

Learning Capability and the Performance of Small and Medium Enterprises in Developing Economies: The Role of Absorptive Capacity

Yakubu Salisu¹, Sani Mohammed²

¹Department of Business Administration, Yobe State University Damaturu, Yobe State Nigeria

²Department of Business Administration, Federal Polytechnic Damaturu, Yobe State, Nigeria

* Corresponding author: ysalisu@ysu.edu.ng, smgadaka68@gmail.com

Abstract

How to develop and enhance the effectiveness of external flow of knowledge and information to improve invention and performance of small and medium enterprises (SMEs) has become crucial to both researchers and managers. This study was designed to purposely examine empirically the influence of the absorptive capacity on the relationship of organizational learning capability and SMEs performance. A total of 206 valid questionnaires obtained from personal administration of the survey instrument on SMEs manager in Kano state Nigeria. Partial Least Square Structural Equation Model (PLS-SEM). The result of the study indicates that learning capability significantly and positively relates to SMEs firms performance, equally learning capability positively relates with absorptive capacity. The study further established significant positive relationship between absorptive capacity and SMEs performance. Similarly, absorptive capacity mediates the relationship between learning capability and SMEs performance. The study concludes that experimentation, risk taking, external interaction, dialogue and participatory decision making influences SMEs knowledge acquisition, assimilation, transformation and application for better performance.

Keywords: Learning Capability, Absorptive Capacity, SMEs Performance

ARTICLE INFORMATION

Received: 10 Dec 2018

Revised: 10 Jan 2019

Accepted: 31 Jan 2019

DOI: 10.31580/jei.v6i1.468

© Readers Insight Publication

INTRODUCTION

The performance of small and medium enterprises in Nigeria has persistently falls below expectation over the years (Salisu, 2018, Aminu, 2015, SMEDAN and NBS, 2013). Nigerian economic largely depends on natural resources endowment with no adequate stimulus and support to invest in SMEs and human capital (Oluwatobi, 2015). Consequently any economic that relies heavily on the proceed from the natural resource tends to be uncompetitive (Salisu, 2018). Ajonbadi, (2015) have demonstrated that the ability of SMEs in Nigeria to learn and adopt new technologies is the major challenges to their growth. However, to remain competitive in today's rapidly changing environment, business firm are frequently adopting strategy for encouraging employees to continuously learn from within and outside the firm. Developing human capital is an important competitive and survival strategy (Elbaz, Agag, and Alkathiri, 2018). However, human capital can be develops through transfer of knowledge and learning (Peansupap and Walker, 2009). Therefore, learning capability is consider as the most essential firm's resources and a strategic capability that drive and enable firm sustain competitive advantage in a dynamic and competitive environment. Thus to effectively achieve strategic business objective, business firms must encourage employees to be innovative and continually learn new skill and try new method and processes (Goh, 2003). Nevertheless, to unfaillingly improve overall performance, firms need not only to be able to acquire the new knowledge, but must also be able to effectively apply the knowledge in continuous profitable innovation (Chaudhary and Batra, 2018b).

Although, extensive research exist on firms strategic learning and absorptive capacity (Ramachandran, 2018, Tian and Soo, 2018, Ojo, Raman, and Chong, 2017, Huan, Yongyuan, Sheng, and Qinchao,

2017, Wang and Byrd, 2017, Hailekiros and Renyong, 2016, Verma, Singh and Rao, 2014, Calantone, Cavusgil and Zhao 2002, Sinkula et al., 1997). Learning has been conceptualized as essential antecedent for absorptive capacity (Rezaei-Zadeh and Darwish, 2016). Camps, Alegre, and Torres, (2011) demonstrated the needs for exploring the relationship of organizational learning and absorptive capacity. However, to date research has not delved specifically to empirically examine the relationship between learning capability and absorptive capacity. Equally, the mediating role of absorptive capability on the relationship of learning capability and performance particularly in small and medium enterprises (SMEs) is quit limited.

LITERATURE REVIEW

The review of literature in this study were divided into; the concepts of the learning capability, absorptive capability, learning capability and performance, learning capability and absorptive capacity as well as absorptive capacity and SMEs performance.

Learning Capability

Learning is an important and complex activities that require management support dedicated to the acquisition and promoting behaviors pervading throughout the firm (Saedi, Dadfar, and Brege, 2014). Rezaei-Zadeh and Darwish, (2016) demonstrated firm learning as consisting of three components exploratory, transformative and exploitative learning. Firm's exploratory learning capability enhances acquisition capacity (Rezaei-Zadeh and Darwish, 2016), through promoting individual initiative, incentive, system and procedure to search and assess the incoming external knowledge (Aribi and

Dupouët, 2015). The transformative learning practice increases assimilation and transformative capability (Rezaei-Zadeh and Darwish, 2016), through inter-departmental and inter-firm communication and relationship (Aribi and Dupouët, 2015). While the exploitative learning capability expedite exploitation capacity (Rezaei-Zadeh and Darwish, 2016), through adaptation of the product to the market and interaction between various stakeholders (Aribi and Dupouët, 2015).

Learning capability has been defined as a systematic and organized firm's culture, commitment and practice that facilitate knowledge acquisition process toward support of fundamental business strategy (Hailekiros and Renyong, 2016). However, it has been established that the culture, behavior and commitment of a firm determine the efficiency at which firms learn (Verma, Singh and Rao, 2014, Calantone, Cavusgil and Zhao 2002, Sinkula et al., 1997). Pilar Jerez Gómez, Lorente, and Cabrera, (2004) stressed that learning capability comprises system thinking, learning commitment, openness and experimentation and the transfer and integration of knowledge. Organizational support for learning, absorptive capability, individual learning and sharing, the nature of the knowledge source and work environment, learning equilibrium and personal relationship determine firm's learning capability (Peansupap and Walker, 2009). Thus the complexity of learning sequences makes it a capability that is perfectly inimitable in explaining performance heterogeneity (Manley and Chen, 2015).

Chiva, Alegre, and Lapedra, (2007) recognized experimentation, interaction, risk taking, participative decision making and dialogue as essential factors influencing firm's learning capability. Experimentation designated the magnitude of concerned to which new ideas and suggestions are attended and treated in the firms (Chiva et al., 2007). Alegre and Chiva, (2008) defined external interaction as the ability of the firm to relate and associates with external partners like customers, competitors, suppliers, and government. Risk taking exhibits the firm's intensity to tolerate ambiguity, uncertainty, and errors (Chiva et al., 2007). Dialogue demonstrates continued communal inquiry into the assumption, uncertainties and process that make up the firm's daily experience (Alegre and Chiva, 2008, Chiva et al., 2007). Whereas participative decision making denotes the level to which employees participate actively in decision making concerning the affairs of the organization (Chiva et al., 2007). Therefore, organizational learning system enhances firm's knowledge transfer through team work and individual learning (Siachou and Gkorezis, 2014, Awang, Hussain, and Malek, 2013).

Absorptive Capacity

The effectiveness of the acquisition and transfer of knowledge depends on firm's absorptive capability, willingness to transfer the knowledge and the environment for learning (Aribi and Dupouët, 2015, Awang, Hussain, and Malek, 2013, Lin, Tan, and Chang, 2002). Firms need to develop effective absorptive capacity to attain and maintain continuous learning. Thus manager's ability, motivation and opportunity to improve knowledge acquisition and sharing in the organization maximizes firm's and employee knowledge sharing capabilities (Elbaz et al., 2018). This demonstrate the functions of the firm's absorptive capacity (Chaudhary and Batra, 2018, Rezaei-Zadeh and Darwish, 2016, Andersén, 2012, Zahra and George, 2002, Cohen and Levinthal, 1990). However, to develop absorptive capacity, firms invest adequately in research and development, networks, system and human capital (Rezaei-Zadeh and Darwish, 2016). Albort-Morant, et al., (2018) established that dedicating firm's resources to strengthen the ability to identify acquire and assimilate external knowledge is an effective practice to improve performance.

Absorptive capacity (AC) has been described as firm's ability to identify the value of new external knowledge and information, assimilate and apply it to business operation (Cohen and Levinthal, 1990). Zahra and George, (2002) demonstrated absorptive capability as consisting of the potential (acquisition and assimilation of knowledge) and realized (the transformation and exploitation of knowledge). Equally, the concept AC has be categorized in two perspectives "the assets and dynamic perspectives" (Roberts, et al., 2012). The asset view

consider absorptive capacity as an essentially knowledge base develop and transferred through path-dependency. While the dynamic view focuses on the identification, assimilation, transformation and application of knowledge. Nevertheless, business firms can employ both perspectives as complementary to effective enterprise resource planning and utilization (Nandi and Vakkayil, 2018).

Zahra and George, (2002) further showcase the concept of absorptive capability into four distinguish and complementary dimensions toward effective firm's operation and performance. It comprises the acquisition (firm's capability to identify and acquire essential knowledge from external source), assimilation (the firm's capacity to process, interpret, analyze and interpret and understand the knowledge obtained from outside the firm), transformation (the firm's capability to convert adapt and combine the external and new knowledge with the existing internal knowledge to understand the obtained external knowledge), transformation (the ability to modify and adapt external knowledge and combine new and existing knowledge to improve understanding and develop new perspectives) and the exploitation (the firm's capacity to integrate the newly knowledge acquired and transformed into competitive advantage).

Absorptive capacity have been acknowledge to be the function of firm's infrastructure and human capital (Cohen and Levinthal, 1990), innovation (Lau and Lo, 2015) and middle level management (Rafique, Hameed, and Agha, 2018). Firms can effectively foster the process of their absorptive capacity through effective knowledge management process, employees training on knowledge sharing activities and process (Rafique et al., 2018). Absorptive capability play crucial role in facilitating firm's ability to acquire and leverage external knowledge to influence performance (Wang, Li, and Huang, 2018, Whitehead, Zacharia, and Prater, 2016). Zahra and George, (2002) succinctly demonstrated that absorptive capacity is a multidimensional concept consisting of potential which includes knowledge acquisition and assimilation and the realized which cover transformation and exploitation of the knowledge acquired. The routines and processes underlying each capability if put together allow the firms to make changes that afford them much-needed flexibility in dynamic markets Zahra and George, (2002). Saeedi, Dadfar, and Brege, (2014), uphold that SMEs can develop and enhance absorptive capacity through learning to benefit from external knowledge.

Learning Capability and Performance

The challenges in the business environment today poised onto the business firms that conventionally source their core operational capabilities externally to where possible re-strategize and commit their resources and time on human capital to develop these capabilities and skills internally (Clements, 2010). Thus central to the firm learning process is the development of firm's and individual knowledge through transfer and integration of knowledge that is individually acquired (Pilar Jerez Gómez et al., 2004). Learning capability enable firms transform and creating organization that continuously expand their abilities to shape and change their future (Lam, Poon, & Chin, 2006). Firms that develop effective and continuously upgrade their learning capability achieve competitive advantage ahead of competitors (Clements, 2010, Bhatnagar, 2006, Goh, 2003). It is essential capability in enhancing innovation, employee's job satisfaction and competitiveness (Goh, Elliott, and Quon, 2012). Firm's learning capability create the foundation to develop and elaborate the concept of strategic learning which enable the achievement of competitive advantage and adaptive capability (Moon and Lee, 2015). This underscore the effectiveness of learning capability in firm's innovation as symbiotic (Limpibuntern and Johri, 2009). Thus the development of learning capability is not an end by itself, firm's pursued learning and knowledge as necessary conditions that explain changes in performance (Prieto and Revilla, 2006).

Learning capability enhances firm's radical innovation development process and facilitates organizational capability to support radical and incremental innovation (Peris-Ortiz, et al., 2018, Escrig, et al., 2016, Tohidi, Seyedaliakbar, and Mandegari, 2012). It is crucial to the nurturing of firm's strategic orientations (Hakala and

Kohtamäki, 2011). Alegre and Chiva, (2008) demonstrated that learning capability influence firm's emotional intelligent and employees job satisfaction. Learning capability positively influences firm's market and financial performance (Goh, et al., 2012, Tohidi et al., 2012, Limpibuntern and Johri, 2009, Bhatnagar, 2006, Prieto and Revilla, 2006) and operational performance (Visser, 2016). Learning capability significantly and positively relates to firm's quality culture and total quality management (Lam et al., 2006). Learning capability enhance the effect of transformational leadership on happiness at work (Salas-Vallina, et al., 2017), and positively influences the effects of human resource practice on performance (Hooi and Ngui, 2014). Thus:

H1: Learning capability positively relates to SMEs performance

Learning Capability and Absorptive Capacity

Due to the intensive competition and dynamic environment, the absorption of external knowledge becomes one of major challenges to business firms (Jung-Erceg, et al., 2007). Nevertheless, with effective organizational and social capital firm's develop sufficient absorptive capacity to exploit external knowledge (Aribi and Dupouët, 2015). Kamal and Flanagan, (2012) identified supply availability; cost affordability; demand; policies and regulation; infrastructure; employees attitude and motivation, labor readiness; culture and communication and sources of new knowledge as determinants of SMEs firm's absorptive capacity. Age, educational qualification, size and clear growth objective influence firm's absorptive capacity (Gray, 2006). While, Lowik, et al., (2017) highlights prior knowledge diversity, social cognitive and the firm's diversity in external network as factor explaining absorptive capacity.

Previous studies have confirmed the role of learning to firm's absorptive capacity and outcomes such as sharing and transfer of knowledge, innovation and performance (Tian and Soo, 2018). AC entails individual or firm's capabilities which depend on prior experience and need for cognition (Ojo et al., 2017). Tian and Soo, (2018) established that intrinsic motivation and commitment to learning contribute tremendously to the development of both individual and firm absorptive capacity. Therefore, top management must ensure that their firm and employees develop the capacity to identify, process and understand the external knowledge, combine it with the existing firm's knowledge and apply it to commercial ends (Elbaz et al., 2018).

The flow of knowledge and information from external sources in the firm is positively links to the firm's absorptive capacity (Miguélez and Moreno, 2015). Firm's learning ability, quality and structure enhance its capacity to acquire and absorb external knowledge (Jung-Erceg et al., 2007). Therefore, driving benefits from inter-firms linkage is a function of firm's absorptive capacity (Rafique et al., 2018, Miguélez and Moreno, 2015, Lin, Tan, and Chang, 2002). Cohen and Levinthal, (1990) maintained that business firm with greater absorptive capacity is considered to be cognitively handy to the external source of knowledge and information as they assimilate; value, exploit and apply the knowledge effectively toward commercial ends.

Encouraging dialogue, team work, debate and communication among employees is essential to the firm's process of knowledge transfer (Joaquín Alegre and Chiva, 2009). Certainly, with effective communication, all firms' related problems and opportunities can be communicated to functional departments within the firm's boundaries. Gathering, transfer and interaction of knowledge and experience of employees create a collective knowledge that can be preserve and use as distinctive capability (Joaquín Alegre and Chiva, 2013). Internal and external transfer of knowledge plays significant role in developing employee's cognitive ability. Thus the ability of SMEs firms to accept risks of new idea, and stand the possibility of mistake and error, improve employee's readiness to acquire new knowledge and initiate would be high. Through experimentation SMEs firms can encourage employees to promote and support new ideas and techniques from external and internal environment (Calantone et al., 2002). The benefits create by experimental errors in a firm includes risks tolerance, problem recognition and interpretation, prompting attention to the problem, search for solutions, and variety in organizational responses (Hailekiros and Renyong, 2016). The openness and interaction with

external bodies would enable SMEs firms to effectively respond to environmental changes and create new opportunities by improving firm's innovation strategy.

The limited size of employees in SMEs enables the development of mutual relationship among employees that create a sense of belonging and collectivism which lead to the understanding of workplace. Understanding work environment encourages employees to willingly learn, actively participate in decision making; develop more courage to experiment new ideas and techniques which may result into innovative product or processes that would improve performance and generate more revenue (Cohen and Levinthal, 1990). Familiarization of work environment and learning capability facilitate the acquisition; sharing and dissemination of new knowledge within the firm which increases the chances of innovating new product, process or solution to survive and succeed in a strongly competitive operating environment (Ho, Hazlina Ahmad, and Thurasamy, 2013). Thus this study hypothesis that:

H2: Learning capability positively relates to absorptive capacity

Absorptive Capacity and Performance

Business firms in developing economies are now frequently struggle to improve their performance at home and international market due largely to inefficient learning capability and supportive environment to effectively absorb, digest and exploit external knowledge and information acquired from the operating business environment (Wang et al., 2018, Andersén, 2015). Nevertheless, business firms nowadays cannot solely rely on their internal resources to achieve sustainable growth and compete favorably in the market, firms needs to develop the capacity to absorb and benefits from new knowledge and technologies (Kamal and Flanagan, 2012). Absorptive capacity is necessary requirement for effective knowledge transfer (Whitehead et al., 2016) and essential in leveraging external knowledge (Wang, et al., 2018, Andersén, 2012), enhance operational capabilities (Costa, et al., 2018, Daspit et al., 2014) which enable firm imitate and customize foreign product to satisfy the requirement of local customers (Zhang, et al., 2015) and generate profit for the firm (Ramachandran, 2018). It is a critical component of firm's strategic capabilities to grow, sustain and compete favorably (Elbaz et al., 2018).

Deng, (2010) professes that firm with inefficient absorptive capacity find it difficult to create, assimilate knowledge, thus ineffective in the development and application of explicit knowledge and exploitation of opportunities. Knowledge acquisition, assimilation and application are essential to rapid development of firm's mass customization capability (Zhang et al., 2015). AC is crucial to enabling business analytical capability to facilitate and enhance decision making (Wang and Byrd, 2017). Lev, et al., (2009) and Zahra and George, (2002) maintained that AC is the key to the firms integrating existing knowledge and improve the knowledge sharing and flow to achieve superior performance in changing environment.

To enhance performance and achieve profitability SMEs firms must strive to develop the ability to identify, acquire and absorb new knowledge to reap the benefits of first mover in this dynamic business environment. Firms with adequate capacity to manage and absorb the existing knowledge and that acquired from the external environment garner a better chance to differential innovativeness, effectiveness and efficiency as well as responsiveness (Mariano and Walter, 2015). Therefore, the capacity to absorb new knowledge and resources have becomes strategic activity to business firms aspiring to achieve and sustain competitive edge. AC enable firm to develop best manufacturing practices and streamline the integration of the manufacturing system (Liao, et al., 2010).

The concept of absorptive capability has been aligned to learning through creation, management, transfer and sharing of information and knowledge (Chaudhary and Batra, 2018a, Mariano and Walter, 2015). To increase absorptive capacity, firm's must aggressively engaged in related mechanism and processes aim at identifying and acquiring external knowledge (Mariano and Walter, 2015), be dependent on individual employee's absorptive capacities, firm's specific and path-dependent (Roberts et al., 2012). Absorptive capacity, ability and

willingness to transfer knowledge affect the stickiness in knowledge transfer (Huan et al., 2017). Absorptive capacity lowers the degree of stickiness of knowledge created by knowledge residency and facilitates the smooth process of knowledge transfer and the readiness for innovation of recipients (Huan et al., 2017).

The extant literature has confirmed that innovation alone without external knowledge cannot lead to the achievement of sustainable competitive performance (Taherparvar, Esmailpour, and Dostar, 2014, Cohen and Levinthal, 1990). Aljanabi, (2018) reported that AC significantly and positively influences SMEs firm’s technological innovation capability. AC enhances the performance and competitive position of firms (Elbaz et al., 2018). Absorptive capacity component “potential and realized” are essential factor in explaining firm’s performance (Chaudhary and Batra, 2018b). Chaudhary and Batra, (2018a) reported that absorptive capacity through strategic orientation influence small family business performance. Albort-Morant, et al., (2018) found that AC significantly and positively influences firm’s green innovation performance. Kim, et al., (2011) infers that absorptive capacity is crucial in complementing the influence of partners’ resources on the performance of firms in collaborative operation. AC significantly influence individual innovation performance (Lowik, Kraaijenbrink, and Groen, 2017). Therefore:

H3: Absorptive capacity positively relates to SMEs performance

H4: Absorptive capacity mediate the relationship between learning capability and SMEs performance

METHODOLOGY

The data of this study were collected from SMEs in Kano state northern Nigeria. The list of SMEs population operating in the state obtained from Kano state Chamber of Commerce, Mine and Agriculture (KACCIMA) as a sample frame. The list of SMEs obtained provides comprehensive information of the target firms which enables the accessibility of the respondent. Personal delivery and collection technique was adopted. A total of 575 questionnaires were administered to SMEs operating in the state. Subsequently a total of 217 questionnaires were retrieved, 9 questionnaires were identified as suspicious and consider not suitable for the analysis. Consequently, 206 valid questionnaires were used for in the analyses. Partial Least Square Structural Equation Model SmartPLS 3.0 version was employed to analyze the data.

A study variable can be measured with multiple or single items (Hair, et al., 2017). However, in this study all the variables were measured with multiple indicators. Specifically, there are 3 variables in this study: learning capability, absorptive capacity and SMEs performance. All the items used to measure the variables in this study were adapted from previous studies. Precisely learning capability were measured with seven items adapted from (Hailekiros and Renyong, 2016), Absorptive capacity were measured with nine (9) items adapted from Aribi and Dupouët, (2015), while SMEs performance were measured with six (6) items adapted from (Aminu, 2015). Similarly, all the variables were measured on a five-point likert scale ranging from (1 = Strongly disagree; 2 = Disagree; 3 = Neither agree nor disagree (Neutral); 4 = Agree; 5 = Strongly agree). The table 1 below presents the items used to measure the study variables.

Table 1. Measurements of the Study Variable

Codes	Item Description	Source
PER01	Compared to three years ago, our products/services reach a wider market	
PER02	Compared to three years ago, our enterprise sales volume has increased	
PER03	Compared to three years ago, our enterprise profits have increased	
PER04	Compared to three years ago, the level of complaints from customers has decreased	
PER05	Compared to three years ago, the number of employees has increased	
PER006	Compared to three years ago, the number of our customers has increased	

LC001	Our firm have been encouraging knowledge sharing among employees
LC002	Our firm encourages participatory decision making
LC003	Our firm management are committed to effective learning
LC004	Our firm is committed to internal dialogue
LC005	Our firm encourages experimentation and openness
LC006	Our firm always strive toward knowledge transfer
LC007	Our firm support new idea from employees
AC001	Our firm has established incentive to search external knowledge
AC002	Our firm has develop a system and procedure for searching external knowledge
AC003	Our firm promotes individual initiatives
AC004	Our firm has effective system and procedure for assessing incoming knowledge
AC005	Our firm has an established relational management procedure
AC006	Our firm maintains inter-firm communication
AC007	Our firm maintains links with external sources of knowledge
AC008	Our firm has the ability to interacts with different stakeholders
AC009	Our firm effectively adapts the product to the market

Note: PER = SMEs Performance; LC = Learning Capability; AC = Absorptive Capacity

ANALYSIS OF RESULT

Reliability and Validity

Reliability test evaluates the extents to which study outcomes from a research instrument is consistent over time. Reliability of survey measurement are evaluated with Cronbach’s alpha, Composite reliability and roh-A. The rule of thumb of reliability determination through Cronbach’s alpha established 0.6 as the acceptable threshold. Similarly a composite reliability of 0.70 was established as the acceptable value for establishing reliability of survey measurement. Average variance extracted is used to measure the convergent validity. The acceptable threshold for convergent validity is 0.5. Table 2 below demonstrates the statistical values of the study Cronbach’s alpha, roh-A, composite reliability and average variance extracted (AVE). All the requirements of the techniques used in this study; Cronbach’s alpha, roh-A, composite reliability and AVE have been satisfied.

Table 2. Reliability Test

Variables	Cronbach’s Alpha	Roh-A	Composite Reliability	Average Variance Extracted (AVE)
ACAP	0.831	0.866	0.883	0.608
LCAP	0.913	0.946	0.940	0.800
PERF	0.774	0.810	0.850	0.538

To assess the problem of multicollinearity amongst the study variables, the discriminant validity were evaluates. Discriminant validity examines the variance extracted value of the measurements under study with the square root estimate between the measurements. Discriminant validity was evaluated using Fornell-Lacker criterion which established that the average variance value of a particular variable must be greater than other correlated variable. From the table 3 below it is clearly seen that number in bold are the average value of various constructs. All variables have higher value than the corresponding correlated variable, therefore the condition of discriminant validity were satisfied in this study.

Table 3: Discriminant validity

Paths	ACAP	LCAP	PERF
ACAP	0.779		
LCAP	0.723	0.894	
PERF	0.638	0.619	0.733

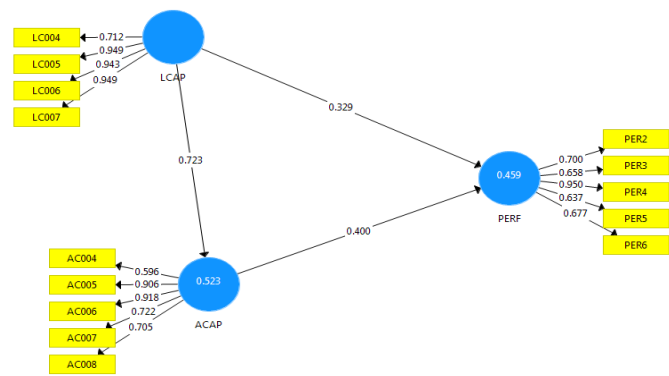


Figure1. PLS Algorithm

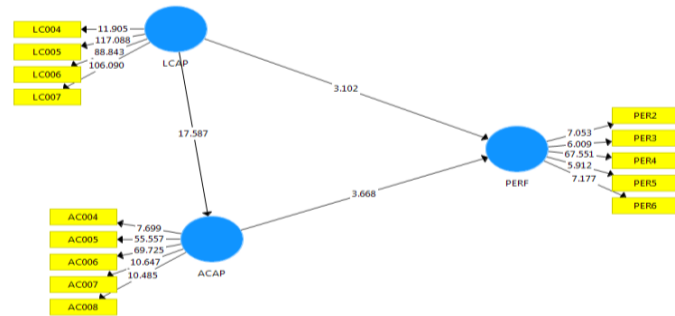


Figure 2. PLS Algorithm

Testing Hypotheses

To evaluate the hypotheses established in this study, a bootstrapping procedure of PLS-SEM were employed. 5000 bootstrapping resampling of 206 cases was used to obtain the statistical values on which the hypotheses were analyzed. Table 4 below presents the statistical results of the direct hypotheses testing. The statistical result shows a support for all the four (4) hypotheses tested. Specifically, from the table 4 below learning capability was found to be significantly and positively relates to the SMEs performance ($\beta = 0.621$; $t = 10.927$; $P < .000$). Similarly, learning capability exalt substantial positive influence on SMEs absorptive capacity as demonstrated by the result in table 4.3 below ($\beta = 0.725$; $t = 17.587$; $P < .000$). Equally, absorptive capacity significantly and positively impacted on SMEs performance ($\beta = 0.413$; $t = 3.668$; $P < .000$). Furthermore, Absorptive capacity was found to mediate the relationship between learning capability and the performance of SMEs as shown in table 4.4 below ($\beta = 0.300$; $t = 3.512$; $P < .000$).

Table 4. Direct Relationship of the Study Variables

Paths	Original Sample	Sample Mean	Standard Deviation	T-Statistic	P-Value
ACAP -> PERF	0.400	0.413	0.109	3.668	0.000***
LCAP -> ACAP	0.723	0.725	0.041	17.587	0.000***
LCAP -> PERF	0.619	0.621	0.057	10.927	0.000***

Note: *** indicates significant at 0.01

Table 5: Indirect Relationship of the Study Variables

Paths	Original Sample	Sample Mean	Standard Deviation	T-Statistic	P-Value
LCAP -> ACAP -> PERF	0.289	0.300	0.082	3.512	0.000***

Note: *** indicates significant at 0.01

Coefficient of Determination

This evaluates the coefficient of determination; otherwise known as R² (Hair et al., 2017). The value of R² indicates the degree of variation in the dependent variable accounted by the predictor variable

(Hair et al., 2017). Although the satisfactory coefficient value (R²) is subjected to research context (Hair, Ringle, & Sarstedt, 2013). Cohen, (1988) recommended that R² value of 0.02, .13 and .27 as small, moderate and substantial coefficient respectively.

Table 6: Coefficient of Determination (R-Square)

Paths	R ²	Decision Based on Cohen (1988)
LCAP -> ACAP	0.523	Substantial
LCAP -> ACAP -> PERF	0.459	Substantial

From the figure 2 and table 6 above it can be clearly observed that learning capability as the study independent variable accounts for 52 percent of changes in the mediating variable (absorptive capacity). Equally, learning capability and absorptive capability explain 46 percent of changes in the dependent variable (performance).

Effect Size

Effect size represent the relative influence of an individual variable on the study dependent variable accounted by the variation in the R² statistical value (Chin, 1998). Alternatively f² demonstrates the variance between R² included and R² excluded. A statistical value of 0.02; 0.15 and 0.35 indicates small, moderate and large effect size respectively (J. Cohen, 1988). Table 7 below demonstrated that all the paths have small effect sizes based on Cohen (1988).

Table 7. Effect Size

Paths	F ²	Decision Based on Cohen (1988)
ACAP -> PERF	0.141	Small
LCAP -> ACAP	1.095	Small
LCAP -> PERF	0.096	Small

DISCUSSION OF MAJOR FINDINGS

The results of study established that learning capability is crucial to SMEs performance. This demonstrated that the higher the SMEs firms learning capability the effective the SMEs knowledge generative processes to achieve superior performance in terms of expanding market share, sales volume, profitability and customer satisfaction. The support for this hypotheses confirmed the results from previous studies which demonstrated that learning capability positively related to firms performance (Peris-Ortiz, et al. 2018, Salas-Vallina, et al., 2017, Hailekiros and Renyong, 2016, Escrig, et al, 2016, Visser, 2016, Hooi and Ngui, 2014, Tohidi, et al., 2012 Goh, et al., 2012, Tohidi et al., 2012, Hakala and Kohtamäki, 2011, Limpibuntern and Johri, 2009, Alegre and Chiva, 2008, Bhatnagar, 2006, Prieto and Revilla, 2006, Lam et al., 2006). Therefore, the study validates that learning capability is essential inimitable resources that facilitates the attainment of SMEs competitive advantage in operating market environments.

Furthermore, the finding of the study discovers that learning capability was significant valuable resource that enhances SMEs knowledge acquisition, assimilation, transformation and exploitation capacities. This shows that learning capability contribute tremendously to the development of both individual and firm absorptive capacity. The findings support the views and outcomes from several previous studies (Tian and Soo, 2018, Rafique et al., 2018, Elbaz et al., 2018, Ojo et al., 2017, Miguélez and Moreno, 2015, Jung-Erceg et al., 2007, Lin, et al., 2002, Cohen and Levinthal, 1990). Equally, the outcomes of this study confirmed that absorptive capacity positively and significantly affects SMEs performance. This is in support of the extant literature (Wang, et al., 2018, Costa, et al., 2018, Ramachandran, 2018, Elbaz et al., 2018 Wang and Byrd, 2017, Whitehead et al., 2016, Zhang, et al., 2015 Daspit and Staci, 2014 Zhang, et al., 2015, Andersén, 2012, Deng, 2010 Lev, et al., 2009) and Zahra and George, 2002). Lastly, absorptive capacity was found to mediate the relationship between learning capability and the performance of SMEs.

CONCLUSION

To improve performance and achieve sustainable competitive position in this dynamic operating environment SMEs firms must endeavor to develop an organization capable of experimenting new ideas, takes calculated risk, interact with external environment, encourages dialogue among employees and consult and accept employee's suggestion while taking decision. This can however accomplish effectively if SMEs firms develop the ability to identify, acquire, assimilate, transform and apply new knowledge to reap the benefits of first mover in this dynamic business environment. Firms with adequate capacity to manage and absorb the existing internal knowledge and that acquired from the external environment stand a better chance of differential performance, effectiveness and efficiency as well as responsiveness to frequent market demand.

References:

- Albort-Morant, G., Leal-Rodríguez, A. L., & De Marchi, V. (2018). Absorptive capacity and relationship learning mechanisms as complementary drivers of green innovation performance. *Journal of Knowledge Management*, 22(2), 432–452. <https://doi.org/10.1108/JKM-07-2017-0310>
- Ajonbadi, H. A. (2015). Technology Drive to Small and Medium Enterprises (SMEs) Growth in Nigeria. In *5th Conference of Directors of Entrepreneurship Development Centres* (pp. 1–15). Ilorin.
- Alegre, J., & Chiva, R. (2008). Emotional intelligence and job satisfaction: The role of organizational learning capability. *Personnel Review*, 37(6), 680–701.
- Alegre, J., & Chiva, R. (2009). Organizational Learning Capability and Job Satisfaction: An Empirical Assessment in the Ceramic Tile Industry. *British Journal of Management*, 20, 323–340. <https://doi.org/10.1111/j.1467-8551.2008.00586.x>
- Alegre, J., & Chiva, R. (2013). Linking Entrepreneurial Orientation and Firm Performance: The Role of Organizational Learning Capability and Innovation Performance. *Journal of Small Business Management*, 51(4), 491–507. <https://doi.org/10.1111/jsbm.12005>
- Aljanabi, A. R. A. (2018). The mediating role of absorptive capacity on the relationship between entrepreneurial orientation and technological innovation capabilities. *International Journal of Entrepreneurial Behavior & Research*, 24(4), 818–841. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Aminu, I. M. (2015). *Mediating Role of Access To Finance and Moderating Role of Business Environment on the Relationship Between Strategic Orientation Attributes and Performance of Small and Medium Enterprises in Nigeria*. Universti Utara Malaysia.
- Andersén, J. (2012). Protective capacity and absorptive capacity: Managing the balance between retention and creation of knowledge-based resources. *The Learning Organization*, 19(5), 440–452. <https://doi.org/http://dx.doi.org/10.1108/TLO-05-2013-0024>
- Andersén, J. (2015). The absorptive capacity of family firms: How familiness affects potential and realized absorptive capacity. *Journal of Family Business Management*, 5(1), 73–89. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Aribi, A., & Dupouët, O. (2015). The role of organizational and social capital in the firm's absorptive capacity. *Journal of Knowledge Management*, 19(5), 987–1006. <https://doi.org/10.1108/JKM-05-2015-0169>
- Awang, A. H., Hussain, M. Y., & Malek, J. A. (2013). Knowledge transfer and the role of local absorptive capability at science and technology parks. *Learning Organization*, 20(4–5), 291–307. <https://doi.org/10.1108/TLO-12-2011-0059>
- Bhatnagar, J. (2006). Measuring organizational learning capability in Indian managers and establishing firm performance linkage. *The Learning Organization*, 13(5), 416–433. <https://doi.org/http://dx.doi.org/10.1108/TLO-05-2013-0024>
- Calantone, R. J., Cavusgil, S. T., & Zhao, Y. (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial Marketing Management*, 31(6), 515–524. [https://doi.org/10.1016/S0019-8501\(01\)00203-6](https://doi.org/10.1016/S0019-8501(01)00203-6)
- Camps, J., Alegre, J., & Torres, F. (2011). Towards a methodology to assess organizational learning capability: A study among faculty members. *International Journal of Manpower*, 32(5/6), 687–703. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Chaudhary, S., & Batra, S. (2018a). Absorptive capacity and small family firm performance: exploring the mediation processes. *Journal of Knowledge Management*, 22(6), 1201–1216. <https://doi.org/10.1108/JKM-01-2017-0047>
- Chaudhary, S., & Batra, S. (2018b). Proposing a sequential operationalization of absorptive capacity. *Measuring Business Excellence*, 22(1), 64–74. <https://doi.org/10.1108/MBE-04-2017-0014>
- Chin, W. W. (1998). Commentary: Issues and opinion on structural equation modeling. *MIS Quarterly*, 22(1), 1–16. <https://doi.org/Editorial>
- Chiva, R., Alegre, J., & Lapiedra, R. (2007). Measuring organisational learning capability among the workforce. *International Journal of Manpower*, 28(3/4), 224–242. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Clements, M. D. (2010). Building learning capability: Enhancing the learning talent chain by connecting environments. *Development and Learning in Organizations: An International Journal*, 24(1), 7–9. <https://doi.org/10.1108/14777281011010442>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.).
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(3), 128–152. <https://doi.org/10.1177/0149206310369939>
- Costa, J. C. N. da, Camargo, S. M., Toaldo, A. M. M., & Didonet, S. R. (2018). The role of marketing capabilities, absorptive capacity, and innovation performance. *Marketing Intelligence & Planning*, 36(4), 410–424. <https://doi.org/10.1108/02634501011078138>
- Daspti, J. J., & Staci M. Zavattaro. (2014). Integrating innovation and absorptive capacity into the place branding process: A capability-based perspective. *Journal of Place Management and Development*, 7(3), 206–224.
- Deng, P. (2010). Absorptive capacity and a failed cross-border M&A. *Management Research Review*, 33(7), 673–682. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Elbaz, A. M., Agag, G. M., & Alkathiri, N. A. (2018). How ability, motivation and opportunity influence travel agents performance: the moderating role of absorptive capacity. *Journal of Knowledge Management*, 22(1), 119–141. <https://doi.org/10.1108/JKM-07-2017-0308>
- Escrig, E. D., Broch, F. F. M., Gómez, R. C., & Alcamí, R. L. (2016). How does altruistic leader behavior foster radical innovation? The mediating effect of organizational learning capability. *Leadership & Organization Development Journal*, 37(8), 1056–1082.
- Goh, S. C. (2003). Improving organizational learning capability: Lessons from two case studies. *The Learning Organization*, 10(4), 216–227. <https://doi.org/10.1108/09696470310476981>
- Goh, S. C., Elliott, C., & Quon, T. K. (2012). The relationship between learning capability and organizational performance: A meta-analytic examination. *The Learning Organization*, 19(2), 92–108. <https://doi.org/http://dx.doi.org/10.1108/TLO-05-2013-0024>
- Gray, C. (2006). Absorptive capacity, knowledge management and innovation in entrepreneurial small firms. *International Journal of Entrepreneurial Behavior & Research*, 12(6), 345–360. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Hailekiros, G. S., & Remyong, H. (2016). The effect of organizational learning capability on firm performance: Mediated by technological innovation capability. *European Journal of Business Management*, 8(30), 87–95.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1–2), 1–12. <https://doi.org/10.1016/j.lrp.2013.01.001>
- Hair, J. F., Tomas, H. G. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. SAGE.
- Hakala, H., & Kohtamäki, M. (2011). Configurations of entrepreneurial-customer- and technology orientation: differences in learning and performance of software companies. *International Journal of Entrepreneurial Behaviour & Research*, 17(1), 64–81. <https://doi.org/10.1108/13552551111107516>
- Ho, T. C. F., Hazlina Ahmad, N., & 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. <https://doi.org/10.1108/BSS-08-2012-0045>
- Hooi, L. W., & Ngui, K. S. (2014). Enhancing organizational performance of Malaysian SMEs: The role of HRM and organizational learning capability. *International Journal of Manpower*, 35(7), 973–995.
- Huan, H., Yongyuan, M., Sheng, Z., & Qinshao, D. (2017). Characteristics of knowledge, people engaged in knowledge transfer and knowledge stickiness: evidence from Chinese R&D team. *Journal of Knowledge Management*, 21(6), 1559–1579. <https://doi.org/10.1108/JKM-02-2017-0054>
- Jung-Ercep, P., Pandza, K., Armbruster, H., & Dreher, C. (2007). Absorptive capacity in European manufacturing: A Delphi study. *Industrial Management & Data Systems*, 107(1), 37–51. <https://doi.org/10.1108/eb057530>
- Kamal, E. M., & Flanagan, R. (2012). Understanding absorptive capacity in Malaysian small and medium sized (SME) construction companies.

- Journal of Engineering, Design and Technology*, 10(2), 180–198. <https://doi.org/10.1108/EL-01-2014-0022>
- Kim, C., Zhan, W., & Krishna Erramilli, M. (2011). Resources and performance of international joint ventures: the moderating role of absorptive capacity. *Journal of Asia Business Studies*, 5(2), 145–160. <https://doi.org/10.1108/15587891111152311>
- Lam, V. M. Y., Poon, G. K. K., & Chin, K. S. (2006). The link between organizational learning capability and quality culture for total quality management: A case study in vocational education. *Asian Journal on Quality*, 7(1), 195–205. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Lau, A. K. W., & Lo, W. (2015). Regional innovation system, absorptive capacity and innovation performance: An empirical study. *Technological Forecasting and Social Change*, 92, 99–114. <https://doi.org/10.1016/j.techfore.2014.11.005>
- Lev, S., Fiegenbaum, A., & Shoham, A. (2009). Managing absorptive capacity stocks to improve performance: Empirical evidence from the turbulent environment of Israeli hospitals. *European Management Journal*, 27(1), 13–25. <https://doi.org/10.1016/j.emj.2008.04.001>
- Liao, K., Tu, Q., & Marsillac, E. (2010). The role of modularity and integration in enhancing manufacturing performance: An absorptive capacity perspective. *Journal of Manufacturing Technology Management*, 21(7), 9818–838. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Limpibuntern, T., & Johri, L. M. (2009). Complementary role of organizational learning capability in new service development (NSD) process. *The Learning Organization*, 16(4), 326–348. <https://doi.org/http://dx.doi.org/10.1108/TLO-05-2013-0024>
- Lin, C., Tan, B., & Chang, S. (2002). The critical factors for technology absorptive capacity. *Industrial Management and Data Systems*, 102(5–6), 300–308. <https://doi.org/10.1108/02635570210431993>
- Lowik, S., Kraaijenbrink, J., & Groen, A. (2017). Antecedents and effects of individual absorptive capacity: A micro-foundational perspective on open innovation. *Journal of Knowledge Management*, 21(6). <https://doi.org/10.1108/JKM-09-2016-0410>
- Manley, K., & Chen, L. (2015). Collaborative learning model of infrastructure construction: A capability perspective. *Construction Innovation*, 15(3), 355–377. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Mariano, S., & Walter, C. (2015). The construct of absorptive capacity in knowledge management and intellectual capital research: Content and text analyses. *Journal of Knowledge Management*, 19(2), 372–400. <https://doi.org/10.1108/JKM-08-2014-0342>
- Miguélez, E., & Moreno, R. (2015). Knowledge flows and the absorptive capacity of regions. *Research Policy*, 44(4), 833–848. <https://doi.org/10.1016/j.respol.2015.01.016>
- Moon, H., & Lee, C. (2015). Strategic learning capability: Through the lens of environmental jolts. *European Journal of Training and Development*, 39(7), 628–640. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Nandi, M. L., & Vakkayil, J. (2018). Absorptive capacity and ERP assimilation: The influence of company ownership. *Business Process Management Journal*, 24(3), 695–715. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Ojo, A. O., Raman, M., & Chong, C. W. (2017). Microlevel antecedents of absorptive capacity in joint project engineering teams. *Management Research Review*, 40(9), 990–1006. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Oluwatobi, S. O. (2015). Innovation-driven economic development model: A way to enable competitiveness in Nigeria. *Advances in Sustainability and Environmental Justice*, 17, 197–218. <https://doi.org/10.1108/S2051-50302015000017017>
- Peansupap, V., & Walker, D. H. T. (2009). Exploratory factors influencing design practice learning within a Thai context. *Engineering, Construction and Architectural Management*, 16(3), 238–253. <https://doi.org/http://dx.doi.org/10.1108/09699981111098711>
Downloaded
- Peris-Ortiz, M., Devece-Carañana, C. A., & Navarro-García, A. (2018). Organizational learning capability and open innovation. *Management Decision*, 28(5), 577–609. <https://doi.org/10.1108/JFM-03-2013-0017>
- Pilar Jerez Gómez, J. J., Lorente, C., & Cabrera, R. V. (2004). Training practices and organisational learning capability: Relationship and implications. *Journal of European Industrial Training*, 28(2/3/4), 234–256. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Prieto, I. M., & Revilla, E. (2006). Learning capability and business performance: A non-financial and financial assessment. *The Learning Organization*, 13(2), 166–185. <https://doi.org/http://dx.doi.org/10.1108/TLO-05-2013-0024>
- Rafique, M., Hameed, S., & Agha, M. H. (2018). Commonality, conflict, and absorptive capacity: Clarifying middle manager roles in the pharmaceutical industry. *Management Decision*, 56(9), 1904–1916.
- Ramachandran, I. (2018). Triggering absorptive capacity in organizations: CEO succession as a knowledge enabler. *Journal of Knowledge Management*, 22(8), 1844–1864. <https://doi.org/10.1108/JKM-03-2018-0192>
- Rezaei-Zadeh, M., & Darwish, T. K. (2016). Antecedents of absorptive capacity: A new model for developing learning processes. *The Learning Organization*, 23(1), 77–91. <https://doi.org/http://dx.doi.org/10.1108/TLO-05-2013-0024>
- Roberts, N., Galluch, P. S., Dinger, M., & Grover, V. (2012). Absorptive capacity and information systems research: Review, synthesis, and directions for future research. *MIS Quarterly*, 36(2), 625–648. <https://doi.org/10.2307/3250951>
- Saeedi, M. R., Dadfar, H., & Brege, S. (2014). The impact of inward international licensing on absorptive capacity of SMEs. *International Journal of Quality and Service Sciences*, 6(2/3), 164–180. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Salas-Vallina, A., López-Cabrales, Á., Alegre, J., & Fernández, R. (2017). On the road to happiness at work (HAW): Transformational leadership and organizational learning capability as drivers of HAW in a healthcare context. *Personnel Review*, 46(2), 314–338. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Salisu, B. (2018). *The Moderating Role of Infrastructure Facility on the Relationship between Organizational Capability and Performance*. Universiti Utara Malaysia.
- Siachou, E., & Gkorezis, P. (2014). Do empowered employees absorb knowledge?: An empirical investigation of the effects of psychological empowerment dimensions on absorptive capacity. *Management Research Review*, 37(2), 130–150. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Sinkula, J. M., Baker, W. E., & Noordewier, T. (1997). A framework for market-based organizational learning: Linking value, knowledge and behavior. *Journal of the Academy of Marketing Science*, 25(4), 305–318.
- SMEDAN, & NBS. (2013). *SMEDAN and National Bureau of Statistics Collaborative Survey: Selected Findings*. Retrieved from http://www.smedan.gov.ng/images/SMEDAN_2013_ANNUAL_REPORT.pdf
- Taherparvar, N., Esmaeilpour, R., & Dostar, M. (2014). Customer knowledge management, innovation capability and business performance: A case study of the banking industry. *Journal of Knowledge Management*, 18(3), 591–610. <https://doi.org/10.1108/JKM-11-2013-0446>
- Tian, A. W., & Soo, C. (2018). Enriching individual absorptive capacity. *Personnel Review*, 47(5), 1116–1132. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Tohidi, H., Seyedaliakbar, S. M., & Mandegari, M. (2012). Organizational learning measurement and the effect on firm innovation. *Journal of Enterprise Information Management*, 25(3), 219–245. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Verma, P., Singh, B., & Rao, M. K. (2014). Developing innovation capability: The role of organizational learning culture and task motivation. *Global Journal of Finance and Management*, 6(6), 575–582.
- Visser, M. (2016). Organizational learning capability and battlefield performance: The British army in world war II. *International Journal of Organizational Analysis*, 24(4), 573–590. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Wang, L., Li, J., & Huang, S. (2018). The asymmetric effects of local and global network ties on firms' innovation performance. *Journal of Business and Industrial Marketing*, 33(3), 377–389. <https://doi.org/10.1108/JBIM-10-2016-0252>
- Wang, Y., & Byrd, T. A. (2017). Business analytics-enabled decision-making effectiveness through knowledge absorptive capacity in health care. *Journal of Knowledge Management*, 21(3), 517–539. <https://doi.org/10.1108/JKM-08-2015-0301>
- Whitehead, K. K., Zacharia, Z. G., & Prater, E. L. (2016). Absorptive capacity versus distributive capability: The asymmetry of knowledge transfer. *International Journal of Operations & Production Management*, 36(10), 1308–1332. <https://doi.org/>
- Zahra, S. A., & George, G. (2002). Absorptive Capacity: A review, Reconceptualisation, and extension. *Academy of Management Review*, 17(2), 185–203. <https://doi.org/10.2514/1.J054260>
- Zhang, M., Zhao, X., Lyles, M. A., & Guo, H. (2015). Absorptive capacity and mass customization capability. *International Journal of Operations & Production Management*, 35(9), 1275–1294. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>