



İİSBF SOSYAL BİLİMLER DERGİSİ

Cilt 4, Sayı 7, Aralık 2017, ISBN: 2147-8414

İmtiyaz Sahibi / General Director

Ali ÖZVEREN

Mütevelli Heyet Başkanı (Chairman of Board of Trustess)

Editör / Editor

Prof. Dr. Süleyman TÜRKEL

Sorumlu Yazı İşleri Müdürü / Editor in Chief

Yrd. Doç. Dr. Murat KÖYLÜ

Sorumlu Yazı İşleri Müdürü Yrd. / Ass. Editor in Chief

Arş. Gör. Gökçe MANAVGAT

Bilim ve Danışma Kurulu / Referees

Prof.Dr. A. Kadir Varoğlu *Başkent Üniv. İ.İ.B.F.*

Prof.Dr. Haluk Korkmaz *Toros Üniv. İ.İ.S.B.F.*

Prof.Dr. Nejat Basım *Başkent Üniv. İ.İ.B.F.*

Prof.Dr. Mehmet Tanyaş *Maltepe Üniv. İ.İ.B.F.*

Prof.Dr. Fatma Orel *Çukurova Üniv. İ.İ.B.F.*

Prof.Dr. Doğan Nadi Leblebici *Hacettepe Üniv.*

Prof.Dr. Haydar Çakmak *Gazi Üniversitesi İ.İ.B.F.*

Prof.Dr. Turan KORKMAZ *Mersin Üniversitesi İ.İ.B.F.*

Prof.Dr. Kamuran ELBEYOĞLU *Toros Üniv. İ.İ.S.B.F.*

Prof.Dr. Banu Yazgan GÜVENÇ *Toros Üniv.İ.İ.S.B.F.*

Doç. Dr. Köksal Hazır *Toros Üniversitesi İ.İ.S.B.F.*

Doç. Dr. Abdullah Çalışkan *Toros Üniversitesi.*

Doç. Dr. Mustafa Bekmezci *Toros Üniversitesi.*

Doç. Dr. Emruhan Yalçın *Avrasya Üniv.*

Doç. Dr. Mehmet İNCE *Mersin Üniversitesi İ.İ.B.F.*

Yrd. Doç. Dr. Meltem Keskin KÖYLÜ *Aksaray Üniv.*

Yrd. Doç. Dr. Murat KÖYLÜ *Toros Üniv.İ.İ.S.B.F.*

Yrd. Doç. Dr. Ayhan DEMİRCİ *Toros Üniv.*

Yrd. Doç. Dr. Cengiz Tunç *Toros Üniv.*

Dergi Yazışma Adresi / Correspondence Address

Toros Üniversitesi İktisadi, İdari ve Sosyal Bilimler
Fakültesi Bahçelievler Mh. 1857 Sk. Yenişehir / MERSİN
Tel: (0324) 325 33 00

Toros Üniversitesi Sosyal Bilimler Dergisi yılda iki kez,
6 ayda bir yayınlanan hakemli ve süreli bir sosyal bilimler
dergisidir.

Dergide öne sürülen fikirler makale yazarına aittir.

Toros University Social Sciences Journal is a refereed
and periodical journal published twice a year and once
every six months.

COMPETITIVE INTELLIGENCE: THE ENHANCING ROLE OF ORGANIZATIONAL LEARNING CAPABILITY

Zaina Mustafa Mahmoud HAMAD

Asst. Prof., Toros University, Department of Industrial Engineering,
zaina.hamad@toros.edu.tr

Uğur YOZGAT

Prof., Istanbul Kultur University, Department of Business Administration
u.yozgat@iku.edu.tr

ABSTRACT

Performing a strong intelligence grants an organization a guarantee of long-term success. This paper investigates the enhancing effect of organizational learning capabilities on competitive intelligence at the commercial banks in Jordan. A sample within top and middle managements was used. Measurement instrument validity and model fit were assessed before testing hypotheses. This study emphasizes the role learning capability plays in enhancing intelligence. Key findings support importance of organizational context of learning facilitators within Jordanian banks and recommend banks to practice learning capabilities in order to introduce themselves as intelligent organizations.

Anahtar Kelimeler: Organizational Learning Capability, Competitive Intelligence, Commercial Banks, Organizational Learning, Structural Equation Modeling, Jordan.



INTRODUCTION

In concurrent shrinking markets, an organization needs to adapt to its surroundings and to know its competitors if they want to survive and prosper (Mollayaaghoobi & Badiiee, 2011). Competitive intelligence (CI) deals with the firm's competitive environment (Ben sassi et al., 2015) and acts as a method for finding new trends and opportunities (Wang & Borges, 2013). Thus, improvement of intelligence in the modern world is one of the very important necessities for most organizations for being able to strengthen their capabilities (Parvizi & Siadat, 2014). CI concept is recognized by the financial services industry in general and banking sector in particular (Wright, Eid, & Fleisher, 2009). Strategic success of organizations on the long term, including commercial banks, requires characterizing organizations with organizational learning capabilities (OLCs) and understanding the role these factors play in supporting CI. Proceeding from that organizational learning (OL) acts as an antecedent to CI (Tuan, 2013) and due to the important role of banking sector in Jordan as one of the main sectors that supply the Jordanian national economy with expertise; this paper investigates the potential relationship between OLC and CI at commercial banks of Jordan.

1. THEORETICAL BACKGROUND AND CONCEPTUAL MODEL

Organizations require various competitive assets in order to perform within the current rapid evolving business environment. Literature review illustrates the importance of some outstanding organizational constructs such as OLC and CI.

1.1. Organizational Learning Capability

There is an increasing need to know more about the most proper conditions for OL (Lähteenmäki, Toivonen, & Mattila, 2001). Achieving and enabling OL requires some managerial practices (Ulrich, Jick, & Von Glinow, 1993), and organizations should establish the internal conditions that foster OL (Goh, 2003). However, the learning facilitators and consequences of promoting learning are not the same for all organizations, as Tannenbaum (1997) expresses.

OLC is the managerial practices, or enablers and conditions that facilitate OL (Goh & Richards, 1997) and enable an organization to learn (Popper & Lipshitz, 1998). OLC is the ability that enables the process of OL by implementing factors that foster the OL process (Nwankpa & Roumani, 2014). Similarly, OLC is the firm's activities for enhancing OL process (Tohidi, Mohsen Seyedaliakbar, & Mandegari, 2012). According to Hult and Ferrell (1997), OLCs are the factors that integrate the relationships and activities existing in the sub processes of OL at the cognitive levels of learning, while Jitnom and Ussahawanitchakit (2010) define OLC as the potential to explore and exploit knowledge through learning stream that creates likelihood the development, evolution and utilization of knowledge, while Alikhani and Fazlollahtabar (2014) consider OLC as a combination of the necessary tangible and intangible skills and resources for achieving competitive advantages. OLC is the capability of organizational members to learn (Hashim, 2013). Hsu and Fang (2009) identify OLC as the ability to acquire and convert a new knowledge and apply it to new product development with high production speed and competitive advantage. OLC is a source for organizational performance, according Prieto and Revilla (2006), Fernández-Mesa, Alegre-Vidal, Chiva-Gómez, and Gutiérrez-Gracia (2012), and Akgün, İmamoğlu, Koçoğlu, İnce, and Keskin (2014). OLC can enhance competitive advantage, as emphasized by Khan (1999) and Ho, Ahmad, and Thurasamy (2013).

OLC concept stresses the significance of the facilitating factors of OL (Chiva, Alegre, & Lapiedra, 2006). Chiva-Gómez (2004) analyzes and proposes fifteen facilitating factors suggested by both the OL and the learning organization literatures, and claims that almost all of these factors determined by both literatures are universal; are perceived and applicable for all organizations and sectors. Chiva, Alegre, and Lapiedra (2007) group OL facilitating factors of Chiva-Gómez (2004), develop a new OLC measurement instrument with taking into account all the literatures involved in the facilitating factors, and identify the following five dimensions for OLC (facilitating factors of OL).

1.1.1. Experimentation (EX): is the level to which new suggestions and ideas are brought, presented, and dealt with sympathetically (Chiva et al., 2007). EX is the most consistent managerial practice observed in learning organizations (Goh & Richards, 1997). EX is trying out new things, being curious about how things work, being able to play with things, and accepting failures (Nevis, Dibella, & Gould, 1995). EX uses the scientific methods to systematically search for and test new knowledge (Garvin, 1994), and needs an organizational culture which increases the risk taking and supports the notion that one can learn from the experiments and mistakes of other ones (Slater & Narver, 1995). Therefore, an organization is supposed to allow and encourage EX with new work methods (Senge, 1990), since learning barriers could be resulted from lack of EX (Schimmel & Muntslag, 2009).

1.1.2 Risk Taking (RT): is defined by Wiklund and Shepherd (2003) as “committing resources to projects where the outcomes are unknown” (p.1309). RT is the toleration and bearing of errors, uncertainties, failures, and ambiguity (Chiva et al., 2007), and organizations assuming risks and accepting mistakes could facilitate OL (Onağ, Tepeci, & Başalp, 2014). RT causes learning from successes and mistakes which in turn leads to opening new and further opportunities (Vargas, 2013). Therefore, taking risks and exploring new novel product domains and markets promotes a learning culture (Anderson, Covin, & Slevin, 2009).

1.1.3 Interaction with the External Environment (INTER): external environment is the factors that are not under the direct control of organizations (Chiva & Algre, 2008). INTER is the extent of relationships that organizations possess and adhere in their immediate environment (Alegre & Chiva, 2008), and it includes achieving information about the organizational capacities and collecting and disseminating information (Abedi & Eslami, 2014). Chiva and Alegre (2009) imply that learning occurs as a result of agents’ connections and interactions. Alliances can boost and promote a unique learning atmosphere by bringing organizations together with unique capabilities and skills (Shukla, 2013). Therefore, organizations should deal with external shocks and set up relationships with external parties or agents (Vargas, 2013).

1.1.4 Dialogue (DIA): is the uninterrupted collective inquiry, into the certainties, assumptions, and processes which form everyday experience, according to the definition of William Isaacs (as cited in Querubin, 2011). DIA is the interactions between internal actors (within the organizations) (Chiva & Alegre, 2009). DIA is important for realizing learning (Gear, Vince, Read, & Leonard Minkes, 2003), since DIA creates collective perceptions and plural comprehensions (Oswick, Anthony, Keenoy, Mangham, & Grant, 2000), promotes and encourages communication, leads to sharing the same conclusion between groups and teams (Mat & Cherazak, 2011), and provides organizational members with opportunity to falsify premises and conclusions (Senge, 1990). Learning barriers could be due to absence of DIA (Schimmel & Muntslag, 2009). Therefore, organizational systems should promote



teamwork and group problem-solving between employees and decrease the employees' dependence on the top managers (Goh & Richards, 1997).

1.1.5 Participative Decision Making (PDM): is the amount of influence and power organizational members enjoying when making a particular decision (Cotton, Vollrath, Foggat, Lengnick-Hall, & Jennings, 1988). It is the participation of the employees in establishing guidelines (Abedi & Eslami, 2014). Workers should participate in decision making in order to achieve learning (Slater & Narver, 1995). PDM requires decreasing bureaucratic problem within organization (Mat & Cherazak, 2011), and requires cohesiveness, trust and good relationship among members (Ho et al., 2013). PDM is assessed in terms of its consequences, including employees' involvement in decisions, reduction of industrial conflict, and workforce democratization (Cotton et al., 1988).

1.2. Competitive Intelligence and Hypotheses Development

CI is not a new concept (Wright, Badr, Weiss, & Pickton, 2004). CI has a rich and valuable heritage (Juhari & Stephens, 2006) and has attracted the attention in the last years (Bouthillier & Jin, 2005). Companies turn to CI for building and maintaining an edge (Johns & Doren, 2010). CI is an unavoidable need of the corporation and the development of market competition (Ting et al., 2008), and considered as a main competitive asset in Japanese firms (Rouach & Santi, 2001).

Fleisher and Bensoussan (2015) imply in their book that there are different definitions for CI and there is no single definition that is accepted universally. Most of definitions consider CI as a process (Pellissier & Nenzhelele, 2013), in spite that a lot of definitions consider CI as a product as well (Brody, 2008). CI defined by Rezaie Dollatabady, Ghandehari, and Amiri (2011) as the "art of collecting, processing and storage of information that people in all levels of the organization have access to it, according to their needs and helps them shape their future and will protect them against competitive threats" (p.942). According to Vedder and Guynes (2002), CI is "the set of legal and ethical methods used to gather information about competitor activities from public and private sources" (p.49). In other words, CI is a process of collecting, analyzing, and communicating the environmental information to assist in making strategic decisions (Dishman & Calof, 2008), to allow a firm to anticipate or forecast what will happen in its competitive environment (Bose, 2008), and to track the activity of direct and indirect competitors (Rouach & Santi, 2001), in order to get a better position in out selling, out smarting and out negotiating the competition (Johns & Doren, 2010).

Intelligence about opportunities and threats in the global competitive environment is needed by firms seeking the sustainable growth (Johannesson & Palona, 2010). CI is a key asset (Liu & Wang, 2008), and aims to predict and anticipate environmental evolutions, actions and moves of competitors, and customers' needs (Anica-Popa & Cucui, 2009). CI helps in making sound business decisions (Agarwal, 2006), and is considered as a main technique for achieving competitive advantage (Bose, 2008). CI is a main component for every service business performance (Marin & Poulter, 2004); objective of CI is maximizing revenues and minimizing expenses (Alampalli, 2002) and firms exhibiting a higher level of CI would create higher financial performance (Cappel & Boon, 1995). CI enhances strategic planning and helps businesses in planning (Trim & Lee, 2008). Intelligence processes of information generation, dissemination, utilization, and responsiveness to an environment are required for innovation (Dayan, 2006).

The massive and revolutionary changes in the business market are realized as the main debate for implementing CI system at the organizations, as learning organizations per se (Radun, 2006). However, many efforts have yielded few convincing results and a general impression of very low correlation between learning abilities and measures of intelligence (Friedman et al., 2012). The estimation that OL can strengthen intelligence is confirmed by abundant studies of OL by practice, by theoretical analyses, and by case observations (Levitt & March, 1988). For example; study of El Badawy et al. (2014) explores the impact of OLC on emotional intelligence. Hashim (2013) implies that OL implementation demands a set of characteristics for developing the learning process and, at the end the firm becomes an intelligent organization. Thus, organizations take more OL to bring intelligent responses to the evolving demands and anticipations of customers, stakeholders, and shareholders (McKenzie & Aitken, 2012). Further, OL is an important instrument of organizational intelligence, and learning and providing organizations with capabilities to learn quickly and precisely would improve intelligence (Levitt & March, 1988). Hence, the intelligent organization can be considered as a learning organization (Glynn, 1996), and OL theories can be a starting point for providing directions about how firms can acquire, disseminate, and utilize information for CI (Dayan, 2006). Similarly, study of Dishman and Pearson (2003) states that OL is important for implementing any intelligence unit and it is a necessary part in any effective intelligence process. While Murray and Carter (2005) show that integration of OL capacity improve market intelligence, by facilitating new knowledge and driving difficult change agendas normally blocked by formal structure.

In the same context, CI can be considered as a part of the OL systems, since OL systems create, communicate, and interpret competitive knowledge that is needed for the strategic decision making process (Shrivastava & Grant, 1985). From the idea that learning can enrich the pool of information capital, Jo & Joo (2011) show that learning organization culture is significantly associated with knowledge-sharing intention. Accordingly, learning enhances CI by providing information about the current and future behaviors of the general business environment including customers, markets, acquisitions, technologies, suppliers, and competitors (Vedder & Guynes, 2002). Shimakalantarian et al. (2012) conclude that OL has a positive impact on CI in food industry, and claim that managers institutionalize OL culture, so they can enhance CI to survive in today`s changing environment. Tuan (2013) confirms that OL acts as an antecedent to CI; it increases CI and positively relates to CI scanning. Parallel to that point, OLC must be connected to other operational activities of the organization such as CI for ensuring the organizational survival for a long time (Goh, 2003). There is a lack of empirical work addressing this linkage within developing countries. Therefore, this paper proposes a significant relation between OLC and CI within Jordanian commercial banking and hypothesizes that: *H1. There is a significant and positive impact of OLC (EX, RT, INTER, DIA, and PDM) on CI.*

However, Saayman et al. (2008) categorize CI into CI process (CIP) and CI context (CIC). They clarify that CIP is influenced by certain contextual influences; by CIC in which CI occurs. Saayman and his colleagues, claim that CIC, in which CI occur, should be evaluated in order to assess CI performance. According to Saayman et al. (2008), CIP consists of three factors; (1) Planning & focus, (2) collection, and (3) analysis & communication, while CIP, in which CI takes place, consists of four factors: (1) awareness/culture, (2) internal information, (3) formal infrastructure, and (4) employee involvement. OL is the center of CIP and leads to knowledge creation (Oubrich, 2011). CIC includes entry to new competitors in the market which is affected by learning and learning expenses (Nikolaos & Evangelia, 2012). This paper adopts the measurement scale of Saayman et al. (2008) for measuring CI, with its categorization into CIP and CIC and proposes that: *H11. There is a significant and positive impact of*



OLC (EX, RT, INTER, DIA, and PDM) on CIP, and H12. There is a significant and positive impact of OLC (EX, RT, INTER, DIA, and PDM) on CIC.

1.3. Proposed Structural Model

According to the research hypothesis developed through literature review, this paper could come up with a conceptual model proposing OLC to have an impact on CI. Figure (1) shows the proposed model of this research.

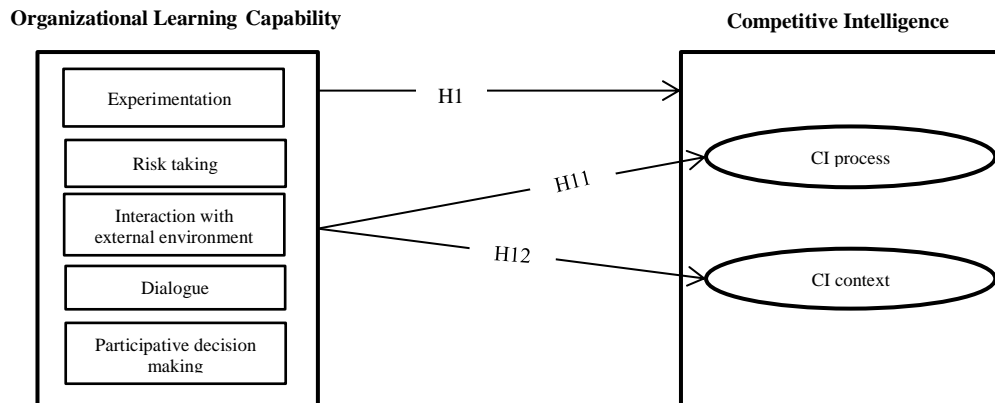


Figure 1: Proposed Model of Research

2. RESEARCH METHODOLOGY

Current research conducts quantitative approach. Descriptive method was used for the demographic variables analysis. SEM analysis was conducted for assessing the validity and reliability of the measurement instrument, for testing the relationships between latent variables and observed variables as well as for assessing the hypothesized relationships between latent variables within the proposed structural model.

2.1. Data Collection

Study population consists of the entire Jordanian banking sector while study sample is composed of all the commercial banks in Jordan. A questionnaire was used for collecting data from all employees of the top and middle level managements working within commercial banks in Jordan (13 commercial banks in total). After distributing (200) questionnaires, a total of (158) answered questionnaire were retrieved and valid for study. As shown in table (1) below, demographic variables of the study sample are analysed.

Table 1: Descriptive analysis for the personal & occupational characteristics of the study sample (N=158)

<i>Variables</i>	<i>Categorization</i>	<i>Frequency</i>	<i>Percent</i>
<i>Age</i>	25 Years or less	1	0.6
	26 – less than 35 Years	48	30.4
	35 – less than 45 Years	75	47.5
	45 Years or more	34	21.5
<i>Gender</i>	Male	90	57.0
	Female	68	43.0
<i>Qualification</i>	Diploma	11	7.0
	Bachelor	87	55.1
	High Diploma	9	5.7
	Master	47	29.7
<i>Experience</i>	Doctorate	4	2.5
	5 Years or less	8	5.1
	6 – less than 15 Years	90	57.0
	15 – less than 25 Years	44	27.8
<i>Managerial level</i>	25 Years or more	16	10.1
	Manager	43	27.2
	Assistant manager	41	25.9
	Head of Division	74	46.8
	Total	158	100.0

2.2. Measures

For measuring the construct of OLC, a total of 23 items were adopted from the literature. In particular, four items were used for measuring experimentation, such as the following item (Isaksen et al., 1999; Chiva et al., 2007): “the firm usually provides initiative a favorable response, so employees feel encouraged to generate new ideas”. Three items were taken for risk taking measurement, such as the following item (Goh & Richards, 1997; Onağ et al., 2014): “employees take risky decisions to perform better in their jobs”. Three items were for assessing interaction with the external environment, such as the item (Pedler et al., 1997; Chiva et al., 2007): “the firm has systems and procedures for receiving, collating and sharing information from outside the firm”. Seven items for dialogue were used, like the item (Hult & Ferrell, 1997; Chiva et al., 2007): “the firm has cross-functional teamwork as a common practice”, while six items were taken for measuring participative decision making, such as the item (Goh & Richards, 1997; Onağ et al., 2014): “the firm’s management often rewards innovative ideas that work”.

For measuring CI construct, this paper adopts the measurement scale of Saayman et al. (2008). A total of 38 items were used for this purpose. 19 items were used for measuring CIP such as the items “the firm has a variety of methods for collecting information (e.g., trade shows, web sites, industry reports, etc.)”, and “the firm analyses its competitors’ plans and strategies to predict and anticipate their actions”, while another 19 items were used for assessing CIC, such as the items “the firm maintains a central record of reliable sources of information” and “the firm’s corporate culture encourages information sharing”.



Cronbach's alpha is used to determine the reliability and level of internal consistency among the elements comprising the six constructs, as suggested by (Gregory, 2004). Reliability should be (0.60) or higher to indicate adequate convergence or internal consistency (Sekaran & Bougie, 2010: 184). The results of scale reliability testing were at the acceptable levels as suggested by (Sekaran & Bougie, 2010). The value of Cronbach's alpha for OLC was 0.913 and for dimensions of OLC were; 0.838, 0.724, 0.794, 0.813, and 0.819 respectively, while Cronbach's alpha value for CI was 0.904 and for indicators of CI were; 0.898 and 0.911 respectively.

3. DATA ANALYSIS AND FINDINGS

Confirmatory factor analysis (CFA) was conducted for testing the construct validity while path analysis was done for estimating the relationships between variables under study.

3.1. CFA for Instrument Validation

A scale of 61 items is developed from previous research and literature review, and a further attempt at refinement and validation of the factor structure was made using CFA for each construct. This provides a better understanding of what items truly measure the factors identified in the research model.

3.1.1. CFA and Measurement Model for OLC: CFA was conducted for each dimension of OLC. From each analysis, all item loadings were over 0.50, with the exception of two items for DIA and one item for PDM which had factor loadings less than 0.50. After running the second analysis, all the factor loadings were over 0.50 and all critical ratios were higher than 1.96. The model fit showed a good fit model. Table (2) shows the results of overall fit indices for each OLC dimension. After finishing the CFA for each individual variable for OLC, the researcher estimated the CFA for the model as one unit, called the measurement model for OLC. The measurement model was run with all the latent variables. All standardized regression weight values were (>0.5), and all critical ratios (C.R.) were (>1.96). The measurement model with all constructs showed a good fit for all indices as shown in table (2).

Table 2: Model fit estimates for OLC

VARIABLES	RMSEA	CMIN/DF	GFI	AGFI	CFI	NFI
EX	0.073	4.810	0.989	0.947	0.990	0.978
RT	0.061	4.012	0.980	0.955	0.989	0.901
INTER	0.063	3.224	0.962	0.946	1.000	1.000
DIA	0.079	1.972	0.982	0.931	0.971	0.985
PDM	0.059	2.989	0.978	0.937	0.928	0.975
OLC (All Constructs)	0.042	1.282	0.909	0.905	0.976	0.901

All values of overall fit indices were within acceptable limits. RMSEA < 0.08; CMIN/DF < 5.00; and GFI, AGFI, CFI, NFI > 0.90 (Byrne, 2001; Hair et al., 2010). The values of AVE for constructs within the measurement model for OLC dimensions are 0.72, 0.58, 0.71, 0.72, and 0.67 respectively, and thus, are within acceptable limits that confirm the convergent validity. In addition, CR indexes for constructs within the measurement model for OLC dimensions are 0.82, 0.73, 0.80, 0.83, and 0.81 respectively, which indicate adequate construct reliability.

3.1.2. CFA and Measurement Model for CI: CFA was conducted for CI. From the analysis, all item loadings were over 0.50, with the exception of five items for CIS and three items for CIC which had factor loadings less than 0.50. After running the second analysis, all the factor loadings were over 0.50 and all critical ratios were higher than 1.96. The model fit showed a good fit model. See table (3).

Table 3: Model fit estimates for CI

VARIABLES	RMSEA	CMIN/DF	GFI	AGFI	CFI	NFI
CIP	0.057	1.515	0.914	0.908	0.958	0.929
CIC	0.063	1.632	0.900	0.989	0.955	0.915
CI (All Constructs)	0.050	1.391	0.923	0.913	0.933	0.938

The value of Average Variance Extracted (AVE) for constructs within measurement model of CI are 0.71 and 0.79 respectively, as recommended by Malhotra & Stanton (2004) who explained that AVE should be greater than (0.50) to validate employing a construct. In addition, composite reliability (CR) indexes within the measurement model of CI are 0.87 and 0.90 respectively, which are greater than (0.70) and thus indicate a satisfactory internal consistency, as recommended by Hair, Black, Babin, and Anderson (2010).

3.2. Testing Hypotheses

The proposed model, presented previously in figure (1), shows a good fit for all indices. All values of overall fit indices were within acceptable limits. RMSEA= 0.067< 0.08; CMIN/DF= 1.698< 5.00; GFI, AGFI, CFI, NFI= 0.968, 0.919, 0.979, 0.951 > 0.90 (Byrne, 2001; Hair et al., 2010). For testing hypotheses, and as shown in table (4), significance of each path coefficient, estimate of standardized regression weight, standard error of regression weight, and critical ratio for regression weight were estimated. Table (4) presents the results of path analysis

**Table 4:** Results of path analysis

Hypothesis	Regression Weights		Estimate	SE	C.R.	P value
	From	To				
H1	OLC	CI	0.813	0.152	6.199	***
	EX	CI	0.372	0.059	4.975	***
	RT	CI	-0.079	0.043	-1.048	0.295
	INTER	CI	0.194	0.048	2.678	0.007
	DIA	CI	0.206	0.054	2.898	0.004
	PDM	CI	0.246	0.049	3.604	***
H11	OLC	CIP	0.692	0.157	6.341	***
	EX	CIP	0.324	0.069	4.131	***
	RT	CIP	-0.149	0.051	-1.889	0.059
	INTER	CIP	0.264	0.056	3.459	***
	DIA	CIP	0.201	0.063	2.693	0.007
	PDM	CIP	0.219	0.057	3.061	0.002
H12	OLC	CIC	0.639	0.160	6.049	***
	EX	CIC	0.310	0.074	3.846	***
	RT	CIC	-0.034	0.055	-0.420	0.674
	INTER	CIC	0.135	0.060	1.731	0.083
	DIA	CIC	0.203	0.068	2.645	0.008
	PDM	CIC	0.234	0.061	3.190	0.001

***significant at $p < 0.001$

Table (4) shows that OLC (EX, INTER, DIA, and PDM) has a significant and positive impact on CI at (p value < 0.05) within commercial banks of Jordan; H1 is supported. Further, OLC (EX, INTER, DIA, and PDM) has a significant and positive impact on CIP at (p value < 0.05); H11 is supported, while OLC (EX, DIA, and PDM) has insignificant impact on CIC (p value < 0.05); H12 is supported.

CONCLUSIONS, IMPLICATIONS, AND FUTURE RESEARCH

This paper develops a model of OLC and CI at the commercial banking sector of one of the developing countries such as Jordan. Empirical studies on CI in the banking sector are minimal (Wright et al, 2009). This paper emphasizes the importance of CI, which considered by Prescott (1999) as a core capability, tries to better understand how organizations can be intelligent by maintaining their OLC, and contributes to related knowledge by enriching the current understanding of how OLC may impact CI.

Findings provide advice for practitioners in banking sector, particularly in Jordanian commercial banking to take into consideration the great role OLC plays in enhancing the CI in order to achieve the private and public interests. Findings encourage firms to be always aware of the importance of keeping informed about their business environment. Possession of facilitating factors for OL would facilitate the management methodologies of CI system and the implementation of CI programs. Organizational executives should continuously explore the diverse influences that affect the performance of their CI systems and provide resources to address the dilemmas that prevent their success in CI systems implementation.

Organizational environment characterized by learning capabilities, especially of experimentation, interaction with external environment, dialogue, and participate decision making, may provide communication skills that can foster abilities required for implanting a competitive intelligent environment. OLC provides the organization with information about its current and future competitors as well as enables it to assess competencies and behaviors of these competitors. OLC provides a gateway into how organizations can collect, analyze, distribute, and utilize information. In other words, enjoying

the organization capabilities of learning and thus institutionalizing a culture of OL can improve CI for survival.

Future research might resort to other construct models with different measures and scales validated by previous studies in order to evaluate constructs under study. OLC might be the organizational antecedent of business intelligence, emotional intelligence, and organizational intelligence, and this justifies an interesting future line of research for investigating and testing these propositions. Further research can take OL orientation or OL intensity into consideration when studying the enhancing factors for CI.

REFERENCES:

- Abedi, S. H., & Eslami, H. (2014). "The Relationship Between Organizational Virtuousness and SocialCapital: The Mediator Role Of Organizational Learning. (case study: ministry of economic affairs and finance of Yazd)". *Interdisciplinary Journal of Contemporary Research in Business*, 5(9), 524-533.
- Agarwal, K. N. (2006). Competitive Intelligence in Business Decisions-An Overview. *Competition Forum*, 4(2), 309-314.
- Akgün, A. E., İmamoğlu, S. Z., Koçoğlu, I., İnce, H., & Keskin, H. (2014). Bridging Organizational Learning Capability and Firm Performance through Customer Relationship Management. *Procedia - Social and Behavioral Sciences*, 10th International Strategic Management Conference, 150, 531-540.
- Alampalli, S. (2002). Role of CI for Opportunity Assessment. *Competitive Intelligence Magazine*, 5(4), 21-24.
- Alegre, J. & Chiva, R. (2008). Assessing The Impact of Organizational Learning Capability On Product Innovation Performance: An Empirical Test". *Technovation*, 28(6), 315-326.
- Alikhani, M., & Fazlollahtabar, H. (2014). "A Mathematical Model for Optimizing Organizational Learning Capability". *Advances in Operations Research*, 2014, 1-12.
- Anderson, B. S., Covin, J. G., & Slevin, D. P. (2009). "Understanding The Relationship Between Entrepreneurial Orientation and Strategic Learning Capability: An Empirical Investigation". *Strategic Entrepreneurship Journal*, 3(3), 218-240.
- Anica-Popa, I. & Cucui, G. (2009). "A Framework For Enhancing Competitive Intelligence Capabilities Using Decision Support System Based On Web Mining Techniques". *International Journal of Computers Communications & Control*, 4(4), 326-334.
- Ben Sassi, D., Frini, A., Ben Abdessalem, W., & Kraiem, N. (2015). "Competitive Intelligence: History, Importance, Objectives, Process And Issues", In *2015 IEEE 9th International Conference on Research Challenges in Information Science (RCIS)* (pp. 486-491). IEEE.
- Bose, R. (2008). "Competitive Intelligence Process and Tools For Intelligence Analysis". *Industrial Management & Data Systems*, 108(4), 510-528.
- Bouthillier, F. & Jin, T. (2005). "Competitive Intelligence and Webometrics: An Exploratory Study on the Status of CI in Five Countries". *Journal of Competitive Intelligence and Management*, 3(3), 19-39.
- Brody, R. (2008). "Issues in Defining Competitive Intelligence: An Exploration". *Journal of Competitive Intelligence and Management*, 4(3), 3-16.



- Byrne, B. M. (2001). *Structural equation modeling with AMOS*. New Jersey, US: Lawrence Erlbaum Associates.
- Cappel, J. J., & Boon, J. P. (1995). "Competitive Intelligence a Performance". *Competitive Intelligence Review*, 11, 15-23.
- Chiva, R., & Alegre, J. (2008). "Emotional Intelligence and Job Satisfaction: The Role Of Organizational Learning Capability". *Personnel Review*, 37(6), 680-701.
- Chiva, R. & Alegre, J. (2009). "Organizational Learning Capability and Job Satisfaction: An Empirical Assessment in The Ceramic Tile Industry" . *British Journal of Management*, 20(3), 323-340.
- Chiva, R., Alegre, J., & Lapiedra, R. (2006, March). Development and Validation of an Instrument To Measure Organizational Learning Capability. In *International Conference on Organizational Learning, Knowledge, and Capabilities (OLKC)*. University of Warwick.
- Chiva, R., Alegre, J. & Lapiedra, R. (2007). "Measuring Organizational Learning Capability Among The Workforce". *International Journal of Manpower*, 28(3/4), 224-242.
- Chiva-Gómez, R. (2004). "The Facilitating Factors For Organizational Learning in The Ceramic Sector". *Human Resource Development International*, 7(2), 233-249.
- Cotton, J. L., Vollrath, D. A., Foggat, K. L., Lengnick-Hall, M. L., & Jennings, K. R. (1988). "Employee Participation: Diverse Forms and Different Outcomes". *Academy of Management Review*, 13(1), 8-22.
- Dayan, M. (2006, June). "The Moderating Effect of Market Turbulence on Organizational Intelligence", In *2006 IEEE International Conference on Management of Innovation and Technology* (Vol. 2, pp. 566-570). IEEE.
- Dishman, P. L. & Calof, J. L. (2008). "Competitive Intelligence: A Multiphasic Precedent To Marketing Strategy". *European Journal of Marketing*, 42(7/8), 766-785.
- Dishman, P. & Pearson, T. (2003). "Assessing Intelligence As Learning Within an Industrial Marketing Group: A Pilot Study". *Industrial Marketing Management*, 32(7), 615-620.
- El Badawy, T. A. ,Srivastava, S. & Sadek, M. B. (2014). "Assessing The Relationship Between Emotional Intelligence, Job Satisfaction and Organizational Learning Capability in Private Higher Educational Institutions in Egypt And India: A Comparative Study". *International Journal of Business Administration*, 5(6), 38-47.
- Fernández-Mesa, A., Alegre-Vidal, J., Chiva-Gómez, R. & Gutiérrez-Gracia, A. (2012). "Design Management Capability: Its mediating Role Between OLC and Innovation Performance in SMEs". *Management*, 25(473), 490.
- Fleisher, C. S., & Bensoussan, B. E. (2015). *Business and Competitive Analysis: Effective Application of New and Classic Methods* (2nd Ed.). Upper Saddle River, New Jersey: Financial Times Press.
- Friedman, M. P., Das, J. P., & Oconer, N. (2012). *Intelligence and Learning*. New York: Springer Science & Business Media.
- Garvin, D. A. (1994). Building a learning organization. *Business Credit*, 96(1), 19-28.
- Gear, T., Vince, R., Read, M., & Leonard Minkes, A. (2003). "Group Enquiry for Collective Learning in Organizations". *Journal of Management Development*, 22(2), 88-102.

- Glynn, M. A. (1996). Innovative Genius: "A Framework For Relating Individual and Organizational Intelligence to Innovation". *The Academy of Management Review*, 21(4), 1081-1111.
- Goh, S. C. (2003). "Improving Organizational Learning Capability: Lessons From Two Case Studies", *The Learning Organization*, 10(4), 216-227.
- Goh, S., & Richards, G. (1997). "Benchmarking The Learning Capability of Organizations". *European Management Journal*, 15(5), 575-583.
- Gregory, R. J. (2004). *Psychological Testing: History, Principles, And Applications*. Allyn & Bacon.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hashim, A. (2013). "A Conceptual Framework for Antecedents and Consequence of Organizational Learning Capability". *Information Management and Business Review*, 5(12), 577-583.
- Ho, T. H. F. Ahmad, N. H. & Thurasamy, R. (2013). "Learn And Thou Shall Thrive: Advancing A Model Of Workplace Familism and Organizational Learning Capability in Small and Medium Enterprise (Smes) Manufacturers in Malaysia", *Business Strategy Series*, 14(5/6), 151-159.
- Hsu, Y. H., & Fang, W. (2009). "Intellectual Capital And New Product Development Performance: The Mediating Role of Organizational Learning Capability". *Technological Forecasting and Social Change*, 76(5), 664-677.
- Hult, G. T. M. & Ferrell, O. C. (1997). "Global Organizational Learning Capacity in Purchasing: Construct and Measurement". *Journal of Business Research*, 40(2), 97-111.
- Isaksen, S. G., Lauer, K. J., & Ekvall, G. (1999). "Situational Outlook Questionnaire: A Measure Of The Climate for Creativity and Change". *Psychological Reports*, 85, 665-674.
- Jitnom, S., & Ussahawanitchakit, P. (2010). "Strategic Learning Capability, Firm Performance and Sustainable Growth: An Empirical Study of Auto Spare Part Manufacturing Businesses in Thailand". *International Journal of Business Strategy*, 10(4), 107-131.
- Jo, S. J., & Joo, B. K. (2011). "Knowledge Sharing: The Influences of Learning Organization Culture, Organizational Commitment, and Organizational Citizenship Behaviors". *Journal of Leadership & Organizational Studies*, 18(3), 353-364.
- Johannesson, J. & Palona, I. (2010). "Environmental Turbulence and The Success of A Firm's Intelligence Strategy: Development of Research Instruments". *International Journal of Management*, 27(3), 448-458.
- Johns, P. & Doren, D. C. V. (2010). "Competitive Intelligence in Service Marketing: A New Approach With Practical Application". *Marketing Intelligence & Planning*, 28(5), 551-570.
- Juhari, A. S. & Stephens, D. P. (2006). "Tracing the Origins of Competitive Intelligence Throughout History". *Journal of Competitive Intelligence and Management*, 3(4), 61-82.
- Khan, S. A. (1999). "Building Organizational Learning Capability". *Indian Journal of Industrial Relations*, 35(1), 74-84.
- Lähteenmäki, S., Toivonen, J. & Mattila, M. (2001). "Critical Aspects of Organizational Learning Research and Proposals for Its Measurement". *British Journal of Management*, 12, 113-129.



-
- Levitt B., & March, J. G. (1988). Organizational Learning. *Annual Review of Sociology*, 14, 516-540.
- Liu, C. H., & Wang, C. C. (2008). "Forecast Competitor Service Strategy With Service Taxonomy and CI Data". *European Journal of Marketing*, 42(7/8), 746-765.
- Malhotra, N. K., & Stanton, S. C. (2004, August). *Validating Inter-Object Interaction in Object Oriented Designs*. In: 4th IASTED International Conference on Modelling, Simulation and Optimization (pp. 241-246). Kauai, Hawaii, USA.
- Marin, J. & Poulter, A. (2004). "Dissemination of Competitive Intelligence". *Journal of Information Science*, 30(2), 165-180.
- Mat, A., & Cherazak, R. C. (2011). "The Influence Of Organizational Learning Capability on Success of Technological Innovation (Product) Implementation With Moderating Effect Of Knowledge Complexity", *International Journal of Business and Social Science*, 2(17), 217-225.
- McKenzie, J., & Aitken, P. (2012). "Learning to Lead The Knowledgeable Organization: Developing Leadership Agility". *Strategic HR Review*, 11(6), 329-334.
- Mollayaaghobi, S. S. & Badiie, F. (2011). "A Comparative study of competitive intelligence in Public Sector (Case study: Iran Auto Industries)". *Interdisciplinary Journal of Contemporary Research in Business*, 3(5), 525-535.
- Murray, P., & Carter, L. (2005). "Improving Marketing Intelligence Through Learning Systems and Knowledge Communities In Not-For-Profit Workplaces". *Journal of workplace learning*, 17(7), 421-435.
- Nevis, E., Dibella, A. J. & Gould, J. M. (1995). "Understanding Organizations as Learning Systems". *Sloan Management Review*, 36(2), 73-85.
- Nikolaos, T. & Evangelia, F. (2012). "Competitive Intelligence: Concept, Context And A Case of its Application". *Science Journal of Business Management*, 2, 1-15.
- Nwankpa, J., & Roumani, Y. (2014). "Understanding The Link Between Organizational Learning Capability And ERP System Usage: An Empirical Examination". *Computers in Human Behavior*, 33, 224-234.
- Onağ, A. O., Tepeci, M., & Başalp, A. A. (2014). "Organizational Learning Capability and its Impact on Firm Innovativeness". *Procedia-Social and Behavioral Sciences*, 150, 708-717.
- Oswick, C., Anthony, P., Keenoy, T., Mangham, I. L., & Grant, D. (2000). "A Dialogic Analysis of Organizational Learning". *Journal of Management Studies*, 37(6), 887-902.
- Oubrich, M. (2011). "Competitive Intelligence And Knowledge Creation-Outward Insights From an Empirical Survey". *Journal of Intelligence Studies in Business*, 1(1), 97-106.
- Parvizi, A., & Siadat, S. A. (2014). "Studying The Status of Organizational Intelligence in Saderat Bank Branches Management Of Isfahan Province". *Interdisciplinary Journal of Contemporary Research in Business*, 5(9), 284- 295.
- Pedler, M., Burgoyne, J., & Boydell, T. (1997). *The Learning Company: A Strategy for Sustainable Development*. London: McGraw-Hill.

- Pellissier, R., & Nenzhelele, T. E. (2013). "Towards a universal competitive intelligence process model". *SA Journal of Information Management*, 15(2), 1-7.
- Popper, M., & Lipshitz, R. (1998). "Organizational Learning Mechanisms A Structural and Cultural Approach To Organizational Learning." *The Journal of Applied Behavioral Science*, 34(2), 161-179.
- Prescott, J. E. (1999). *The Evolution of Competitive Intelligence: Designing a Process for Action. Proposal Management*, spring, 37-52.
- Prieto, I. M., & Revilla, E. (2006). "Learning Capability And Business Performance: A Non-Financial and Financial Assessment". *The Learning Organization*, 13(2), 166-185.
- Querubin, C. (2011, September). Dialogue: Creating shared meaning and other benefits for business. In *Proceedings of the 55th Annual Meeting of the ISSS-2011*(Vol. 55, No. 1), UK: Hull.
- Radun, V. (2006, July). The internal and external communication of intelligence and the competitive intelligence process: The case of the higher educational sector in Serbia. In *2006 Technology Management for the Global Future-PICMET 2006 Conference* (3, pp. 1298-1306). IEEE.
- Rezaie Dollatabady, H., Ghandehari, F., & Amiri, F. (2011). "Analyzing The Impact of Competitive Intelligence on Innovation at Scientific Research Centers In Isfahan Science And Technology Town". *Interdisciplinary Journal of Contemporary Research in Business*, 3(5), 939-948.
- Rouach, D. & Santi, P. (2001). "Competitive Intelligence Adds Value: Five Intelligence Attitudes". *European Management Journal*, 19(5), 552-559.
- Saayman, A., Pienaar, J., Pelsmacker, P. D., Viviers, W., Cuyvers, L., Muller, M. L., & Jegers, M. (2008, July). Competitive intelligence: construct exploration, validation and equivalence. In *Aslib Proceedings: new information perspectives* (Vol. 60, No. 4, pp. 383-411). Emerald Group Publishing Limited.
- Schimmel, R. & Muntslag, D. R. (2009). "Learning Barriers: A Framework For The Examination of Structural Impediments to Organizational Change". *Human Resource Management*, 48(3), 399-416.
- Sekaran, U. & Bougie, R. (2010). *Research methods for business: A skill building approach* (5th ed.). West Sussex, UK: John Wiley & Sons Ltd.
- Senge, P. M. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Doubleday Currency.
- Shimakalantarian, Baratimarnani, A., & Salavati, A. (2012). "The Relationship between Organizational Learning and Competitive Intelligence on Small and Medium Industries in the City of Kermanshah". *Interdisciplinary Journal of Contemporary Research In Business*, 4(6), 348-359.
- Shrivastava, P., & Grant, J. H. (1985). "Empirically Derived Models of Strategic Decision - Making Processes". *Strategic Management Journal*, 6(2), 97-113.
- Shukla, M. (2013, January). To Study the Relationship Between Knowledge Utilization and Learning Capability in a Team. In *Proceedings of the 10th International Conference on Intellectual Capital, knowledge Management and Organizational Learning: ICICKM 2013* (pp. 394-400). Academic Conferences Limited.
- Slater, S. F., & Narver, J. C. (1995). "Market Orientation and the Learning Organization". *The Journal of Marketing*, 59(3), 63-74.



Tannenbaum, S. I. (1997). "Enhancing Continuous Learning: Diagnostic Findings From Multiple Companies". *Human Resource Management*, 36(4), 437-452.

Ting, C., Kaihu, H., & Kaichao, Y. (2008). Study on model about competitive intelligence system of enterprise based on data mining under electronic commerce environment. In *2008 International Seminar on Business and Information Management ISBIM'08* (1, pp. 203-206). IEEE.

Tohidi, H., Mohsen Seyedaliakbar, S., & Mandegari, M. (2012). "Organizational Learning Measurement and The Effect on Firm Innovation". *Journal of Enterprise Information Management*, 25(3), 219-245.

Trim, P. R., & Lee, Y. I. (2008). "A Strategic Marketing Intelligence And Multi-Organizational Resilience Framework". *European Journal of Marketing*, 42(7/8), 731-745.

Tuan, L. T. (2013). "Leading To Learning And Competitive Intelligence". *The Learning Organization*, 20(3), 216-239.

Ulrich, D., Jick, T., & Von Glinow, M. A. (1993). "High-Impact Learning: Building And Diffusing Learning Capability". *Organizational Dynamics*, 22(2), 52-66.

Vargas, M. I. R. (2013). "Underlying Dimensions and Organizational Values in Organizational Learning: Strategy for Capacity Building in Developing Countries". *Journal Of Technology Management & innovation*, 8(3), 57-69.

Vedder, R. G., & Guynes, C. S. (2002). "Cios' Perspectives on Competitive Intelligence". *Information Systems Management*, 19(4), 49-55.

Wang, C. H., & Borges, L. A. J. (2013). "Does Competitive Intelligence Matter? An Anthropological Way of Thinking". *International Journal of Business Anthropology*, 4(2), 76-84.

Wiklund, J., & Shepherd, D. 2003. "Knowledge-Based Resources, Entrepreneurial Orientation, and the Performance of Small and Medium-Sized Businesses". *Strategic Management Journal*, 24(13), 1307-1314.

Wright, S., Badr, A., Weiss, A., & Pickton, D. W. (2004). "Competitive Intelligence Through UK Eyes". *Journal of Competitive Intelligence and Management*, 2(2), 68-87.

Wright, S., Eid, E. R., & Fleisher, C. S. (2009). "Competitive Intelligence in Practice: Empirical Evidence From The UK Retail Banking Sector". *Journal of Marketing Management*, 25(9-10), 941-964.