

# Strategic Orientation, Knowledge Management and Performance of Telecommunication Sector

Niyi Israel Akeke<sup>1</sup>  
Peter Olatunji Olayiwola<sup>2</sup>

## *Abstract*

*The study examined the mediating role of knowledge management in the relationship between strategic orientation and firm performance in southwest Nigeria using a data set of 300 customers and 57 managers of the telecommunication firms which include the customer care staff members. The collected data was analysed using mediation analysis. The results indicate that strategic orientation is positively related to performance by 0.37, while knowledge management is directly related to performance by 0.16. On a direct basis, the result shows that strategic orientation has larger effect on performance than the direct effect of knowledge management on performance. The results showed further that the introduction of knowledge management as a mediating variable improves the relationship between strategic orientation and performance by 0.04. The results lead to the conclusion that knowledge management is nearly indispensable in the role of strategic orientation as a necessary factor in the performance drive of firms.*

*Keyword: Strategic orientation; Knowledge management; Performance; Structural equation modeling*

*JEL Codes: MO, M10, M19*

## **1. Introduction**

There is no doubt that the telecommunication sector plays a crucial role in providing the requisite tools for growing the economy of nations. This sector has not only been adjudged as one of the major support services needed to promote growth and modernization across all other sectors of economy, but also acts in its own right as an enabler to drive socio-economic transformation as well as bringing out radical changes in the way people transact commercial activities and work (Danbatta, 2017). For instance, the country's telecommunication sector was the largest contributor to growth in 2012, expanding by 34.2 percent. The percentage

---

<sup>1</sup> Department of Business Administration, Faculty of Management Sciences, Ekiti State University, Nigeria, Corresponding e-mail: niyi.akeke@eksu.edu.ng; Phone Line: 08035645876

<sup>2</sup> Department of Accounting and Business Administration, Distance Learning Institute, University of Lagos, Nigeria, e-mail: polayiwola@unilag.edu.ng; Phone Line: 08023005464

contribution of Telecommunication sector to GDP was 7.05 percent in 2012, higher than financial services and manufacturing sectors (Business Day, 2013). Accordingly, the share of Nigeria's telecommunication sector in GDP for the end of 2017 was 9.16%.

Nonetheless, this sector is faced with many challenges which affect its performance. In order to perform and attain sustainable competitive advantage, Hilman and Kalippen (2014), Masa'deh, Tirhini, Al-Dmour and Obeidat (2015) and Shanak (2013) opine that firms need to develop and implement effective strategies that exploit opportunities in the operating environment while capitalizing on available resources and capabilities. The strategy which firm adopts can be used to respond to changes in the business environment, However, O'Regan and Ghobadian (2005) note that not all firms respond to the operating environment the same way and that the responses to the operating environment can be categorized according to the strategic orientation of the enterprise.

Strategic orientation is a systematic approach to strategic management and as such it determines the method of strategic management. It is a body of research in strategic management domain which focuses on identifying and examining the relationship that exists between firm strategy and its performance potentials (Avci, *et al.*, 2011).

While studies have been carried out with regard to establishing the link between firms' strategic orientation and performance, the outcome of the studies have been contradictory and deficient perhaps because they failed to compliment with some internal organisational practices that will create synergies notably the role of knowledge management system which has been adjudged by Audretsch and Thurik (2004) as the best strategy that business can use to improve their competitive level. Knowledge management is not only an important internal resource for a firm, but also serves as a basic source of competitive advantage (Conner & Prahalad, 1996; Grant, 1996; Gold, Malhotra & Segars, 2001). The above shortcomings in the literature, therefore, complicate the assessment of the robustness of concepts used to support the model that links strategic orientation to firm performance. An important message from these studies, especially for the Nigerian telecommunication sector, is that simply examining the link between strategic orientations (SO) and performance does not provide a complete picture of performance of firms. Hence, future research has been urged to control for relationship between strategic orientation and performance of firms through knowledge management strategies employed by organisations (Lopez-Nicolas & Merono-Cerdan, 2011). Additionally, even though studies are vast on strategic orientation and performance relationships, it has been reported that firms need to pursue complimentary organisational practices that create

synergy (Milgron & Roberts, 1995). Aside, firms are also encouraged to ensure the alignment of different sets of capabilities for sustainable performance (Masa'deh & Shanak, 2012).

Furthermore, several studies that focus on the direct effect of each specific strategic orientation factors of market, entrepreneurial, technology and learning orientation on performance, ignore the consideration for the possibility of interaction of each of these factors as a single functioning management system. More so, the management of knowledge system in the orientation and the performance linkage could determine the sustainability of performance attainment of firms. But, this has not been given attention in the literature. Consequently, the research sought to answer the question of whether strategic orientation mediated by knowledge management system affect the performance of telecommunication firms in Nigeria.

## 2. Literature Review

### Strategic orientation

Strategic orientation involves a broad strategic outline executed by firm in creating customer value for achieving competitive superiority (Akeke, 2019). It is the tendency to engage in activities designed to help facilitate the creation of value to meet customers' needs. According to Wheelen and Hunger (2012), strategic orientation reflects the development of less routine and mechanistic but flexible innovative strategies in order to adjust to the dynamics of the market. It is about the basic direction and courses of action charted that yield better firm profitability. The literature has identified several dimensions of strategic orientation such as entrepreneurial orientation, technological orientation, customer orientation, learning orientation, market orientation, cost orientation (Gatignon & Xuereb, 1997; Zhou, Yim & Tse, 2005).

Entrepreneurial orientation is a tendency, willingness and ability of firm owners to always reach out to new markets, search to exploit new opportunities and show market dynamism in order to bring about change as a result (Zahra, 2008; Tutar et al., 2015; Zehir, Can & Karaboga, 2015). It is about how business owners proactively put up a posture to pursue vigorously market development, penetrate existing market with new products and services and product development which lead to sustainable performance. It reflects practices and decision making styles of managers to act entrepreneurially (Real, Roldan & Leal, 2014).

Technological orientation reflects a firm's capacity and determination to seek to acquire and have technological superiority for introducing new production process to respond to customers' new needs (Hult, Hurley & Knight, 2004). This shows

that firm which inclines to technology will have increased tendency in implementing novel products than rivals which Gao, Zheng and Yin (2007) argue helps in positively leading to superior firm performance.

Market orientation reflects the effective and efficient creating the required behavior for value for customers toward achieving superior firm performance (Narver & Slater, 1990). It reflects not only firm's ability to be aware of customers' expectations and needs, but also satisfying them and making them feel worthy (Kohli & Jaworski, 1990). Market orientation requires that firm should monitor changing customers' needs, determine the impact the changes on customer satisfaction and implement strategies that build firm competitive advantage (Mahmoud, Blankson, Owus-Frimpong, Nwankwo & Trang, 2016). Micheels and Gov (2010) note that being market-oriented requires that firms will show sensitivity and aggressively pursue opportunities more than competitors whose market orientation are low in order to continuously introduce new products and services for satisfying market conditions.

### **Knowledge Management**

Zack (1999) asserts that the most important organisation's strategic resource is knowledge. Firms need to seek knowledge information about their customers, competitors, employees, suppliers, industry and general environments they operate in order to stay competitive. This assertion was corroborated by Byukusenge, Munene and Orobia (2016) that to remain competitive, managers of business must focus their efforts on the management of their knowledge resources as it will increase profits, sales growth and market share. The capability to contribute to the value of firm for instance, when knowledge is produced and distributed to all and sundries in organization has been documented, but when it is not appropriately managed brings its irrelevance and uselessness for organisations (Choi et al., 2006; Yusof & Abu-Bakar, 2012). Thus, knowledge management is not only an important resource for a firm, but also serves as a basic source of competitive advantage (Jaworski & Kohli, 1993; Conner & Prahalad, 1996; Grant, 1996; Chirico, 2008; Milton, Shadbolt, Cottam & Hammersely, 1999 in Torabi & El-Den, 2017).

Many different scholars and authors on knowledge management have given it different terminologies. Bukowitz and Williams (1999) define knowledge management as the procedure used by the organisation to create capital from its intellectual or knowledge-based assets. Darroch (2005) considers it as the process of acquiring, sharing and applying knowledge to enhance business performance. In like manner, Chawla and Joshi (2010) describe knowledge management as the identification and analysis of available and required knowledge in order to achieve

organisational objectives. Bhatti and Qureshi (2007) see knowledge management as efforts to explore the tacit and explicit knowledge of individuals, groups and organizations and to convert this treasure into organisational assets that are used by managers to make organisational decisions. From the foregoing, knowledge management is a business strategy for acquiring, transferring, transmitting, storing and executing knowledge to build the competency and efficiency of employees for enhanced organisational performance (Dahiya, Gupta & Jain 2012).

Past researches have used different dimensions of knowledge management (Spender, 1996; Wiig et al., 1997; DeLong, 1997; Teece, 1998; Skyrme, 2001; Gold et al., 2001; Darroch, 2005; Zack et al., 2009), however, they were looking at same thing from different lenses. This study is using Gold et al (2001) four dimensions of knowledge management capability process architecture.

### **Organisational Performance**

Organisational performance is an index that gauge how well a firm is doing in its operations. It is the quality and quantity of group work attainment (Schermerhorn et al., 2002). Thus, firms that perform well generate advantage for the business as well as the stakeholders (Mdrid et al., 2007). The consensus findings of past studies on organizational performance indicates no one best measure of overall organizational performance can be used because in the changing competitive environment it will look thin and capture only one part of organizational performance. This therefore, leads to its multidimensional nature in order to consider the various stakeholders' interests (Richard, Devinney, Yip & Johnson, 2009).

### **3. Methodology**

The study employs cross sectional descriptive design as the study seeks to describe the effect of strategic orientations and knowledge management on the performance of the telecommunication firms in Nigeria. Three states with high population which may affect the number of telecommunication subscriptions were focused. The operational headquarters of the Telecommunication firms are also located in one of the States (Lagos State). The population of interest in the telecom firms includes the marketing managers, business development managers, operations managers and IT managers from each of the 4 major telecommunication companies in each of the three (3) states to be covered. In total the study targeted a population of 48 telecommunication managers. Three (3) customer care staff from each state will be included in the population. Due to the size of the targeted population, all the 57 respondents from the telecom firms will be sampled. Since the population of customers is also infinite, random sampling

will be used to select 100 respondents from each of the sample states. In total, 300 customers will be randomly selected.

The variable of strategic orientation was measured using market orientation, entrepreneurial orientation, technology orientation and learning orientation (Panda, 2014). Knowledge management measurement was adapted from Wang et al. (2009) while organizational performance, represented by non-financial performance, was adapted from Hernaus, Bach and Vuksic (2012). The first procedure will involve assessment of measurement models via confirmatory factor analysis (CFA). Hierarchical regression model will also be used to account for the mediating effect of knowledge management constructs on the empirical linkage between strategic orientation and performance of telecommunication firms.

#### 4. Results and Discussion

##### **The mediating role of knowledge management in the relationship between strategic orientation and performance**

The results of analysis of the mediation role of knowledge management are graphically illustrated in figures 1 and 2. The mediation process requires the existence of direct relationship between strategic orientation (independent) and performance (dependent) on one hand, and an indirect relationship between strategic orientation (independent) and knowledge management (mediator), and between knowledge management (mediator) and performance (dependent).

The result in figure 1 depicts the relationship between strategic orientation and performance; and between KM and performance in a direct way as a mediation process. The results show that strategic orientation is positively related to performance by 0.37 or 37%, while knowledge management is directly related to performance by 0.16 or 16%. On a direct basis, the result shows that strategic orientation has larger effect on performance than the direct effect of knowledge management on performance.

The effect of mediation is depicted in figure 2. The introduction of knowledge management as a mediating variable improves the relationship between strategic orientation and performance by 0.04 or 4% suggesting the need for telecommunication firms to pay relevant attention to knowledge management in their interaction of strategic orientation with performance objectives of the firms. Indirectly or as a mediator, knowledge management exerts larger influence on performance of telecommunication firms by 55%. The overall effect of strategic orientation on performance using knowledge management as a mediator is up to 75%. This further implies that knowledge management is nearly indispensable

in the role of strategic orientation as a necessary factor in the performance drive of firms.

The results bring up a number of empirical issues. Individually, strategic orientation influences performance in the telecommunication sector by 37%. In isolation, knowledge management plays significant role in the performance of the telecommunication sector by 16%. As a mediator, knowledge management exerts up to 55% influence on the performance outcome of the telecommunication firms suggesting a possible catalytic role in the strategic orientation framework. The influence of strategic orientation becomes higher when interacted with knowledge management in the performance framework. It is thus very instructive for telecommunication firms to look into the dimensions of the two variables in their performance drive. This result finds consistency with Conner and Prahalad (1996), Zack (1999), Gold *et al* (2001) and Audretsch and Thurik (2004) affirming knowledge management is not only the best strategy that business use to improve competitive level, but also an important internal strategic resource for a firm's basic source of competitive advantage. In addition, Masa'deh and Shanak (2012) argue that when there is alignment of different sets of firm's capabilities, sustainable performance is attained. Furthermore, Hou and Chen (2010) conclude that knowledge management could increase performance most especially if it more focused on knowledge of the market and business environment.

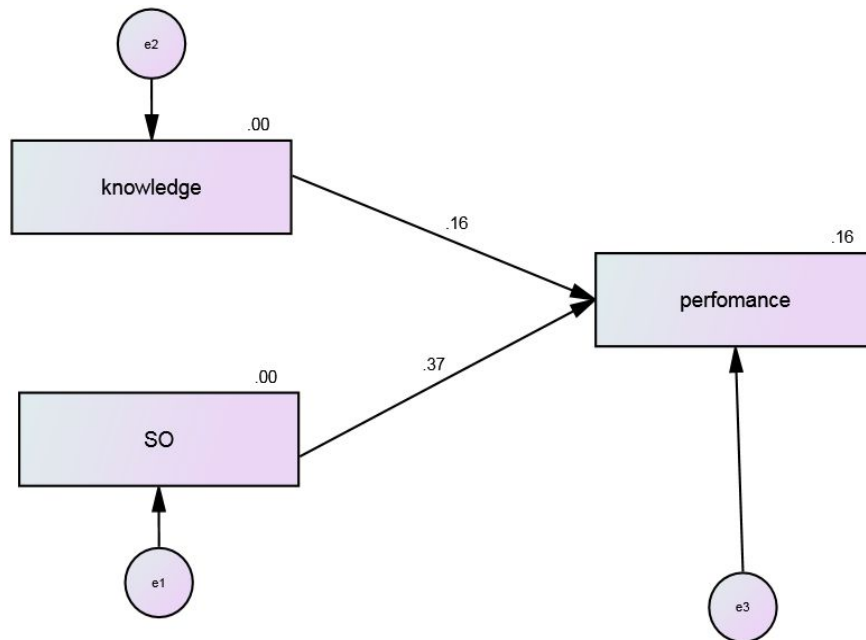
The findings of the study further emphasize the huge importance of strategic orientation in business performance when mediated by good knowledge management of firms. The findings of the study following Ferraresi *et al*, (2012), indicate that the strength of relationship of factors with performance objectives of firms could vary with the strength of the mediators. This is proven in the finding of the study where direct relationship between strategic orientations and performance appears too low until a mediator was added. This follows the argument of Nazdrol *et al*. (2011) that obtaining good firm performance from strategic factors should not be left with expectations of ordinary direct relationship; possible mediation need to be tested to make an informed policy decision.

**Table 1. Regression Weights of strategic orientation and performance**

	Estimate	S.E.	C.R.	P	Label
Performance <--- SO	.098	.015	6.479	***	
Performance <--- knowledge	.214	.074	2.909	.004	

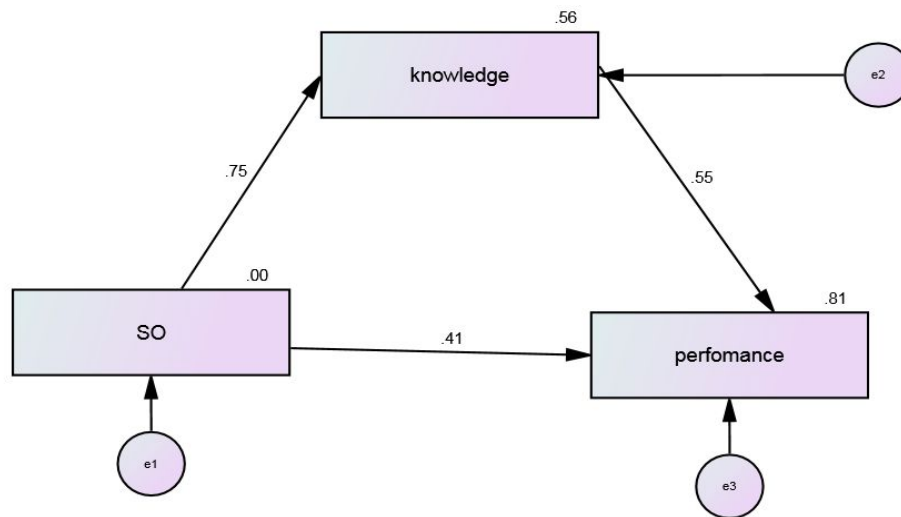
**Table 2. Regression Weights of the mediation:  
(Group number 1 - Default model)**

	Estimate	S.E.	C.R.	P	Label
knowledge <--- SO	.749	.210	3.566	***	
performance <--- knowledge	.547	.195	2.805	***	
performance <--- SO	.411	.120	3.425	***	



**Figure 1 The path analysis of strategic orientation and performance**





**Figure 2. The mediation analysis of Knowledge management in Strategic orientation and performance relationship**

## 5. Conclusion and Recommendations

The study has considered the increasing importance of knowledge management strategies as mechanism through which strategic orientation affect telecommunication sector performance. Previous researches have focused on direct relationship between strategic orientation and firm performance. The study has demonstrated an indirect effect on the relationship between strategic orientation and performance through knowledge management as mediating variable on a sample of 357 respondents in southwest Nigeria. The study results lead to the conclusion that the components of strategic orientation such as market orientation, entrepreneurial orientation, and technology orientation in aggregate mediated by knowledge management practices are important pathways to good performance. The impact of these knowledge management strategies can be felt through the role played by strategic orientation.

The study recommends the need to position the telecommunication sector strategically now and in the future through knowledge management strategies so that the sector will continue to act as enabler to drive socio-economic transformation as well as bringing about a radical change in the way people transact commercial activities.

### Acknowledgements

Our sincere appreciation goes to Professor P. O. Oladele, Dean, Faculty of Management Sciences, Federal University of Oye, Ngeria for his professional advice and comments as well as Professor O. L Kuye, Dean, Faculty of Management Sciences, University of Lagos, Nigeria for his ingenuity and time taken to offer useful suggestions in the course of writing the paper.

### References

- Akeke, N. I. (2019). Strategic interventions and performance of small and medium enterprises in Nigeria. *Internanational Journal of Community Development and Management Studies*, 3, 17-29.
- Al-Ansaari, Y., Bederr, H. & Chen, C. (2015) Strategic Orientation and Business Performance. *Management Decision*, 53, 2287-2302.
- Hernaus, T., Bach, M. & Vuksic, V. (2012) Influence of strategic approach to BPM on financial and non-financial Performance. *Baltic Journal of Management*, 7, 376-396.
- Audretsch, D. B. & Thurik, A. R. (2004). A model of the entrepreneurial economy. *International Journal of Entrepreneurship Education*, 2, 143-166.
- Avcı, U., Madanoglu, M. & Okumus, F. (2011). Strategic orientation and performance of tourism firms: Evidence from a developing country. *Tourism Management*, 32, 147-157.
- Bhatti, K. K. & Qureshi, T. M. (2007). Impact of employee participation on job satisfaction, employee commitment and employee productivity. *International Review of Business Research Papers*, 3(2), 54-68.
- Bukowitz, W. R. & Williams, R. L. (1999). *The knowledge management fieldbook*, Upper Saddle River, N.J: Financial Times, Prentice Hall.
- Business Day (2013, July 15). Nigeria 'Telecoms' subscription dips as industry growth rate slows.
- Byukusenge, E., Munene, J. & Orobia, L. (2016) Knowledge management and business performance: Mediating effect of innovation, *Journal of Business and Management Sciences*, 4(4), 82-92.
- Chawla, D. & Joshi, H. (2010). Knowledge management practices in Indian industries: A comparative study. *Journal of Knowledge Management*, 14, 708-725.
- Chirico, F. (2008). Knowledge accumulation in family firms: Evidence from four case studies. *International Small Business Journal*, 26, 433-462.
- Choi, B., Poon, S. & Davis, J. (2008). Effects of knowledge management strategy on organisational performance: A complementarity theory-based approach, 36, 235-251.

- Conner, K. R. & Prahalad, C. K. (1996). A resource-based theory of the firm: Knowledge versus opportunism. *Organisation Science*, 7(5), 477-501. *Omega*.
- Cook, S. & Yanow, D. (1995). *Culture and organizational learning*, in Cohen and Sproull (Eds.) *Organizational Learning*, Thousand Oaks, CA: Sage Publications, 430-459.
- Dahiya, D., Gupta, M. & Jain, P. (2012). Enterprise knowledge management system: A multi agent perspective. *Information Systems, Technology and Management*, 285(4), 271-281.
- Danbatta, U. G. (2017). The role of the Telecoms sector in the diversification of the Nigeria economy. Achievements, prospects and challenges. A presentation of inaugural lecture, Bayero University, Kano. August.
- Darroch, J. (2005). Knowledge management, innovation and firm performance. *Journal of Knowledge Management*, 9(3), 101-15.
- DeLong, D. (1997). Building the knowledge-based organisations: how culture drives knowledge behaviors. Ernest & Young Center for Business Innovation, Boston, MA, working paper, May.
- Gao, G., Zhou, K. & Yim, C. (2007). On what should firms focus in transitional economies? A study of the contingent value of strategic orientations in China. *International Journal of Research in Marketing*, 24, 3-15.
- Gatignon, H. & Xuereb, J. (1997). Strategic orientation of the firm and new product performance. *Journal of Marketing Research*, 34, 77-90.
- Gold, A., Malhotra, A. & Segars, A. (2001). Knowledge management: An organisational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185-214.
- Grant, R. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17, 109-22.
- Hilman, H. & Kaliappen, N. (2014). Market orientation practices and effects on organisational performance: Empirical insight from Malaysian hotel industry. *SAGE, Open*, 4, 1-8.
- Hult, G.T.M., Hurley, R.F. & Knight, G.A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management*, 33(5), 429-38.
- Jaworski, B. J. & Kohli, A.K. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing*, 57(3), 53-70.
- Kohli, A. & Jaworski, B. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 54(2), 1-17.
- López-Nicolás, C. & Meroño-Cerdán, A. L. (2011). Strategic knowledge management, innovation and performance. *International Journal of Information Management*, 31, 502-509.

- Mahmoud, M.A., Blankson, C., Owusu-Frimpong, N., Nwankwo, S. & Trang, T. P. (2016). Market orientation, learning orientation and business performance. *International Journal of Bank Marketing*, 34, 623-648.
- Masa'deh, R., Tarhini, A., Al-Dmour, R. H. & Obeidat, B. Y. (2015) Strategic IT-business alignment as managers' explorative and exploitative strategies. *European Scientific Journal*, 11, 437-457.
- Masa'deh, R. & Shannak, R. (2012). Intermediary effects of knowledge management strategy and learning orientation on strategic alignment and firm performance. *Research Journal of International Studies*, 24, 112-128.
- Milgrom, P. & Roberts, J. (1995). Complementarities of fit: Strategy structure, and organisational change. *Journal of accounting and economics*, 19, 511-280.
- Milton N., Shadbolt, N., Cottam, H. & Hammersley, M. (1999). Towards a knowledge technology for knowledge management. *International Journal of Human-Computer Studies*, 51(3), 615-641.
- Micheels, E. T. & Gow, H. R. (2010). The impact of alternative market orientation strategies on firm performance: Customer versus competitor orientation, American Agricultural Economics Association, Annual Meeting, Denver, Colorado.
- Narver, J. & Slater, S. (1990), The effect of market orientation on business profitability. *Journal of Marketing*, 54(4), 20-35.
- O'Regan, N. & Ghobadian, A. (2005). Innovation in SMEs: The impact of strategic orientation and environmental perceptions. *International Journal of Productivity and Performance Management*, 54, 81-97
- Panda, D. K. (2014). Managerial Networks and Strategic Orientation in SMEs. *Journal of Strategy and Management*, 7, 376-397.
- Real, J. C., Roldan, J. L. & Leal, A. (2014). From entrepreneurial orientation and learning orientation to business performance: Analysing the mediating role of organisational learning and the moderating effects of organizational size. *British Journal of Management*, 25, 186-208.
- Richard, P. J., Devinney, T. M., Yip, G. S. & Johnson, G. (2009). Measuring organisational performance: Towards methodological best practice. *Journal of Management*, 35, 718-804.
- Rodriguez-Pinto, J., Carbonell, P. & Rodriguez-Escudero, A. I. (2011). Speedor quality? How the order of market entry influences the relationship between market orientation and new product performance. *International Journal of Research in Marketing*, 28(2), 145-154.
- Shannak, R. (2013). Key issues in E-banking strengths and weaknesses: The case of two Jordanian banks. *European Scientific Research*, 9, 239-263.
- Skyrme, D. (2001). Capitalizing on knowledge: From e-business to k-business. Oxford: Butterworth-Heinemann.

- Teece, D. (1998). Capturing value from knowledge assets: the new economy, markets for knowledge and intangible assets. *California Management Review*, 40(3), 55-79.
- Torabi, F. & El-Den, J. (2017). The impact of Knowledge Management on Organisational Productivity: A Case Study on Koosar Bank of Iran, 4th Information Systems International Conference 2017, ISICO 2017, 6-8 November 2017, Bali, Indonesia. 124, 300-310 *Procedia Computer Science*.
- Tutar, H., Nart, S. & Bingöl, D. (2015). The effects of strategic orientations on innovation capabilities and market performance: the case of ASE orientation of airports in Europe's peripheral areas. *Journal of Air Transport Management*, 13(6). *Procedia-Social and Behavioral Sciences*, 207, 709-719.
- Wang, C. L., Hult, G. T. M., Kitchen Jr., D. J. & Ahmad, P. K. (2009). Knowledge management orientation, market Orientation, and firm performance: An integration and empirical examination. *Journal of Strategic Marketing*, 17, 147-170.
- Wheelen, T. L. & Hunger, J. D. (2012). *Strategic management and business policy: Towards global sustainability*. Pearson Educational Inc., Prentice Hall.
- Wiig, K. M., DeHoog, R. & Vander Spek, R. (1997). Supporting knowledge management: A selection of methods and techniques. *Expert Systems with Applications*, 13, 15-27.
- Yusof, M. N. & Abu Bakar, A. (2012). Knowledge management and growth performance in construction companies: a framework. *Procedia - Social and Behavioral Sciences*, 62, 128-134.
- Zack, M., McKeen, J. & Singh, S. (2009). Knowledge management and organisational performance: An exploratory analysis. *Journal of Knowledge Management*, 13, 392-409.
- Zahra, S. A. (2008). Being entrepreneurial and market driven: Implications for company performance. *Journal of Strategy and Management*, 1, 125-142.
- Zehir, C., Can, E. & Karaboga, T. (2015). Linking entrepreneurial orientation to firm performance: the role of differentiation strategy and innovation performance. *Procedia-Social and Behavioral Sciences*, 210, 358-367.
- Zhou, K. Z., Yim, C. K. B. & Tse, D. K. (2005). The effects of strategic orientations on technology and market-based breakthrough innovations. *Journal of Marketing*, 69(2), 42-60.