

Impact of Knowledge Capacity on the Employees Performance and Competitive Advantage

^{1*}Mohamad Nour Mosry,²Valliappan Raju

^{1*} Postgraduate Center, Limkokwing University of Creative Technology, Malaysia

² Postgraduate Center, Limkokwing University of Creative Technology, Malaysia

ABSTRACT

The aim of this particular study is to examine the direct influences of knowledge capacity factors (training & development, knowledge sharing, quality of academic qualification, and quality of professional qualification) on the organizational competitive advantage and indirectly through the employees' performance among the Syrian ICT private sector. The proposed model have four independent variables from the knowledge capacity and organizational competitive advantage as the dependent variable. The study is deductive approach by using quantitative methods to perform PLS-SEM statistical analysis of the original data that collected from 335 participants. The sampling selection technique is quota sampling to choose the suitable samples from 2615 senior executives from the Syrian ICT sector. Results of the main dependent variable, competitive advantage (CA), illustrate a moderate predictive power; the prediction constructs can explain 68.7% of the competitive advantage (CA) variance. Knowledge capacity have the highest impact ($\beta = 0.257$), followed by quality of professional qualification ($\beta = 0.155$), then quality of academic qualification ($\beta = 0.105$). However, training and development have no direct significant impact but it has and indirect impact through the employee performance. The four antecedents have significant relationships to the employees' performance and can indirectly impact the competitive advantages. Future, studies can replicate the study in different domains.

Keywords: Knowledge Capacity, Training and Development, Academic Qualification, Professional Qualification, Knowledge Sharing, Competitive Advantage. Employees Performance

INTRODUCTION

Nowadays, Capacity building is generally recognized to involve more than the enhancement of individual abilities and skills (Mormina, 2019). Thus, an analytical framework that encompasses individual, organizational, and institutional dynamics is essential when studying capacity development (Falk, Kumar, & Srigiri, 2019). Additionally, despite this knowledge being readily available, it does not always lead to optimal planning or effective action (Dyer & Singh, 1998). This lagging or constraining effect is notably apparent in countries that are developing into modern economies but is a challenge for all societies as they must continuously adapt to new changes (Chen, Ge, Xu, & Li, 2019).

Technology becomes essential part in any business today; however, the advancement of technology adoption is related to the performance and advantages of ICT firms (Gërguri-Rashiti, Ramadani, Abazi-Alili, Dana, & Ratten, 2017; Haseeb, Hussain, Kot, Androniceanu, & Jermsittiparsert, 2019). In developing countries, the advancement and adoption of technology have difficulties due to many factors including infrastructure, market conditions; however, this for sure affects the performance and competitiveness of business and affect the national economy as well (Rodrik, 2018; Zanello, Fu,

Mohnen, & Ventresca, 2016). In Syria, the advantages offered by ICT firms is either outdated or deficient because of the lack of knowledge and competences (Ahmed & Hasan, 2016; Bose, 2019). In Syria, this problem in performance and competitive advantages are rational result to the national security and immigration matters (Gharib, Kahwaji, & Elrasheed, 2017).

The causal ambiguity associated with this relationship is a large challenge to competitive advantage (Jones, Harrison, & Felps, 2018). In general, causal ambiguity is associated with situations characterized by competitive advantages that are not straightforward (Cegliński, 2016). However, decision-makers who perceive linkage ambiguity concerning competency and competitive advantage understand it that way instead (Mikalef, Krogstie, Pappas, & Pavlou, 2020). An enterprise can apply the latter relationship successfully to all resources that comply with the requirements of the resource-based view, which means that those resources can become sources of competitive advantage (Cegliński, 2016). Management and competitors have little insight into the role of the tacit activities that create the organization's competitive advantage because the activities are difficult to express and codify; this advantage will likely be sustained as managed imitation cannot occur (Mahdi, Nassar, & Almsafir, 2019).

A number of sources and types of competitive advantages have already been identified by scientists (Bergman & Feser, 2020). In (Mikalef et al., 2020), they argue that while a coherent theory and model of dynamic capabilities are urgently needed, there is still no consensus on the particulars of the concept of dynamic capabilities, which is based on the resource-based view of organizations. In effect, there is no agreement reached in the world literature as to how competitive advantages should be understood and analysed (Al Shobaki & Abu-Naser, 2017).

In order for an organization to build a competitive advantage, it is critical to transfer best practices internally for it to be able to monetize scarce internal knowledge (Chiambaretto, Massé, & Mirc, 2019). An enterprise's ability to transfer positive practices relies on the organizational culture or, strictly speaking, whether its values favor the transfer of such practices (Dhir, 2019). The relationship between a firm's activities conforming to corporate social responsibility and competitive advantage is becoming more and more popular recently (Wang & Sarkis, 2017). In strategic management, starting from the premise of competitive advantages for sustainable growth, there are assumed to be competitive advantages of sustainability (Forrest & Nightingale, 2017).

The most significant contributors to the field of strategic management have attempted to classify all definitions of competitive advantage into two broad categories (Nasifoglu Elidemir, Ozturen, & Bayighomog, 2020). The external sources of competitive advantage, such as the characteristics of particular markets, the price leadership, the differentiation of locations, technologies, and product features, as well as the specific resources and capabilities of an organization (Ferreira, Coelho, & Moutinho, 2020). According to Sigalas(Sigalas, 2015), the first causal path within the sources of competitive advantage-competitive advantage-superior performance conceptual framework is also a tautology. Additionally, competitive advantage can also refer to superior performance, such as higher than average returns, high relative profitability, economic value surplus, and beyond industry profitability averages (Sigalas, 2015).

In general, scholars and academics have not taken into consideration that competitive advantage cannot be properly understood without conceptualizing it comprehensively, i.e., without including latent characteristics (Salunke, Weerawardena, & McColl-Kennedy, 2019). The concept of performance and of the sources of competitive advantage, then the managers will not be able to understand, observe and develop competitive advantage for their organization (Saeidi et al., 2019). Consequently, one cannot blame practicing managers for failing to understand the concept of competitive advantage if academics are themselves inclined to use vague words (Stajković & Sergent, 2019). Previous studies shows that employees' performance is essential for organizations to have competitive advantages. Another previous studies, shows that employees' abilities are important to the organization performance. However, the relationships between different knowledge capacities, employee's performance, and competitive advantage have not explored well neither in Syria or worldwide.

To sum up, this study is identified that Syria is suffering from the lake of technology transfer due to the national security problem. This issue is affecting the Syrian ICT companies and cause difficulties to have competitive advantage. Previous studies show that human capital is key for making advantages via the outstanding performance, which is conducted by the knowledge of every employee in the organization. However, no studies explored the impact of different capacity factors at organizational level in Syria. In addition, limited studies do that in other contexts. This study is different in margining four knowledge capacity factors as antecedents for both employee performance and competitive advantage. In addition, employee performance is considered as a mediator. The study is an investigation for the impact of knowledge capacity factors (training & development, knowledge sharing, quality of academic qualification, and quality of professional qualification) on employee performance to improve the organizational competitive advantage among Syrian ICT sectors.

Operational Definitions

Competitive Advantage

Though defining competitive advantage conceptually is extremely difficult, they created a stipulate definition that incorporated all the latent characteristics of the concept and separated the concept of competitive advantage from its sources and from the concept of superior performance (Sigalas, 2015). In particular, mention that competitive advantage is "the above industry average manifested exploitation of market opportunities and neutralization of competitive threats" (Sigalas, Economou, & Georgopoulos, 2013). The definition of competitive advantage by Sigalas et al. (Sigalas et al., 2013) states it is an unobservable factor and therefore inherently complex (Godfrey & Hill, 1995). Competitive advantage is conceptually distinct whether it is defined in terms of performance or by the factors that determine its existence. Due to this, there are distinct and different concepts of i) sources of competitive advantage, ii) competitive advantage, and iii) superior performance (Feizabadi, Gligor, & Motlagh, 2019).

Employee Performance

The performance of your employees is determined by their behavior at work and whether they carry out their duties effectively (Deshmukh, 2020). At the task level, employee performance relates to

the effectiveness, quality, and efficiency of their work (Zhijie, Asghar, Gull, Shi, & Akbar, 2019).

Knowledge Capacity

It is defined by (Ning, Fan, & Feng, 2006) as “the sum of total of the knowledge assets of organizations that including both knowledge resources and knowledge operating capabilities that can reflect the knowledge capability more fully. And it is proposed that knowledge capability is dynamic, that is to say it will reconstruct with the changing of the environment”. Therefore, this study integrates knowledge assets factors and knowledge operation factors by combining quality of academic qualifications, quality of professional qualifications, knowledge sharing, and training and development.

Training and Development

Through a variety of educational methods and programs, training and development refers to the formal, ongoing efforts companies make to improve their employees' performance and fulfillment (Jeba, 2019). The training and development have emerged as a formal business function, an integral element of strategy, and a recognized profession with distinct theories and methodologies (Ntiri-Ampomah, 2016).

Quality of Academic Qualification

In higher education, Academic Qualification is the degree that is awarded to students upon successful completion of a course of study. Typically, this happens at college or university (Holt, 2020).

Quality of Professional Qualification

professional qualifications are vocational qualifications, often involving an element of practical training (Nurtanto, Sofyan, Pardjono, & Suyitno, 2020). In addition to acquiring the necessary qualifications for your profession, you will need a diploma or degree from a recognized institution in order to obtain qualified status; for example, a licensed accountant or engineer (Bohalteanu, 2016).

Knowledge Sharing

Knowledge sharing is an activity through which knowledge (namely, information, skills, or expertise) is exchanged among people, friends, families, communities, or organizations (Charband & Navimipour, 2018). Technology plays a significant role in the knowledge-sharing process. However, technology is only one of many factors that affect how knowledge is shared in organizations, such as organizational culture, trust, and incentives (J.-C. Lee, Shiue, & Chen, 2016). In the field of knowledge management, sharing knowledge is a major challenge as some employees tend to be reluctant to share their expertise with the rest of the organization (Barley, Treem, & Kuhn, 2018).

Proposed Model and Hypotheses

This particular study proposed a model of the impact of knowledge capacity factors (training and development, quality of academic qualification, quality of professional qualification, knowledge sharing) to competitive advantages and employee performance as mediation relation. Figure 1 shows the conceptual framework of this study.

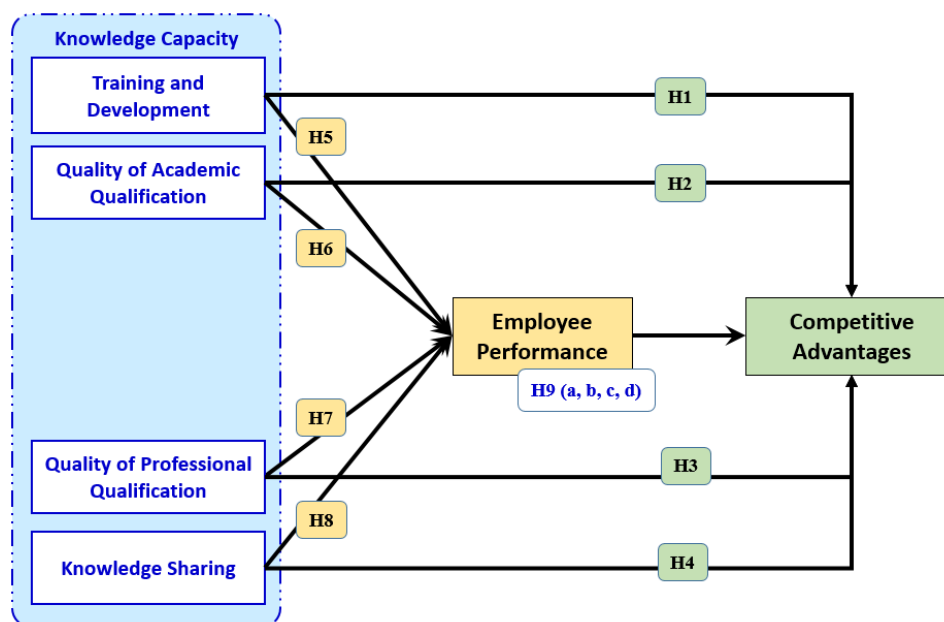


Figure 1 Conceptual Framework

Training and Development, and Employee's Performance, and Competitive Advantage

Training and development involve boosting the efficiency of institutions and the individuals and staffs within them (Abba, Suleiman, & Yahaya, 2018; Austin & Pisano, 2017). Training may be actually deemed related to prompt modifications in company performance using coordinated guideline, while advancement is actually connected to the improvement of longer-term company and staff member goals (Hammond & Churchill, 2018). The researcher is expecting significant positive direct effect of Training and development on employee's performance among employees of IT sector in Syria. The hypothesis of this study is consistent with others as well, such as; (Ahmad, Kura, Bibi, Khalid, & rahman Jaaffar, 2019; Krishnaveni & Monica, 2016; Nguyen & Duong, 2020).

H1 Training and development has a significant relationship with competitive advantages.

In addition, the more the employee are well trained and getting to develop the better they will do their assigned tasks and responsibilities. Which will lead to a better competitive advantage in workplace (Heredia-Calzado & Duréndez, 2019; Husti & Mahyarni, 2019; Le, 2020). Training and development have been expected to have a significant positive direct effect on the competitive advantage of IT companies in Syria. According to this hypothesis, other studies have also proposed similar hypotheses including; (Al Mamun, Nawi, Ibrahim, & Muniady, 2018; Azizi, Maleki, Moradi-Moghadam, & Cruz-Machado, 2016; Evelina, 2018).

H5: Training and development has a significant relationship with competitive advantages indirectly through employees' performance.

Quality of Academic Qualification and Employee's Performance

Quality refers to exactly how excellent something is actually compared to various other

comparable traits. Simply put, its own degree of quality (Noaman, Ragab, Madbouly, Khedra, & Fayoumi, 2017; Sharp, 2017). And Quality of academic qualification may be specified as the level of excellence that the scholastic qualification of a person is, and to what expand it thought about to become special (Chaudhry, Munawar, & Sittar, 2020; Skolnik, 2016). Researchers expect that the quality of academic qualifications has a positive direct effect on performance among employees of the information technology industry in Syria. As this hypothesis is compatible with other hypothesis in others studies such as; (Lian, 2020; Msallam, Abu-Naser, Shobaki, & Al-Habil, 2019; Sweis et al., 2020).

H2: Quality of academic qualification has a significant relationship with competitive advantages.

In addition, the more the employee are having a higher education the better they will do their assigned tasks and responsibilities. Which will lead to a better competitive advantage generation in workplace (Le, 2020; Singh, Chen, Del Giudice, & El-Kassar, 2019). The researcher expects that the Quality of academic qualification will have a significant positive direct effect on the competitive advantages of Syrian IT companies. This hypothesis is consistent with other hypotheses of other studies, such as; (Abubakar & Odock, 2018; Cura & Alani, 2018; Eaton, 2016; Evelina, 2018; Tomlinson, 2016).

H6: Quality of academic qualification has a significant relationship with competitive advantages indirectly through employees' performance.

Quality of Professional Qualification and Employee's Performance

Quality of professional qualification is actually the Professional accreditation, trade license, or qualified designation, often phoned just certification or even qualification, is a designation gained through an individual to ensure qualification to conduct a project or task (Bashirova & Sattarova, 2018; Ishola, Adeleye, & Tanimola, 2018). The more employees with good professional qualification the better they will do their tasks and job. which will lead to a better employee's performance (Msallam et al., 2019; Sweis et al., 2020). It is expected that a direct, positive effect of quality professional qualifications on employees' performance will be evident among employees of the IT sector of Syria. According to other studies, this hypothesis is compatible with the following; (Aris, Maupa, Muis, & Tabbat, 2019; Ayub, Hussain, & Ghulamullah, 2018; Giorgi, Mattei, Notarnicola, Petrucci, & Lancia, 2018).

H3: Quality of professional qualification has a significant relationship with competitive advantages.

In addition, the more the employee are having a better practical and professional qualifications like experience certificates etc. the better they will do their assigned tasks and responsibilities. Which will lead to a better competitive advantage generation in workplace (Husti & Mahyarni, 2019; B. Obeidat, Al-Khateeb, & Abdallah, 2019). There will be a significant positive direct effect of technical qualifications on the competitive advantage of IT companies in Syria, the researcher expects. The hypothesis of this study is consistent with others as well, such as (Al Mamun et al., 2018; Le, 2020; D. Obeidat, Yousef, Tawalbeh, & Masa'deh, 2018).

H7: Quality of professional qualification has a significant relationship with competitive advantages indirectly through employees' performance.

Knowledge Sharing and Employee's Performance

Knowledge sharing is actually an activity through which expertise is actually traded amongst people, buddies, peers, family members, neighborhoods, or within or between companies (Alsharo, Gregg, & Ramirez, 2017; Singh, Gupta, Busso, & Kamboj, 2019). The more the employees are sharing their knowledge this will enable the employees to improve and the better they will do their tasks and job. which will lead to a better employee's performance (Gillani, Iqbal, Akram, & Rasheed, 2018; Son, Cho, & Kang, 2017). Among employees in Syria's IT sector, the researcher expects significant positive effects of knowledge sharing on employees' performance. This hypothesis is compatible with other hypotheses in other studies, including; (Ali, Paris, & Gunasekaran, 2019; Kucharska & Erickson, 2019; Liu, Lin, Joe, & Chen, 2019).

H4: Knowledge sharing has a significant relationship with competitive advantages indirectly through employees' performance.

In addition, the more the employee sharing their good skills, knowledge and experience the better they will do their assigned tasks and responsibilities. Which will lead to a better competitive advantage generation in workplace (Hili, Gani, Hamzah, Rahman, & Sjahrudin, 2017; Husti & Mahyarni, 2019; Le, 2020). It is anticipated that knowledge sharing will have a significant positive impact on the competitive advantages of IT companies in Syria. As this hypothesis is consistent with other hypotheses found in other studies, for example; (Hamadamin & Atan, 2019; Huang, Chang, & Yeh, 2020; D. Lee & Park, 2016; Zainol & Al Mamun, 2018).

H8: Knowledge sharing has a significant relationship with competitive advantages indirectly through employees' performance.

Employees Performance and Competitive Advantages

In the workplace, performance refers to how a staff member meets his or her obligations and carries out the tasks that are being demanded. It refers to the effectiveness, quality, and effectiveness of their result. Functionality additionally results in our examination of how valuable a staff member is to the institution (Narayana, 2017; Riyanto, Sutrisno, & Ali, 2017). A competitive advantage may consist of accessibility to natural resources, like state-of-the-art native minerals or even an inexpensive power source, extremely experienced effort, geographic place, higher entrance barricades, and accessibility to new innovation (Borsekova, Vaňová, & Vitálišová, 2017; Lu, Lu, Gursoy, & Neale, 2016). Based on that, the more the employee's performance is high level the better they will be able to generate creative and innovative ideas. Which will lead to a better competitive advantage in workplace (Hamadamin & Atan, 2019; Ni, Cui, Sang, Wang, & Xia, 2018; Pham, 2020). Researchers expect employee performance to have a significant positive impact on the competitive advantage of IT companies in Syria. This hypothesis is consistent with the hypothesis in other studies, such as (Hili et al., 2017; Huang et al., 2020; Husti & Mahyarni, 2019).

H9: Employees' performance has a significant positive impact on competitive advantages of IT companies in Syria.

H10: employee performance mediation the relationship between the precedent variables [(a) training and development, (b) academic qualification, (c) professional qualification, and (d) knowledge sharing) and the competitive advantages.

Research Methodology

In an empirical research project, the research design is the comprehensive plan for collecting data. It is intended to address the research questions and test the hypotheses. Using a cross-sectional survey design, the research objectives are fulfilled with a single group of respondents completing a well-structured questionnaire – the dependent variable along with the independent variables at the same time are measured in the same questionnaire (Bhattacharjee, 2012). To assess the study hypotheses in addition to the regression type of analysis, experimentation is conducted.

The study follows a scientific approach as it begins with identifying the problem, defining it, and formulating a hypothesis. It ends up with confirming or disproving that hypothesis except for the outcome's interpretation and conclusion. In this process, there are usually some specific stages (Creswell, 2014; Jackson, 2015). The entire study will focus on this particular hypothesis, which will be supported by mathematical and statistical measures. Quantitative research designs can be a valuable tool to disprove or prove null hypotheses (Hair, Hult, Ringle, & Sarstedt, 2014). Additionally, the study consists of a survey, as surveys are a common method in business research and allow significant numbers of respondents to be surveyed.

The target population is the senior management / executives, which include chief officers, vice president positions, and general managers. It is estimated that even ICT sector companies could have up to 5 senior executives, which makes the target population size 2615. The researcher used the quota sampling to collect sample from the two groups of employees from small companies and medium and large companies. Based on Morgan and Kerjice's (Krejcie & Morgan, 1970) formula, 335 is the appropriate sample size for the entire population of 2615.

As part of our analysis, SmartPLS is the primary tool used for two types of examinations: measurement model testing and structural model testing. Testing the measurement model involves evaluating the validity and reliability of the dataset and the measurement model itself. Using the PLS algorithm together with bootstrapping, the main results for relations can be analyzed and predicted by using structural model tests.

Results and Discussions

In the following sections, we discuss descriptive analysis, reliability and validity, and the findings of path coefficients.

Demographic and Descriptive Analysis

There are 335 participants in the final dataset after data cleaning, 66.9% of whom are males, 53.7% of whom have bachelor's degree, and 50.4% have an experience of 10 to 14 years. Table 1 shows the results of the descriptive analysis of the research variables. All variables show a moderate

satisfaction level between 3.15 and 3.47 in the likert-5 scale.

Table 1 Descriptive Statistics of Research Variables				
	Min	Max	Mean	SD
Competitive Advantages	1.54	4.70	3.1937	.62576
Competitive Advantages - Flexibility	1.61	5.00	3.1816	.70173
Competitive Advantages - Responsiveness	1.00	4.86	3.2058	.77698
Employee Performance	1.48	5.00	3.4725	.93664
Quality of Academic Qualification	1.28	5.00	3.3310	1.04639
Quality of Professional Qualification	1.00	5.00	3.2287	.91343
Knowledge Sharing	1.17	5.00	3.1567	.91403
Training and Development	1.21	5.00	3.1848	.84924

Reliability and Validity Analysis

As a means of ensuring that the data is reliable and valid, it is necessary to conduct some preliminary tests before analyzing relationships between variables. Using the composite reliability or Cronbach's alpha, the internal consistency test ensures that items for each variable are equally consistent. It is recommended that the acceptable value for both tests be above 0.7 and below 0.95 (Jr-Hair, Hult, Ringle, & Sarstedt, 2016; Risher & Hair Jr, 2017). This criteria has been used in different previous studies in social science such as (Salem & Salem, 2019). According to Table 3, all the results are within the range of acceptable variance, and the dataset is internally consistent.

In addition, to examine how well items in different variables align with one another, the average variance extracted (AVE) is used. It is generally considered that the AVE value should be greater than 0.5 (Jr-Hair et al., 2016; Risher & Hair Jr, 2017). This criteria has been used in different previous studies in social science such as (Salem & Salem, 2018). All results are within an acceptable range as shown in Table 2. Moreover, the dataset is internally convergent.

Table 2 Construct Reliability and Validity			
	Cronbach's Alpha	Composite Reliability	AVE
Competitive Advantages	0.869	0.893	-
Competitive Advantages - Flexibility	0.854	0.896	0.632

Table 2 Construct Reliability and Validity			
	Cronbach's Alpha	Composite Reliability	AVE
Competitive Advantages - Responsiveness	0.855	0.893	0.583
Employee Performance	0.903	0.929	0.724
Quality of Academic Qualification	0.908	0.929	0.685
Quality of Professional Qualification	0.883	0.919	0.739
Knowledge Sharing	0.852	0.901	0.696
Training and Development	0.825	0.877	0.590

The Fornell Larcker criterion matrix, which represents the divergent validity, can be found in Table 4. The divergent validity of the designed model is revealing that the variables have enough distance between each other. Statistically speaking, the diagonal value has to exceed any cross value within a column or row to be considered valid (Risher & Hair Jr, 2017). Results in Table 3 suggest that all data falls within an acceptable range, and the dataset shows good divergence among variables.

Table3 FornellLarcker Criterion Matrix Assessment of Research Variables							
	CAF	CAR	EP	KS	QAQ	QPQ	TD
Competitive Advantages - Flexibility	0.795						
Competitive Advantages - Responsiveness	0.436	0.763					
Employee Performance	0.796	0.515	0.851				
Quality of Academic Qualification	0.506	0.473	0.494	0.828			
Quality of Professional Qualification	0.566	0.250	0.456	0.237	0.860		
Knowledge Sharing	0.631	0.283	0.511	0.250	0.505	0.834	
Training and Development	0.658	0.342	0.717	0.358	0.367	0.457	0.768

Predictive Power of Research Variables

It is shown in Table 4 how competitive advantage (CA) and employee performance (EP) have predictive power and predictive relevance. A relational model estimates of the research proposed

model is also shown in Figure 4.8. Competition Advantage (CA), which is the main dependent variable, shows a moderate amount of predictive power and a high level of predictive relevance. As can be seen in the table, the related R square is 0.687 (which corresponds to 68.7% of the power) and the related Q square is 0.288 (which corresponds to 28.8% of the relevance). Results for the primary dependent variable, employee performance (EP), illustrate a moderate predictive power and medium level of predictive relevance since the prediction constructs related to it can explain nearly 68.7% of the competitive advantage (CA) variance. According to the table, the related R square value is 0.621 (62.1%), and the related Q square value is 0.444 (a relevance of 44.4%), thus the model explains 62.1% of the variance in employee performance (EP).

Table 4 Predictive Power and Predictive Relevance of Proposed Model				
	Predictive Power		Predictive Relevance	
	R Square	Status	Q Square	Status
CA	0.687	moderate	0.288	Medium
EP	0.621	moderate	0.444	Large

Path Coefficient of Research Model Relations

In the research, PLS-SEM is used to test hypotheses by using the regression model. In order to estimate the decision of rejection of a hypothesis, path coefficient results must be used. P-value score indicates the significance of the relationship, so accepting or rejecting it depends on its level of significance; 5% (0.5) or less is acceptable. In addition, T statistics is a second test for assessing the validity of a two-tailed relationship; T values of 1.98 or higher are considered valid(Jr-Hair et al., 2016; Risher & Hair Jr, 2017) . Different studies in social sciences have applied this criterion in the past, including (Alatyoush & Salem, 2020; Salem & Alanadoly, 2020).

Impacts of Knowledge Capacity Factors on Employees Performance

First strongest relationship is between training and development and employee performance among employees of IT sector in Syria. The path coefficient for this hypothesis is 0.512, indicating a significant positive relationship. That means that training and development is a direct high impact variable will be affecting employee performance positively. A better training and development will lead to a better employee performance. This is compatible (Ahmad et al., 2019; Krishnaveni & Monica, 2016; Nguyen & Duong, 2020) and employee performance among employees of IT sector in Syria. This hypothesis is showing a path coefficient of 0.244 which indicates a positive significant relationship. That means that knowledge sharing is a direct high impact variable will be affecting employee performance positively. A better knowledge sharing will lead to a better employee performance. This is compatible (Jyoti & Rani, 2017; Lian, 2020; Msallam et al., 2019; Rahardja, Moein, & Lutfiani, 2018) and employee performance among employees of IT sector in Syria. This hypothesis is showing a path coefficient of

0.146 which indicates a positive significant relationship. That means that quality of professional qualification is a direct high impact variable will be affecting employee performance positively. A better quality of professional qualification will lead to a better employee performance. This is compatible with other studies that have been discussed in literature review (Aris et al., 2019; Ayub et al., 2018; Giorgi et al., 2018). Fourth strongest relationship is between quality of academic qualification and employee performance among employees of IT sector in Syria. There is a path coefficient of 0.137 in this hypothesis, indicating a positive significant relationship. That means that quality of academic qualification is a direct high impact variable will be affecting employee performance positively. A better quality of academic qualification will lead to a better employee performance. This is compatible with other studies that have been discussed in literature review (Kucharska & Erickson, 2019; Liu et al., 2019; Muqadas, Rehman, & Aslam, 2017).

Table 5 Antecedents of Employees Performance			
	Path Coefficient	P Value (one tailed)	Status
KS -> EP	0.244	0.000	Significant
QAQ -> EP	0.137	0.000	Significant
QPQ -> EP	0.146	0.000	Significant
TD -> EP	0.512	0.000	Significant

Impacts of Knowledge Capacity Factors on Competitive Advantage

First strongest relationship is between employee performance and competitive advantage among employees of ICT sector in Syria. The path coefficient for this hypothesis is 0.498, which indicates a significant positive relationship. That means that employee performance is a direct high impact variable will be affecting competitive advantage positively. A better employee performance will lead to a better competitive advantage. This is compatible with other studies that have been discussed in literature (Hili et al., 2017; Huang et al., 2020; Husti & Mahyarni, 2019). Second strongest relationship is between knowledge sharing and competitive advantage among employees of ICT sector in Syria. According to this hypothesis, the path coefficient is 0.2557, showing a significant positive relationship. That means that knowledge sharing is a direct high impact variable will be affecting competitive advantage positively. A better knowledge sharing will lead to a better competitive advantage. This is compatible with other studies that have been discussed in literature review (Al Mamun et al., 2018; Azizi et al., 2016; Evelina, 2018). Third strongest relationship is between quality of professional qualification and competitive advantage among employees of ICT sector in Syria. The path coefficient for this hypothesis is 0.155, indicating a positive significant correlation. That means that quality of professional qualification is a direct high impact variable will be affecting competitive advantage positively. A better quality of professional qualification will lead to a better competitive advantage. This is compatible with other studies that have been discussed in literature review (Abubakar & Odock, 2018; Cura & Alani,

2018; Eaton, 2016; Evelina, 2018).

Table 6 Antecedents of Competitive Advantage			
	Path Coefficient	P Value (one tailed)	Status
EP -> CA	0.498	0.000	Significant
KS -> CA	0.257	0.000	Significant
QAA -> CA	0.105	0.001	Significant
QPA -> CA	0.155	0.000	Significant
TD -> CA	0.034	0.252	Non-Significant

Fourth strongest relationship is between quality of academic qualification and competitive advantage among employees of ICT sector in Syria. The path coefficient for this hypothesis is 0.105, indicating that there is a significant positive relationship. That means that quality of academic qualification is a direct high impact variable will be affecting competitive advantage positively. A better quality of academic qualification will lead to a better competitive advantage. This is compatible with other studies that have been discussed in literature review (Le, 2020; D. Obeidat et al., 2018). Fifth relationship is between training and development and competitive advantage among employees of ICT sector in Syria. This hypothesis is showing a path coefficient of 0.034 with P-value of 0.252 which indicates a positive non-significant relationship. That means that training and development has no impact on competitive advantage. A better training and development will not affect the competitive advantage. Maybe because the fact that training in this particular environment has some kind of negative sides or not preferable by employees for some reasons This is compatible with other studies that have been discussed in literature review (Hamadamin & Atan, 2019; Huang et al., 2020).

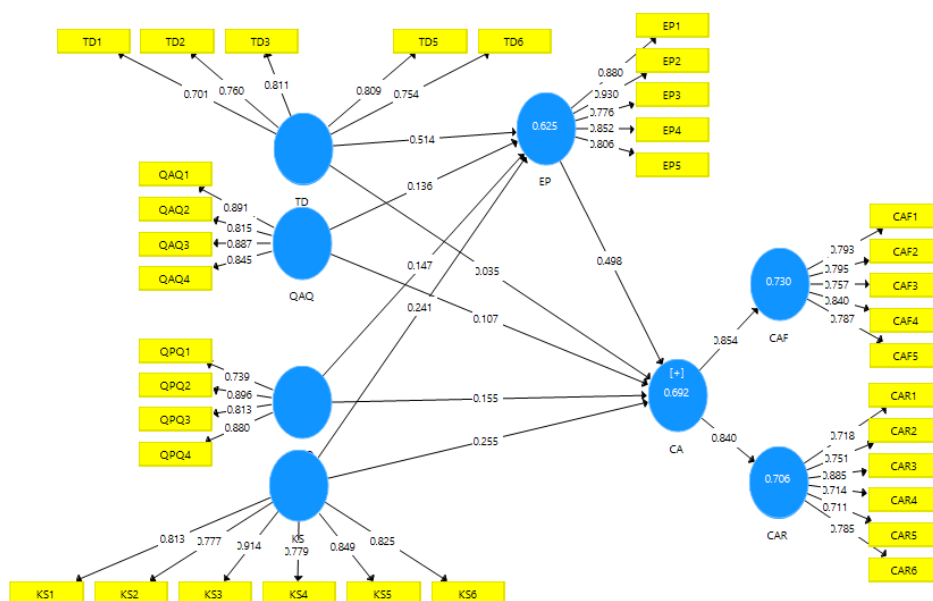


Figure 2 Path Coefficient Estimates of the Proposed Model

Mediating Impacts of Employees Performance

First strongest mediating relationship states that employee performance mediation the relationship between knowledge sharing and the competitive advantages among employees of ICT sector in Syria. This relationship shows a p-value of 0.000 based on direct and indirect impact analysis, and a Path Coefficient of 0.379, which indicates a partial mediation status with a positive outcome. Which mean that employee performance would of be a good mediator and improver of the relationship between knowledge sharing and the competitive advantages among employees of ICT sector in Syria. A better employee performance will lead to a better relationship between knowledge sharing and the outcome variable (Abubakar & Odock, 2018; Cura & Alani, 2018; Eaton, 2016). Second strongest mediating relationship states that employee performance mediation the relationship between training and development and the competitive advantages among employees of IT sector in Syria. Based on the direct and indirect impact analysis of this relationship, a p-value of 0.000 is found and the Path Coefficient is 0.289 indicating full mediation with a positive impact. Which mean that employee performance would of be a good mediator and improver of the relationship between training and development and the competitive advantages among employees of IT sector in Syria. A better employee performance will lead to a better relationship between training and development and the outcome variable (Hamadamin & Atan, 2019; Huang et al., 2020). Third strongest mediating relationship states that employee performance mediation the relationship between quality of professional qualification and the competitive advantages among employees of IT sector in Syria. The total effect that based on direct and indirect impact analysis of this relationship shows a p-value is 0.000 and the Path Coefficient is 0.228 which indicates a partial mediation status with positive impact. Which mean that employee performance would of be a good mediator and improver of the relationship between quality of professional qualification and the competitive advantages among employees of IT sector in Syria. A

better employee performance will lead to a better relationship between quality of professional qualification and the outcome variable (Huang et al., 2020; D. Lee & Park, 2016). Fourth strongest mediating relationship states that employee performance mediation the relationship between quality of academic qualification and the competitive advantages among employees of IT sector in Syria. The total effect that based on direct and indirect impact analysis of this relationship shows a p-value is 0.000 and the Path Coefficient is 0.173 which indicates a partial mediation status with positive impact. Which mean that employee performance would of be a good mediator and improver of the relationship between quality of academic qualification and the competitive advantages among employees of IT sector in Syria. A better employee performance will lead to a better relationship between quality of academic qualification and the outcome variable (Giménez, Madrid-Guijarro, & Duréndez, 2019; Hamadamin & Atan, 2019; Huang et al., 2020).

Table 7 Employees Performance as a Mediator			
	Total Effect		Status (Mediation)
	Path Coeff	P Value	
KS -> EP -> CA	0.379	0.000	Partial mediation
QAQ -> EP -> CA	0.173	0.000	Partial mediation
QPQ -> EP -> CA	0.228	0.000	Partial mediation
TD -> EP -> CA	0.289	0.000	Full mediation

CONCLUSIONS AND RECOMMENDATIONS

A moderate predictive power and high predictive relevance are observed for the primary dependent variable, competitive advantage (CA). According to the R square, it is 0.687 (which indicates 68.7% power) and the Q square is 0.288 (which indicates 28.8% relevance), so that the prediction constructs related to the variable can explain more 68.7% of the competitive advantage (CA) variance, results of the main dependent variable, employee performance (EP), illustrate a moderate predictive power and a large predictive relevance. R square value is 0.621 (a power of 62.1%) and the related Q square is 0.444 (a relevance of 44.4%), so that the prediction constructs related to the variable can explain more 62.1% of the employee performance (EP) variance. The study went through many steps to make sure of the validity and reliability and we can conclude that both are so consistent and highly trusted as a data for analysis. We have nine main hypotheses which were tested in this study, all hypotheses are to test direct relationships along with some mediating impact testing, and in total only one main direct relation hypotheses been rejected and the rest all hypotheses are accepted.

Developed as a revised model based on different theories, the proposed model is new and counts as a revision. This model introduces a new approach for differentiating training and

development, quality of academic qualification, quality of professional qualification, knowledge sharing, employee performance and competitive advantages. The model relations were examined, and a re-specified model was proposed for evaluation by other researchers.

In this study, a new model is proposed with new constructs and relationships. However, more research is needed to assess the model in a variety of environments. Because of the limited approach of implementation, which reduces generalization, it is recommended to replicate the same assessments in other countries to gain a better understanding and generalization. Moreover, the future studies should focus on exploring and examining additional factors, such as the quality of academic and professional qualifications and the sharing of knowledge. The rejected hypothesis could have a significant impact in other environments. And the impact of mediating variables can be different and vary from positive to negative or vice versa. While this finding is rational result considering that good disclosure must be carried out in accordance with managerial practices clarifying the methods and method of disclosure, but interviews can be used to explain this result in more qualitative research studies.

References

- Abba, M., Suleiman, N., & Yahaya, L. (2018). Environmental Management Reputation Effect on Financial Performance of Nigerian Companies. *International Journal of Management, Accounting and Economics*, 5(5), 300–318.
- Abubakar, O. M., & Odock, S. (2018). EFFECT OF TOTAL QUALITY MANAGEMENT PRACTICES ON OPERATIONAL EFFICIENCY OF CONTAINER DEPOTS IN MOMBASA COUNTY. *European Journal of Business and Strategic Management*, 3(6), 66–84.
- Ahmad, A., Kura, K. M., Bibi, P., Khalid, N., & rahman Jaaffar, A. (2019). Effect of Compensation, Training and Development and Manager Support on Employee Commitment: The moderating effect of Co-worker Support. *Journal on Innovation and Sustainability*, 10(2), 39–55.
- Ahmed, J. U., & Hasan, H. (2016). Barriers to e-commerce adoption in Syria: An empirical detection. *World Journal of Business and Management*, 2(1), 41.
- Al Mamun, A., Nawli, N. B. C., Ibrahim, M. A. H. Bin, & Muniady, R. (2018). Effect of economic vulnerability on competitive advantages, enterprise performance and sustainability. *Social Sciences*, 7(4), 54.
- Al Shobaki, M. J., & Abu-Naser, S. S. (2017). The Role of the Practice of Excellence Strategies in Education to Achieve Sustainable Competitive Advantage to Institutions of Higher Education- Faculty of Engineering and Information Technology at Al-Azhar University in Gaza a Model.
- Alatyoush, A. S., & Salem, S. F. (2020). ANTECEDENTS OF JOB PERFORMANCE AND THE MEDIATING ROLE OF SATISFACTION AMONG EMPLOYEES OF OIL AND GAS INDUSTRY. *Journal of Critical Reviews*, 7(11), 3136–3151.
- Ali, A. A., Paris, L., & Gunasekaran, A. (2019). Key factors influencing knowledge sharing practices and its relationship with organizational performance within the oil and gas industry. *Journal of Knowledge Management*.
- Alsharo, M., Gregg, D., & Ramirez, R. (2017). Virtual team effectiveness: The role of knowledge sharing and trust. *Information & Management*, 54(4), 479–490.
- Aris, A. A., Maupa, H., Muis, M., & Tabba, M. I. (2019). Effects of government policy, quality of human

- resources and professional institutions on workforce competitiveness using welding technology as mediating variable. *Journal of Science and Technology Policy Management*.
- Austin, R. D., & Pisano, G. P. (2017). Neurodiversity as a competitive advantage. *Harvard Business Review*, 95(3), 96–103.
- Ayub, A., Hussain, M. A., & Ghulamullah, N. (2018). Causes and Impact of Work Stress on Teacher's Performance in Urban Primary Schools. *Journal of Research in Social Sciences*, 6(1), 81–100.
- Azizi, R., Maleki, M., Moradi-Moghadam, M., & Cruz-Machado, V. (2016). The impact of knowledge management practices on supply chain quality management and competitive advantages. *Management and Production Engineering Review*, 7.
- Barley, W. C., Treem, J. W., & Kuhn, T. (2018). Valuing multiple trajectories of knowledge: A critical review and agenda for knowledge management research. *Academy of Management Annals*, 12(1), 278–317.
- Bashirova, M., & Sattarova, A. (2018). The Use of New Teaching and Learning Technologies for Professional Qualification Development in the System of the Initial and Secondary Vocational Education. In *Vocational Teacher Education in Central Asia* (pp. 111–115). Springer, Cham.
- Bergman, E. M., & Feser, E. J. (2020). Industrial and regional clusters: concepts and comparative applications.
- Bhattacharjee, A. (2012). Social science research: Principles, methods, and practices.
- Bohalteanu, C. (2016). The current experience and training of Romanian Occupational Health and Safety (OHS) professionals. Middlesex University.
- Borsekova, K., Vaňová, A., & Vitálišová, K. (2017). Smart specialization for smart spatial development: Innovative strategies for building competitive advantages in tourism in Slovakia. *Socio-Economic Planning Sciences*, 58, 39–50.
- Bose, U. (2019). ICT, Marketing Technology and E-Commerce In Unstable Economies (Cases of South Sudan, Syria, Democratic Republic of Congo, Yemen, Somalia). *International Journal of All Research Writings*.
- Cegliński, P. (2016). The concept of competitive advantages. Logic, sources and durability. *Journal of Positive Management*, 7(3), 57–70.
- Charband, Y., & Navimipour, N. J. (2018). Knowledge sharing mechanisms in the education: A systematic review of the state of the art literature and recommendations for future research. *Kybernetes*.
- Chaudhry, A. Q., Munawar, S., & Sittar, K. (2020). Role of Principals' Motivational Strategies and Performance of Elementary Schools Teachers Regarding their Academic Qualification. *Journal of Elementary Education*, 29(2), 109–120.
- Chen, J., Ge, F., Xu, Y., & Li, Y. (2019). Construction of Practical Teaching System for Technical Skilled Talents Based on Professional Ability Training. In *2019 3rd International Conference on Economic Development and Education Management (ICEDEM 2019)*. Atlantis Press.
- Chiambaretto, P., Massé, D., & Mirc, N. (2019). "All for One and One for All?"-Knowledge broker roles in managing tensions of internal coopetition: The Ubisoft case. *Research Policy*, 48(3), 584–600.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. Sage Publications.
- Cura, F., & Alani, T. A. (2018). Accreditation Effect on Quality of Education at Business Schools.

- International Journal of Social Sciences & Educational Studies*, 4(5), 71.
- Deshmukh, R. (2020). Understanding the Cultural Factors to Build Innovation in Organizations. In *The Tenth International Conference on Engaged Management Scholarship*.
- Dhir, S. (2019). The changing nature of work, leadership, and organizational culture in future ready organizations. Corporate culture, Management, Leadership, Job redesign, Organizational Behavior, Innovation, Change Management, Human Resources, VUCA.
- Dyer, J. H., & Singh, H. (1998). The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *Academy of Management Review*, 23(4), 660–679.
- Eaton, J. S. (2016). The quest for quality and the role, impact and influence of supra-national organisations. *Global Rankings and the Geopolitics of Higher Education*. Routledge, Abingdon, 324–338.
- Evelina, K. (2018). The impact of proactive corporate social responsibility strategy on competitive advantages. *International Journal of Innovative Technologies in Economy*, (4 (16)).
- Falk, T., Kumar, S., & Srigiri, S. (2019). Experimental games for developing institutional capacity to manage common water infrastructure in India. *Agricultural Water Management*, 221, 260–269.
- Feizabadi, J., Gligor, D., & Motlagh, S. A. (2019). The triple-As supply chain competitive advantage. *Benchmarking: An International Journal*.
- Ferreira, J., Coelho, A., & Moutinho, L. (2020). Dynamic capabilities, creativity and innovation capability and their impact on competitive advantage and firm performance: The moderating role of entrepreneurial orientation. *Technovation*, 92, 102061.
- Forrest, J. Y.-L., & Nightingale, J. (2017). Successfully transition into the era of transient competitive advantages. *Northeastern Association of Business, Economics and Technology*, 73.
- Gërguri-Rashiti, S., Ramadani, V., Abazi-Alili, H., Dana, L., & Ratten, V. (2017). ICT, innovation and firm performance: the transition economies context. *Thunderbird International Business Review*, 59(1), 93–102.
- Gharib, M. N., Kahwaji, A. T., & Elrasheed, M. O. (2017). Factors affecting staff retention strategies used in private Syrian companies during the crisis. *International Review of Management and Marketing*, 7(2), 202–206.
- Gillani, S. M. F., Iqbal, S., Akram, S., & Rasheed, M. (2018). Specific antecedents of employees' knowledge sharing behavior. *VINE Journal of Information and Knowledge Management Systems*.
- Giménez, J., Madrid-Guijarro, A., & Duréndez, A. (2019). Competitive capabilities for the innovation and performance of Spanish construction companies. *Sustainability*, 11(19), 5475.
- Giorgi, F., Mattei, A., Notarnicola, I., Petrucci, C., & Lancia, L. (2018). Can sleep quality and burnout affect the job performance of shift-work nurses? A hospital cross-sectional study. *Journal of Advanced Nursing*, 74(3), 698–708.
- Godfrey, P. C., & Hill, C. W. L. (1995). The problem of unobservables in strategic management research. *Strategic Management Journal*, 16(7), 519–533.
- Hair, J. F. J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Long Range Planning (Vol. 46). <https://doi.org/10.1016/j.lrp.2013.01.002>

- Hamadamin, H. H., & Atan, T. (2019). The impact of strategic human resource management practices on competitive advantage sustainability: The mediation of human capital development and employee commitment. *Sustainability*, 11(20), 5782.
- Hammond, H., & Churchill, R. Q. (2018). The role of employee training and development in achieving organizational objectives: A study of Accra Technical University. *Archives of Business Research*, 6(2), 67–74.
- Haseeb, M., Hussain, H. I., Kot, S., Androniceanu, A., & Jermsittiparsert, K. (2019). Role of social and technological challenges in achieving a sustainable competitive advantage and sustainable business performance. *Sustainability*, 11(14), 3811.
- Heredia-Calzado, M., & Duréndez, A. (2019). The influence of knowledge management and professionalization on the use of ERP systems and its effect on the competitive advantages of SMEs. *Enterprise Information Systems*, 13(9), 1245–1274.
- Hili, P., Gani, M. U., Hamzah, N., Rahman, Z., & Sjahrudin, H. (2017). *Effect of human capital and leadership on institutions performance and competitive advantages*. Center for Open Science.
- Holt, L. (2020). Indigenous higher education in historical context in Australia. In *Post-Imperial Perspectives on Indigenous Education* (pp. 91–110). Routledge.
- Huang, L., Chang, K.-Y., & Yeh, Y.-C. (2020). How Can Travel Agencies Create Sustainable Competitive Advantages? Perspective on Employee Role Stress and Initiative Behavior. *Sustainability*, 12(11), 4557.
- Husti, I., & Mahyarni, M. (2019). Islamic Leadership, Innovation, Competitive Advantages, and Performance of SMEs in Indonesia. *East Asia*, 36(4), 369–383.
- Ishola, A. A., Adeleye, S. T., & Tanimola, F. A. (2018). Impact of educational, professional qualification and years of experience on accountant job performance. *Journal of Accounting and Financial Management ISSN*, 4(1), 2018.
- Jackson, S. L. (2015). *Research methods and statistics: A critical thinking approach*. Cengage Learning.
- Jeba, I. J. (2019). Effectiveness of training & development on enhancing employee performance at Energypac Electronics Limited.
- Jones, T. M., Harrison, J. S., & Felps, W. (2018). How applying instrumental stakeholder theory can provide sustainable competitive advantage. *Academy of Management Review*, 43(3), 371–391.
- Jr-Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Jyoti, J., & Rani, A. (2017). High performance work system and organisational performance: Role of knowledge management. *Personnel Review*.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educ Psychol Meas.*
- Krishnaveni, R., & Monica, R. (2016). Identifying the drivers for developing and sustaining engagement among employees. *IUP Journal of Organizational Behavior*, 15(3), 7.
- Kucharska, W., & Erickson, G. S. (2019). The influence of IT-competency dimensions on job satisfaction, knowledge sharing and performance across industries. *VINE Journal of Information and Knowledge Management Systems*.
- Le, M. (2020). Effects of employee development and marketing capacity on competitive advantages: The mediating role of product innovation. *Management Science Letters*, 10(13), 3159–3166.

- Lee, D., & Park, B. (2016). Impact of manufacturing systems on quality management practices, competitive advantages, and operational performance. *International Journal of Productivity and Quality Management*, 19(3), 301–318.
- Lee, J.-C., Shiue, Y.-C., & Chen, C.-Y. (2016). Examining the impacts of organizational culture and top management support of knowledge sharing on the success of software process improvement. *Computers in Human Behavior*, 54, 462–474.
- Lian, B. (2020). The Effect Of Academic Qualification, Work Experience And Work Motivation Towards Primary School Principal Performance.
- Liu, M.-L., Lin, C.-P., Joe, S.-W., & Chen, K.-J. (2019). Modeling knowledge sharing and team performance. *Management Decision*.
- Lu, L., Lu, A. C. C., Gursoy, D., & Neale, N. R. (2016). Work engagement, job satisfaction, and turnover intentions: A comparison between supervisors and line-level employees. *International Journal of Contemporary Hospitality Management*, 28(4), 737–761.
- Mahdi, O. R., Nassar, I. A., & Almsafir, M. K. (2019). Knowledge management processes and sustainable competitive advantage: An empirical examination in private universities. *Journal of Business Research*, 94, 320–334.
- Mikalef, P., Krogstie, J., Pappas, I. O., & Pavlou, P. (2020). Exploring the relationship between big data analytics capability and competitive performance: The mediating roles of dynamic and operational capabilities. *Information & Management*, 57(2), 103169.
- Mormina, M. (2019). Science, technology and innovation as social goods for development: rethinking research capacity building from sen's capabilities approach. *Science and Engineering Ethics*, 25(3), 671–692.
- Msallam, A. A., Abu-Naser, S. S., Shobaki, M. J. Al, & Al-Habil, W. I. (2019). Computerized Management Information Systems and Its Relationship to Improving the Job Performance of the Employees of the Palestinian Cellular Telecommunications Company-Jawwal.
- Muqadas, F., Rehman, M., & Aslam, U. (2017). Exploring the challenges, trends and issues for knowledge sharing. *VINE Journal of Information and Knowledge Management Systems*.
- Narayana, A. (2017). A critical review of organizational culture on employee performance. *American Journal of Engineering and Technology Management*, 2(5), 72–76.
- Nasifoglu Elidemir, S., Ozturen, A., & Bayighomog, S. W. (2020). Innovative behaviors, employee creativity, and sustainable competitive advantage: A moderated mediation. *Sustainability*, 12(8), 3295.
- Nguyen, C., & Duong, A. (2020). The Impact of Training and Development, Job Satisfaction and Job Performance on Young Employee Retention. *International Journal of Future Generation Communication and Networking*, 13(3), 373–386.
- Ni, G., Cui, Q., Sang, L., Wang, W., & Xia, D. (2018). Knowledge-sharing culture, project-team interaction, and knowledge-sharing performance among project members. *Journal of Management in Engineering*, 34(2), 4017065.
- Ning, Y., Fan, Z.-P., & Feng, B. (2006). Knowledge capability: A definition and research model. In *International Conference on Knowledge Science, Engineering and Management* (pp. 330–340). Springer.
- Noaman, A. Y., Ragab, A. H. M., Madbouly, A. I., Khedra, A. M., & Fayoumi, A. G. (2017). Higher

- education quality assessment model: towards achieving educational quality standard. *Studies in Higher Education*, 42(1), 23–46.
- Ntiri-Ampomah, A. (2016). Balancing The Gap Between The Hidden Contradictions In TQM Implementation. University of Ghana.
- Nurtanto, M., Sofyan, H., Pardjono, P., & Suyitno, S. (2020). Development model for competency improvement and national vocational qualification support frames in automotive technology. *International Journal of Evaluation and Research in Education*, 9(1), 168–176.
- Obeidat, B., Al-Khateeb, A., & Abdallah, A. A. (2019). Reviewing the mediating role of work/life balance and motivational drivers of employee engagement on the relationship between talent management and organization performance. *Journal of Social Sciences (COES&RJ-JSS)*, 8(2), 306–326.
- Obeidat, D., Yousef, B., Tawalbeh, H. F., & Masa'deh, R. (2018). The Relationship between Human Resource Management (HRM) Practices, Total Quality Management (TQM) Practices and Competitive Advantages. *Total Quality Management (TQM) Practices and Competitive Advantages (December 12, 2018). Modern Applied Science*, 12(11).
- Pham, H. (2020). Impact of human resource management practices on enterprises' competitive advantages and business performance: Evidence from telecommunication industry. *Management Science Letters*, 10(4), 721–732.
- Rahardja, U., Moein, A., & Lutfiani, N. (2018). Leadership, competency, working motivation and performance of high private education lecturer with institution accreditation B: Area kopertis IV Banten province. *Man India*, 97(24), 179–192.
- Risher, J., & Hair Jr, J. F. (2017). The robustness of PLS across disciplines. *Academy of Business Journal*, 1, 47–55.
- Riyanto, S., Sutrisno, A., & Ali, H. (2017). The impact of working motivation and working environment on employees performance in Indonesia stock exchange. *International Review of Management and Marketing*, 7(3), 342–348.
- Rodrik, D. (2018). *New technologies, global value chains, and developing economies*. National Bureau of Economic Research.
- Saeidi, P., Saeidi, S. P., Sofian, S., Saeidi, S. P., Nilashi, M., & Mardani, A. (2019). The impact of enterprise risk management on competitive advantage by moderating role of information technology. *Computer Standards & Interfaces*, 63, 67–82.
- Salem, S. F., & Alanadoly, A. B. (2020). Personality traits and social media as drivers of word-of-mouth towards sustainable fashion. *Journal of Fashion Marketing and Management*. <https://doi.org/10.1108/JFMM-08-2019-0162>
- Salem, S. F., & Salem, S. O. (2018). SELF-IDENTITY AND SOCIAL IDENTITY AS DRIVERS OF CONSUMERS'PURCHASE INTENTION TOWARDS LUXURY FASHION GOODS AND WILLINGNESS TO PAY PREMIUM PRICE. *Asian Academy of Management Journal*, 23(2).
- Salem, S. F., & Salem, S. O. (2019). Effects of social media marketing and selected marketing constructs on stages of brand loyalty. *Global Business Review*, 0972150919830863.
- Salunke, S., Weerawardena, J., & McColl-Kennedy, J. R. (2019). The central role of knowledge integration capability in service innovation-based competitive strategy. *Industrial Marketing Management*, 76, 144–156.

- Sharp, K. (2017). The distinction between academic standards and quality: implications for transnational higher education. *Quality in Higher Education*, 23(2), 138–152.
- Sigalas, C. (2015). Competitive advantage: the known unknown concept. *Management Decision*.
- Sigalas, C., Economou, V. P., & Georgopoulos, N. B. (2013). Developing a measure of competitive advantage. *Journal of Strategy and Management*.
- Singh, S. K., Chen, J., Del Giudice, M., & El-Kassar, A.-N. (2019). Environmental ethics, environmental performance, and competitive advantage: role of environmental training. *Technological Forecasting and Social Change*, 146, 203–211.
- Singh, S. K., Gupta, S., Busso, D., & Kamboj, S. (2019). Top management knowledge value, knowledge sharing practices, open innovation and organizational performance. *Journal of Business Research*.
- Skolnik, M. L. (2016). How do quality assurance systems accommodate the differences between academic and applied higher education? *Higher Education*, 71(3), 361–378.
- Son, S. Y., Cho, D. H., & Kang, S. (2017). The impact of close monitoring on creativity and knowledge sharing: The mediating role of leader-member exchange. *Creativity and Innovation Management*, 26(3), 256–265.
- Stajković, A. D., & Sergent, K. (2019). *Cognitive Automation and Organizational Psychology: Priming Goals as a New Source of Competitive Advantage*. Routledge.
- Sweis, R., Abualsondos, A., Magableh, M., Alamayreh, E., Sukkari, L., & Alawneh, A. (2020). THE EFFECT OF TOTAL QUALITY MANAGEMENT PRACTICES ON THE ACADEMIC PERFORMANCE OF ISO: 9001 CERTIFIED PRIVATE SCHOOLS: THE CASE OF JORDAN. *International Journal of Information, Business and Management*, 12(1), 113–140.
- Tomlinson, M. (2016). The impact of market-driven higher education on student-university relations: Investing, consuming and competing. *Higher Education Policy*, 29(2), 149–166.
- Wang, Z., & Sarkis, J. (2017). Corporate social responsibility governance, outcomes, and financial performance. *Journal of Cleaner Production*, 162, 1607–1616.
- Zainol, N. R., & Al Mamun, A. (2018). Entrepreneurial competency, competitive advantage and performance of informal women micro-entrepreneurs in Kelantan, Malaysia. *Journal of Enterprising Communities: People and Places in the Global Economy*.
- Zanello, G., Fu, X., Mohnen, P., & Ventresca, M. (2016). The creation and diffusion of innovation in developing countries: A systematic literature review. *Journal of Economic Surveys*, 30(5), 884–912.
- Zhijie, S., Asghar, M., Gull, N., Shi, R., & Akbar, M. (2019). Perceived organizational politics impact on organizational citizenship behavior: Job stress in the teachers. *BioCell*, 43(6).
- Afolabi, I. T., and FisayoAdegoke. "Analysis of Customer satisfaction for competitive advantage using clustering and association rules." *International Journal of Computer Science and Engineering (IJCSSE)* 3.2 (2014): 141-150.
- Mehta, P. A. L. L. A. V. I., and K. H. U. S. H. B. U. Mehta. "Green HRM practices and organizational culture." *International Journal of Human Resources Management* 6.1 (2017): 1-6.
- Berliandaldo, Mahardhika, and AnangHidayat. "Implementing Talent Management Approach, to Improve Non-Tax Revenue in Center for Innovation." *International Journal of Business and General Management (IJBGM)* 6.6 (2017): 47-56.

- Biriowu, C. S., and Nissi Linda Kalio. "TALENT ANALYTICS AND EMPLOYEE RETENTION IN NIGERIA ORGANIZATIONS." *International Journal of Human Resources Management (IJHRM)* 9 (2020): 1-12.
- Khatoon, Nuzhath. "Integration of information technology with human resource training and its impact on performance." *International Journal of Human Resource Management and Research (IJHRMR)* 5.4 (2015): 17-22 (2015).
- Madhavi Lakshmi, P., and P. Siva Pratap. "HR Analytics-a Strategic Approach to HR Effectiveness." *International Journal of Human Resource Management and Research (IJHRMR)* ISSN (P) (2016): 2249-6874.