	5.614	.000

As it shown above, there is significant effect for learning organization on internalization. This due to significant value as it is (0.000) that is less than (0.05), the value of R is the square root of R-Squared and is the correlation between the observed and predicted values of dependent variable was (0.789) and the coefficient of determination R2 (0.622). Therefore, about 62.2% of the variation in changing internalization explained by learning organization. Restriction Parameter (F) was (71.266) of the learning organization on internalization, and thus we will accept the alternative the hypotheses "There is statistically significant of learning organization dimensions with its dimensions (Team learning System connection Continuous learning) on the internalization at level ($\alpha \le 0.05$).

- Ho1-4: There is no statistically significant impact of learning organization dimensions (Team learning System connection Continuous learning) on the combination at level ($\alpha \le 0.05$)

We used Multiple Regression test to check the direct impact of learning organization on combination shown in the table 12.

Table 12. Multiple Regression test to check the direct impact of learning organization dimensions on combination

Dependent Variable	n	\mathbb{R}^2	F		DE	Coefficients			
	K	K		Sig	DF	Predictor	В	T	Sig
					2	Constant	.402	2.359	.020
					3	Team learning	.040	.439	.662
Combination	.758	.575	58.544	.000	120				
					130	Inquiry and dialogue	.452	5.438	.000
					133	Continuous learning	.341	4.435	.000

As it shown from the table above, there is significant effect for learning organization on combination because the significant value was (0.000) less than (0.05), the value of R is the square root of R-Squared and is the correlation between the observed and predicted values of dependent variable was (0.758) and the coefficient of determination R2 (0.575). Therefore, about 57.5% of the variation in changing combination explained by learning organization. Restriction Parameter (F) was (58.544) of the learning organization on combination, and thus we will accept the alternative the hypotheses "There is statistically significant of learning organization dimensions (Team learning. System connection. Continuous learning) on the combination at level ($\alpha \le 0.05$).

6. Discussion and Conclusion

6.1 Discussion

Responding to (Donate & de Pablo (2015) that assured the importance of conducting more research that tackles learning organization, knowledge management and practices through enhancing knowledge creation processes. The study has made a conceptual case that shows the role in which learning organization plays on enhancing knowledge focusing on the commercial banks working in Amman. The results of the means and standard deviations of the role of learning organization on enhancing knowledge creation. This indicates that commercial banks seek to improve team's dynamics, build their skills through rich experiences. Consequently, this builds a high performing team which reflects positively on the banks to continue running effectively. It also may indicates that banks keen to develop teamwork in order to provide an excellent performance, which enables banks to provide a high quality of the services.

Testing The main hypothesis (H01), confirms a statistically significant of the role of learning organization on enhancing knowledge creation. This indicates that learning organization in banks create opportunities to deal with environmental change and uncertainties and a sustainable competitive advantage. It also unites the Bank's long-term shared vision. Moreover, such a result might indicate that organizational learning is an ongoing effort exerted by the bank in building and improving knowledge creation in methods that assure reaching common meanings that can be used to solve the problems faced by different administrative levels.

Interestingly, Socialization as is highly associated with learning organization in which the last affects positively the process of sharing tacit knowledge. This is can be interpreted as banks rely on developing the employee improving their skills, and sharing experiences in order to create implicit knowledge such as mental models and common technical skills. Another point the study has confirmed that there is statistically significant of learning organization on the externalization. This the researcher has interpreted that as banks seek to encourage the executives and employees to share knowledge, experiences, skills and practices among team members within the bank in order to create high knowledge productivity, and build new service ideas. Thus, Banks gain competitive advantage and generate high profitability returns. Moreover, learning organization affects positively on internalization. This indicates that banks seek to provide training programs, simulations, experiments, and use of documents on work assignments and job rotation in order to influence the efficiency of organizational processes, and achieve rapid response to market changes. Finally, there is statistically significant of learning organization on the combination. Banks urge executives and employees to communicate among groups, disseminate, and circulate knowledge within the bank through meetings, telephone conversations or communication networks in order to help them to share ideas and experiences, which enable banks to achieve an increase in profits and returns, and then raise the competitive side.

6.2 Research Limitations

Although the measurement, analysis, and findings went very positively to assures a result with significant. There were several limitations should be acknowledged in terms of unit of analysis - and strategies of testing the impact learning organisations on enhancing knowledge creation. One major limitation is the human limitation

that is presented within this study. A as the study population was limited to include executive managers who work at commercial bank in Amman, Jordan only. While choosing executive managers was effective and appropriate for the current study, it would've been more effective to incorporate a bigger sample to acquire better outcomes. It would also be preferable to broaden the scope of the study to include commercial bank other than the ones in Amman, Jordan and have it from across the entire Hashemite Kingdom of Jordan. In addition, further qualitative research would be required later on to measure the role of learning organization on enhancing knowledge creation accurately. Further research into the broader and more extensive the role of learning organization on enhancing knowledge creation with any new outcomes, regardless of whether they are positive or negative, would be highly valued and appreciated by the researcher.

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