Learning Organizations and Competitive Advantage as Mediating the Effect of Network Capability on Organizational Performance

Bunyamin[1*], Kadarusman[2]
[1*] Management Departement, STIE Malangkuçeçwara Malang
Jl. Terusan Candi Kalasan Malang, Jawa Timur 65142
[2] Accounting Departement, STIE Malangkuçeçwara Malang
Jl. Terusan Candi Kalasan Malang, Jawa Timur 65142
E-mail: kadarusman@stie-mce.ac.id [2*]

ABSTRAK

This study aims to test the effect between the Network Capability and Organizational Performance and Learning Organization, with the Competitive Advantage being served as the moderating variable conducted at Small and Medium Enterprises (SME) in Malang city. This study was done by distributing the questioners filled in by the owners and the heads of the small and medium enterprises firms in Malang city. The data was processed using smartpls program. The result shows that the Network Capability directly affects the Organizational Performance, Learning Organization, and Competitive Advantage. Organizational Performance is also directly and positively affected by the Learning Organization and Competitive Advantage. The indirect effect suggests that the Learning Organization and Competitive Advantage are variables that mediate the effect between the Network Capability and Organizational Performance and serve as partial mediation. Based on this study, it is hoped that it gives. This result is expected to give a deeper understanding of the importance of the strategy implementation referring to the resource-based view of the organization. The Network Capability improvement can be a trigger to develop the organization's learning capability, competitive and organizational performance. Practically, is expected to be implemented within an organization to collaborate either with internal or external parties

Keywords: Learning Organization, Network Capabilit, Compettitive Advantage

INTRODUCTION

Resources based view (RBV) states that the company's competitive capability depends on the resource's ownership that has a valuable, rare, imperfectly imitable, and non-suitable characteristic or VRIN in short. A company that has a resource with the VRIN characteristic can generate a barrier for the newcomers to enter the competition resulting in high profitability (Barney, 1991; Wernerfelt, 1984). Small, medium and big enterprises are faced with the changes in the increasingly dynamic, complex, and unpredictable environment. The Resources-based View states that the firm has limited internal resources, thus it needs to be constantly renewed to maintain a competitive advantage. (Lee, Lee, & Pennings, 2001) emphasize the importance of collaboration in developing a network from the external parties for the company.

The company which develops a diverse network has a chance to gain knowledge, competence, new resources, contacts with diverse enterprise thus, improving the limited internal resources' capability in boosting the competitive advantage (Adler & Kwon, 2002; Baum, Calabrese, & Silverman, 2000). The though competition, ever-changing and rapid technology changes, the proliferation of product variations, and the shorter product life cycles are the adhered characteristics of the industry. The company should find a new way to run its business by undertaking innovation and developing a network either for external or internal parties to generate more profits as well as to gain a competitive advantage. The company which possesses a networking capability tend to learn how to obtain information from the market, gathering new ideas and looking for moral support to execute the technical matters (Messersmith & Wales, 2013; Zacca, Dayan, & Ahrens, 2015). The research result from (Zacca et al., 2015) suggests that the effect of network capability on the company's performance is mediated by innovativeness and competitive aggressiveness.

The improvement of the company's performance can be obtained from implementing a proper strategy. Strategic orientation consisting of entrepreneurship, market orientation, and technology are the ones that can improve the long-term accomplishment and the competitive advantage. (Hurley & Hult, 1998; Mu & Di Benedetto, 2011; Noble, Sinha, & Kumar, 2002) argue that the network orientation should be a part of strategic orientation in the company because it becomes a source of innovation and competitive advantage. Acostaa, Crespo, & Agudo, (2018) also, study the network capability which is considered to be part of the strategic orientation because it has a dynamic capability in improving the company's performance. Small and medium enterprises have limited resources thus, finding and developing the network capability as the part of the solution regarding the owned resources is

needed.

Capability is the resource's attribute that is embedded in an organization which is immovable and enables the organization to coordinate and utilize its resources (Ray, Barney, & Muhanna, 2004). One of the strategic orientations is the network capability which is a resource that can be used to improve their capability in achieving a competitive advantage and obtaining a favorable performance. Thus, the relationship between the organizations can be approved as the capability that can be the source of competitive advantage and favorable performance (Dyer & Singh, 1998; Gulati, Nohria, & Zaheer, 2000). Strategic orientation can facilitate the suitability between the owned resources and the company's strategy and how the company adapts to the external condition.

Network capability is the company's capability in developing and utilizing the network between organizations to improve the competitive advantage and organizational performance (Parida, Pesämaa, Wincent, & Westerberg, 2017). The company is expected to maintain an existing network and to increase the capability to build and discover new networks to obtain additional resources rather than compensating for the lack of internal resources. Network capability is also expected to improve and utilize the expertise so that the organization can build, develop, and develop and efficiently handle the relationship either inside or outside the networks (Vesalainen & Hakala, 2014). The company should possess an ability to recognize external information, assimilating, and implementing it for commercial purposes to improve its' performance. The company is also expected to keep on learning to anticipate the changes of information from the external partner so that it can continuously adapt to the ongoing changes. They also should not only manage and compiling the external knowledge but also adapting their internal capability either from the systematization, coordination, or knowledge socialization side to succeed in strategic innovation (Gebauer, Worch, & Truffer, 2012).

The research result from (Karami & Tang, 2019), indicates that network capability is proven to be a mediating variable between entrepreneurial orientation and international performance, at the same time it can be concluded that network capability affects international performance. Network capability is expected to enable the organization to always learn about how to gain experience and convert those experiences into practical knowledge. The organization must encourage and facilitate its members to continuously learn so that they possess adequate either technical or managerial skills. This kind of learning becomes important for small and medium enterprises as from this learning the capability or distinguishable new resources are obtained, so it can be "a weapon" to improve the competitive advantage and eventually improves the company's performance. (XU, 2019)

states that there is a reversed U relationship between the network cooperation and the performance, it signals that the redundant and ever-increasing networking on a certain level can decrease the company's performance. Network capability is a part of internal resource whose existence is hard to be isolated from other resource capabilities, resulting in dependency between the resources possessed by the company.

The research result from (Zacca et al., 2015) suggests that the network capability positively affects knowledge creation and firm performance. Meanwhile, (Koch & Windsperger, 2017) state that the company can reach competitive advantage by forming an active digital environment and creating a shared value from interconnected companies. The research result from Acostaa et al., (2018) shows that the implementation of network capability affects international performance. The result from (Kurniawan, Manurung, Hamsal, & Kosasih, 2020) illustrates that there is a direct insignificant effect between the network capability and firm performance and business process agility. Network capability in a younger organization can speed up the company's performance, meanwhile, for the older company, it should go through the internal resource configuration path thus, it signals the mediating variable on how the network capability affects the performance to be included inside. (Chen, Coviello, & Ranaweera, 2020). Some of the research gaps indicate that there is a chance to develop the network capability concept on organizational performance. This study shapes a new model by including a learning organization variable and competitive advantage as a mediating variable. Network capability creates value and new knowledge so that the company should give every individual in the company a chance to do continuous learning. Network capability is also expected to create competitive advantage because the external partner could be a solution for the limited internal resources

The company's performance is a measurement to what extent it is managed and how well the value is given to the customers and other stakeholders are. The performance is a multi-dimension construct which can depend on the indicators used within the measurement (Lumpkin & Dess, 1996; Lumpkin, Wales, & Ensley, 2011), that can be in the form of each or three measurements combined, namely; financial perception, non-financial perception, and financial data (Lumpkin et al., 2011). This study uses a performance measurement with five indicators, namely: changes in the market segment, changes in the sales volume, changes in the firm's reputation, changes in the operating profit, and changes in assets (Zhao, Li, Lee, & Chen, 2011).

Network capability is defined as the company's capability in developing and utilizing the inter-organizational relationship to achieve a favorable organizational performance

(Walter, Auer, & Ritter, 2006). The company that has a partnership experience with another organization is proven to improve its performance. Network capability is the company's capability in obtaining, managing, and developing the benefits from external parties (Parida et al., 2017). Network capability is measured using four dimensions, namely: the ability to coordinate with the partners, knowledge about the partners, relationship skills with the partners, and internal communication skills. Each dimension is measured by three indicators/items (Parida et al., 2017; Walter, Auer, & Ritter, 2006).

The competitive advantage concept is a strategic implementation that is not done by the competitors that can facilitate cost reduction, market exploitation opportunities, and/or neutralizing the threats from the competitors (Ray et al., 2004). The performance is generally conceptualized as a result gathered from the company as a consequence of its strategic implementation (Helfat & Peteraf, 2009; Teece & Pisano, 1994). Competitive advantage in the resource-based view is an antecedent of organizational performance (Ray et al., 2004). Thus, it can be concluded that the competitive advantage does affect the company's performance, not the other way around. The competitive advantage in this study is measured using five indicators according to the forces that affect the competition and profitability which is known as Porter's five-force analysis (Basu & Gupta, 2013; Porter, 1985).

A learning organization is an organization that gives its members a chance to do continuous learning as a part of the organization's action to anticipate the existing changes (Pedler, Boydell, & Burgayne, 1989). Learning organization has two main components, namely; organization members, and the structure and culture created by the social institution of the organization (Yang, Watkins, & Marsick, 2004). The learning organization model is divided into four levels, namely: firstly, the individual level which consists of two dimensions of organizational learning, namely a continuous learning, dialogue and inquiry; secondly, team or group level which is reflected from the team learning and collaboration; thirdly, organizational level, which has two dimensions of organizational learning, namely embedded system and empowerment; and fourthly, the global level, which consists of two dimensions of organizational learning, namely the connection system and strategic leadership (Leufvén, Vitrakoti, Bergström, Ashish, & Målqvist, 2015; Marsick & Watkins, 2009; Yang et al., 2004).

Network Capability and Learning Organization

According to (Dyer & Singh, 1998), the knowledge-sharing between the companies routinely can be formed by creating a relationship between multiple companies. It is done based on the fact that there is an awareness of their limited internal resource. Network

capability can be used to implement the strategy and innovation in improving the networking capacity so that they can earn their expected performance. Learning organization is an effort to acquiring, integrating, exploiting the knowledge-based resource so that the company can continuously learn from the different partners inside their network. The network development enables a chance for the company to learn and escalate their competency, obtain a new resource, and maintain contact with the diverse partners resulting in the improvement in the internal resource's capability (Adler & Kwon, 2002; Baum, Calabrese, & Silverman, 2000; Deutscher, Zapkau, Schwens, Baum, & Kabst, 2016). (Vesalainen & Hakala, 2014; XU, 2019) state that the company that can develop their network is expected to always refine their capacity, by offering a chance to their members to keep on learning. Based on the statements above, the second hypothesis is proposed:

H1: Network capability positively and significantly affects the learning organization

Network Capability and Competitive Advantage

The internal resource limitation becomes the main cause for the firms especially the small and medium enterprises (SME) in performing a collaboration to form a network with either external or internal parties to achieve a competitive advantage (Lee, Lee, & Pennings, 2001). The company should discover a new strategy in facing the increasingly difficult competition, changes in technology, and the short product life cycle by performing an innovation and developing a network to maintain a competitive advantage. Network orientation is one of the strategic orientation which becomes an innovation strategy and a source of the competitive advantage. The company can earn a competitive advantage by creating an inter-connected environment, so that it might help the company in devising and setting up the strategy to achieve and to maintain as well as to improve the competitive advantage (Koch & Windsperger, 2017; Parida et al., 2017). The research result from Mu, (2013) illustrates that the network capacity could be "a weapon" to implement the innovation strategy in forming a solid and firm business and achieving sustainable competitive advantage. Based on the statements above, the hypothesis is formulated as follows:

H2: Network capability positively and significantly affects the competitive advantage

Network Capability and Firm Performance

Organization as a part of the social construct cannot be separated from the environmental dynamics either from the internal or external environment. The internal resource limitation demands the company to build a network to obtain a new resource, partnership with diverse enterprises in hoping that it can optimize the internal resource's ability in achieving a competitive advantage. (Acostaa et al., 2018; Zacca et al., 2015) state

that the network capability is one of the strategic orientations that can improve the organization's performance, thus it should be secured, developed, and implemented as an effort to boost the limited internal resource's capability. Network capability is a capacity to manage and to obtain an advantage from the external relationship. Based on (Walter et al., 2006), the performance is heavily influenced by the network capability's dimension. From those statements above, the hypothesis is formulated as follows:

H3: network capability positively and significantly affects the company's performance.

Learning Organization and Firm Performance

The increasingly complex environment is encouraging the organization to always learn. From the learning activity, the members can anticipate the on-going changes. The company should commit to continuously learn from resource development and the business capability to improve and maintain a better and favorable performance (Amin, 2015). The competitive advantage occurs when the organization not only securing its life cycle but also improving the cycle in a state where it reflects sustainable growth. (Senge & Kofman, 1993) suggest that without a learning environment, hard work, and commitment, an individual is unable to generate a significant added value to the organization. A research result shows that organizational learning does affect organizational performance (Aly, 2016; Hussein, Mohamad, Noordin, & Ishak, 2014; Zhang, Zhang, & Yang, 2004). Based on the underlying statements, the hypothesis can be formulated as follows:

H4: Learning organization positively and significantly affects the firm performance

Competitive Advantage and Firm Performance

According to (Porter, 1985) the comparative advantage occurs whenever the company can earn an above-average return in investment on the industrial scale. Meanwhile, (Barney, 1991) suggests that proper implementation of the strategy to create a company's value which is not done by the competitors could be controlled, thus, the formulation and implementation of the strategy can be done efficiently and effectively resulting in a competitive advantage. The competitive advantage and performance are a construct which often used interchangeably, however, according to (Scott L. Newbert, 2008) both of them are a different construct. Competitive advantage is a concept of strategic implementation of the company which is not done by the contemporary competitors by reducing the cost, exploiting the market opportunity and an effort to neutralize the threats from the competitors(Barney, 1991), meanwhile, the performance is an outcome gathered from the company as the result of the implementation of the strategy (Teece & Pisano, 1994). The research result from (Rauch, Wiklund, Lumpkin, & Frese, 2009; Tuan & Yoshi, 2010) illustrates that the competitive

advantage does affect the organization's performance. Based on the statements above, the hypothesis can be formulated as follows:

H5: Competitive advantage positively and significantly affect the firm performance
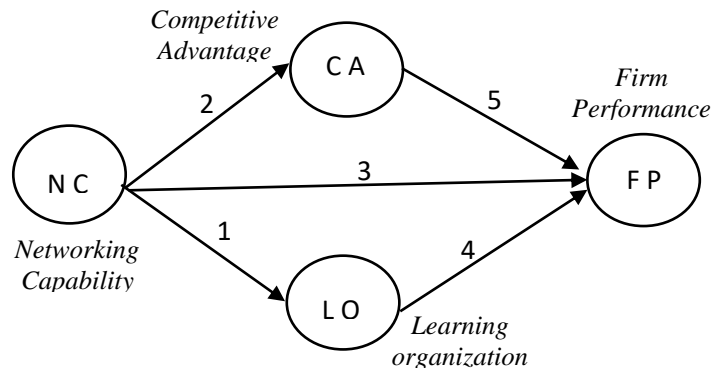
Figure 1. Research Model

Source: Vesalainen & Hakala, (2014), Parida et al., (2017), Walter et al., (2006), Acostaa et al., (2018), Zacca et al., (2015), Aly, (2016), Rauch et al., (2009); Tuan & Yoshi, (2010).

RESEARCH METHODS

This research uses the smartpls 2.0 program to conduct the test, namely; the outer model, which is used to test the validity and reliability, and both inner model tests to assess the model and hypothesis. The validity test consists of convergent validity and discriminant validity. The convergent validity test is done by assessing the loading factor with the least loading factor value > 0.7, however, the loading factor > 0.6 can be accepted if the AVE value > 0.5 (Hair., Black, Babin, & Anderson, 2009), and the discriminant validity is done by utilizing the cross-loading and average variance extracted (AVE) with the least AVE value > 0.5 (Asyraf & Afthanorhan, 2013; Hair. et al., 2009). The composite reliability test is used to test the reliability and it is considered reliable if the value >0.7 and Cronbach alpha with the requirements of being reliable >0.5 (Asyraf & Afthanorhan, 2013; Joseph F. Hair, Hult, Ringle, & Sarstedt, 2017). The inner model is done by accessing the model and the hypothesis. The model test is done by testing the R2 and predictive relevance (Q2) = 1 – (1 – R21) (1 - R22)… (1 – R2n), and Goodness of Fit test (GoF). The prediction relevance value of (Q2) = 0.02, 0.15, and 0.35 shows the small, medium, and great value(Joseph F. Hair et al., 2017) meanwhile Goodness of fit (GoF) = √(average of AVE x average of R2), with the value requirements, small GoF value = 0.1, GoF medium value= 0.2 and great GoF value = 0.38 (Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). The hypothesis test is used to test the proposed hypothesis in the research.

Table 1: Operational definitions and indicators

Variable	Operational definitions	Dimension
Network capability (Parida et al., 2017; Walter et al., 2006)	Network capability is the company's capability in obtaining, managing, and developing the benefits from external parties	The ability to coordinate with the partners (Dimensions) 1. Analyzing what we want to get from the partners. 2. We are developing a relationship with every partner based on their contributions. 3. We routinely discuss with our partners how we support each other The knowledge about the partners (Dimension) 1. We can form a good personal relationship with our business partners. 2. We can flexibly reckon with our partners 3. We almost at all times settle our problems with our partners constructively. The relationship ability with the partners. (Dimension) 1. We recognize our partners 2. We recognize our partners' products/ procedures/ / and services 3. We recognize our partners' strengths and weaknesses The internal communication ability (Dimension) 1. We routinely hold a meeting for every project. 2. Our employees develop informal contact with each other. 3. Managers and employees frequently give feed-backs 4. We are always open to new relationships and new partners.
Firm Performance	The company's performance is a measurement to what extent it is managed and how well the value is given to the customers and other stakeholders are	1. Changes in the market segment 2. Changes in the sales volume 3. Changes in the firm's reputation 4. Changes in the operating profit 5. Changes in the asset size
Competitive advantage (Porter, 1985)	The competitive advantage concept is a strategic implementation that is not done by the competitors that can facilitate cost reduction, market exploitation opportunities, and/or neutralizing the threats from the competitors	1. Ability to face the threats from the newcomers. 2. Ability to face the threats from the consumers bargaining power 3. Ability to face the threats from the suppliers bargaining power 4. Ability to face the threats from the product replacement. 5. Ability to face the threats from the existing competitors.

Variable	Operational definitions	Dimension
Competitive advantage (Porter, 1985)	The competitive advantage concept is a strategic implementation that is not done by the competitors that can facilitate cost reduction, market exploitation opportunities, and/or neutralizing the threats from the competitors	1. Ability to face the threats from the newcomers. 2. Ability to face the threats from the consumers bargaining power 3. Ability to face the threats from the suppliers bargaining power 4. Ability to face the threats from the product replacement. 6. Ability to face the threats from the existing competitors.
Learning Organization (Leufvén et al., 2015; Marsick & Watkins, 2009)	A learning organization is an organization that gives its members a chance to do continuous learning as a part of the organization's action to anticipate the existing changes	1. Continuous learning 2. Dialogue and inquiry 3. Team learning and collaboration 4. Embedded system 5. Empowerment 6. Connection system 7. Strategic leadership

RESULT AND DISCUSSION

Outer Model

The outer model test is used to test the validity and reliability by analyzing the data using the smart pls 2.0 program which can be seen in table 2. The convergent validity test is observed from the value of the loading factor variable on its indicators which the whole loading factors have values more than 0.7 except the CA1, CA 3, and LO1 indicators whose values are less than 0.7. The loading factor value is less than 0.7 but higher than 0.6 and the AVE variable values of competitive advantage and learning organization are higher than 0.5, therefore it can be concluded that the whole indicators are valid and reflects the overall research variables (Hair. et al., 2009). The loading indicator value within its variable is higher compared to the loading factor indicator within other variables and the AVE value of overall variables is>05, therefore the discriminant validity criteria are met. The result of the validity test illustrates that the measuring instrument has measured what it should be measured. With Cronbach's alpha value of the overall variables >0.5 and the composite reliability of overall variables >0.7, therefore the reliability criteria are met, which means the whole measuring instruments have consistently and accurately measured the variables.

For further explanation, it can be seen in table two as follows on the next page.

Table 2. Reliability and Validity test

	CA	FP	LO	NC	NC1	NC2	NC3	NC4	AVE	Cronbach Alpha	composite reliability
CA1	**0.68**	0.30	0.19	0.22	0.15	0.32	0.17	0.08			
CA2	**0.72**	0.35	0.26	0.27	0.23	0.32	0.20	0.13			
CA3	**0.62**	0.30	0.25	0.16	0.12	0.15	0.11	0.09	0.50	0.75	0.83
CA4	**0.72**	0.36	0.27	0.30	0.22	0.28	0.25	0.17			
CA5	**0.77**	**0.36**	0.28	0.33	0.32	0.34	0.18	0.19			
FP1	0.36	**0.77**	0.51	0.47	0.33	0.37	0.37	0.33			
FP2	0.37	**0.81**	0.58	0.51	0.38	0.35	0.38	0.40			
FP3	0.43	**0.84**	0.54	0.52	0.35	0.33	0.46	0.39	0.63	0.86	0.90
FP4	0.35	**0.77**	0.30	0.34	0.24	0.24	0.28	0.23			
FP5	0.35	**0.77**	0.35	0.38	0.27	0.22	0.33	0.28			
LO1	0.23	0.44	**0.69**	0.61	0.21	0.25	0.59	0.60			
LO2	0.17	0.31	**0.75**	0.47	0.17	0.22	0.40	0.48			
LO3	0.27	0.44	**0.78**	0.51	0.34	0.24	0.39	0.47			
LO4	0.26	0.45	**0.74**	0.56	0.34	0.33	0.44	0.49	0.55	0.87	0.90
LO5	0.25	0.35	**0.71**	0.44	0.33	0.30	0.34	0.33			
LO6	0.28	0.42	**0.80**	0.59	0.35	0.28	0.45	0.57			
LO7	0.36	0.61	**0.74**	0.57	0.40	0.37	0.40	0.48			
NC11	0.34	0.34	0.31	0.52	**0.76**	0.47	0.28	0.20			
NC12	0.24	0.32	0.33	0.52	**0.85**	0.45	0.17	0.23	0.65	0.73	0.85
NC13	0.15	0.32	0.37	0.50	**0.80**	0.36	0.18	0.27			
NC21	0.31	0.34	0.40	0.56	0.44	**0.79**	0.28	0.31			
NC22	0.31	0.27	0.17	0.42	0.42	**0.71**	0.18	0.13	0.58	0.64	0.80
NC23	0.30	0.28	0.29	0.53	0.36	**0.78**	0.34	0.25			
NC31	0.24	0.40	0.55	0.68	0.22	0.28	**0.86**	0.51			
NC32	0.28	0.44	0.54	0.69	0.19	0.32	**0.89**	0.50	0.74	0.83	0.90
NC33	0.17	0.36	0.43	0.63	0.26	0.33	**0.83**	0.39			
NC41	0.11	0.34	0.52	0.70	0.25	0.27	0.44	**0.89**			
NC42	0.16	0.41	0.58	0.76	0.23	0.31	0.51	**0.92**	0.72	0.87	0.91
NC43	0.19	0.41	0.62	0.69	0.24	0.23	0.43	**0.88**			
NC44	0.21	0.27	0.55	0.63	0.27	0.23	0.48	**0.69**			

Source : Primary data processed (2022)

Inner model test

The inner model test results to observe the model suitability are as follows:

Table 3: R^2, Q^2, and GoF

	R^2	Q^2	GoF
CA	0.14		
FP	0.45		
LO	0.54		
NC1	0.40	0.99	0.54
NC2	0.45		
NC3	0.60		
NC4	0.67		

Source : Primary data processed (2022)

Q2 value = 1 – (1-0.14) x (1-0.45) x (1-0.54) x (1-0.40) x (1-0.45) x (1-0.60) x (1-0.67)

= 0.99

GoF value = √ (average of R2 x average of AVE
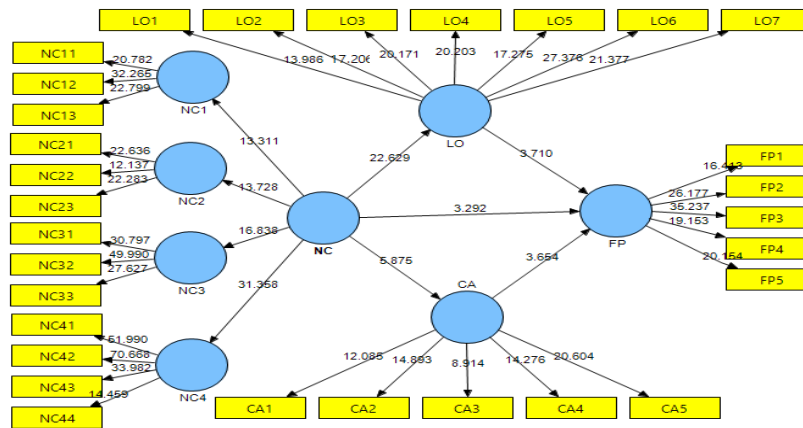
= √ (0.46 x 0.63

= 0.54

Q2 value > 0.35 and GoF value > 0.38 means that based on the Q2 criteria and GoF robust model or robust, then the model can be used as a hypothesis testing model.

Hypothesis testing

The hypothesis testing by observing the t statistic in this figure 2 and the table 4 as follows:

Figure 2. Path Coefficient with Bootstrapping

Table 4. Total Effect and Path Coefficient

	Original Sample	Sample Mean	Standard Error	T Statistics	Decision
Path Effect					
CA -> FP	0.27	0.29	0.07	3.61	Accepted
LO -> FP	0.33	0.32	0.10	3.39	Accepted
NC -> CA	0.37	0.38	0.06	5.83	Accepted
NC -> FP	0.23	0.23	0.07	3.24	Accepted
NC -> LO	0.73	0.73	0.04	20.11	Accepted
Total Coefficient					
CA -> FP	0.27	0.29	0.07	3.61	Accepted
LO -> FP	0.33	0.32	0.10	3.39	Accepted
NC -> CA	0.37	0.38	0.06	5.83	Accepted
NC -> FP	0.57	0.57	0.05	11.91	Accepted
NC -> LO	0.73	0.73	0.04	20.11	Accepted

Source: Primary data processed (2022)

The first hypothesis, the network capability positively and significantly affects the learning organization in the total effect table with the value of β = 0.73 and the statistical t value of 20.11 > 1.97 (α = 0.05, df = 265), therefore the second hypothesis is accepted. The company with high network capability tends to frequently learn and understanding the partners' skills and knowledge by collaboration and continuously hold the learning activities to its members. Dynamic theory capability suggests that the organization has to adapt, renew, and reconfigure the resources to gain an advantage and exploit the opportunity from the ever-

changing business environment. The resource configuration can be originated from the business partners' existing internal and external environment conditions utilization (Teece & Pisano, 1994). The network capability enables the organization to always learn so that the strategic skills and knowledge can be earned to be used to seize the opportunity. The complexity of organizational management becomes more complex with the increasing of partnership, therefore the organization has to implement an improvement in innovation skills by doing continuous learning. Network capability is expected to create, integrate, and manage the relationship with the partners so that it can enable the organization to adjust to the changes in the organizational learning process. Network capability also enables the company to access new and high-quality information rapidly, therefore the company should respond to the information quickly with the organizational learning pace. A collaboration with the right partners can improve the company's knowledge and skills by doing an appropriate and comprehensive organizational learning process to enable quicker products/services development.

The second hypothesis, Network capability positively and significantly affects the competitive advantage in the total effect table with β value + 0.37 and statistical t value 5.83 > 1.97 (α = 0.05, df = 265). The resources-based theory states that the company's achievement heavily depends on the resource availability that has these characteristics; valuable, rare, inimitable, and non-substitutable (VRIN). Network capability is one of the resources which is invested to earn a higher outcome in the future. Network capability is less likely to be possessed by the competitors therefore, it is considered a rare resource because it is made of the sequence of social complexity, and network capability is difficult to imitate because it solely depends on the social construct and organization interconnectivity (Jiang, Liu, Fey, & Jiang, 2018). An organization that can earn, coordinate, and understands the partners' skills and knowledge tend to improve its skills in facing the existing competitions. It also tends to compete with potential newcomers. An ability to face the competitors and the newcomers are since the organization has a tendency to act accordingly in anticipating the possibility of changes in the business environment and has resources with the VRIN characteristics. An organization with a strong networking capability can respond to the market quickly by expanding and altering the products' innovation. The speed of anticipating the market is the key to the competitive advantage (Walter et al., 2006). The research result from (Mu, 2013) suggests that the organization has to establish and utilize a network capability in managing the network and resources to innovate, develop, and create a value to achieve the competitive advantage.

The third hypothesis, network capability (NC) positively and significantly affects the firm performance (FP) with the total effect of β value of = 0.23 with the t statistical value of 3.24 > 1.97 (α = 0.05, df = 265), therefore the first hypothesis is accepted. The increasing company's network capability tends to improve its performance. The company which has a network capability should always refine the coordinating capability with the partners, analyzing and developing a relationship to gain the advantage from the partners, which can be contributed to each party. The company which has a network capability always does coordination through the discussion intensity with the partners to gain an advantage that beneficial to both parties and learning together to improve each other performance. The company is always faced with the lack of the resources to deal with its competitors, therefore it becomes important to improve and utilize the relationship between organizations in facing the competition, and to gain access to the resources owned by the partners. Network capability allows the company to identify the opportunity and quickly exploit it to obtain an optimal result. The relational theory states that the network capability helps the organization to obtain, exploit, and develop its resources to expand the products that are suitable for the consumers' needs and market (Kurniawan et al., 2020; Mu, Thomas, Peng, & Di Benedetto, 2017; Parida et al., 2017). Network capability can benefit the organization by maximizing the opportunity by utilizing the network resource so that it can optimize the proficiency, knowledge, and skills. The organization can produce a combination of new strategic resources if it is capable of routinely connecting the collaboration network at every organizational level (Eisenhardt & Martin, 2000). Synergy, teamwork with the partners can speed up the decision-making process and enables it to accurately obtain the information and competency so that it can be agile in facing the ever-changing business environment.

The fourth hypothesis, Learning organization positively and significantly affects the firm performance in the total effect table β value = 0.33 and statistical t value 3.39 > 1.97 (α = 0.05, df = 265). The organization's tendency which implements organizational learning can improve its performance. The organization's capability in utilizing its resources from the ownership and the use of knowledge in every business process that are less likely to be possessed by the competitors, also it is hard to imitate by the competitors and eventually creating a favorable performance for the organization. The organizational learning implementation enables every member to be a learner individual, and an effort to develop a partnership with the partners thus, creating an organization that quickly responds, anticipates the potential changes in the business environment, and to keep on track with the initial organization's development. Learning organizations can raise the members' awareness that

they are one of the systems, therefore they should act and work together in improving the organizational performance. The members' increased awareness is one of the intangible resources that are hard to imitate by the competitors, so it escalates the organization's ability to improve its performance.

The fifth hypothesis, Competitive advantage positively and significantly affects the firm performance in the total effect table with β value = 0.27 and statistical t value 3.61 > 1.97 (α = 0.05, df = 265). An organization has a strong tendency in facing the existing competition, the potential newcomers tend to have a better performance. The implementation of competitive advantage as a part of internal strategy can be controlled by the organization thus enables it to be efficiently and effectively formulated, and implemented which leads to better organizational performance. The organization which tends to produce with lower costs can have good progress which means it may improve the company's performance. Likewise, the organization which has the valuable, rare, inimitable, and non-substitutable (VRIN) characteristics tends to compete better and eventually win the competition leading to the improvement of the organizational performance. The organization's ability in facing the probability of the potential newcomers, consumers' bargaining power, and suppliers' bargaining power can be a trigger of organizational performance improvement. Competitive advantage and performance frequently become an interchangeable and antecedent construct, however, according to (Scott L. Newbert, 2008) competitive advantage is an implementation concept that is less likely done by the competitors from the efficiency, neutralizing the threats from the competitors and exploiting the market's opportunity, meanwhile, performance is the outcome earned from the implementation of the strategy.

Mediation's role in learning orientation on the impact between network capability and firm's performance. The analysis results in the total effect table show that the impact total between the Network capability and firm performance is 0.57 with the t value = 11.91, and the mediating variable learning organization and competitive advantage causes the impact value of network capability and performance decreases to 0.23 with the statistical t value of 3.24, therefore, the learning organization variable and competitive advantage serve as a partial mediation. An organization with network capability tends to develop continuous organizational learning from the embedded learning process inside the organization. The network development is expected to increase the organization's competence by acquiring new capability, learning from diverse partners resulting in the improvement of internal resource skills and eventually improves the organizational performance. The increased competency and partnership skills also demand the organization to always upgrade the ability in analyzing the

relationship skills and internal communication. Network capability also can improve the organization's capability in facing the competitors, the possibility of the new arrivals, and bargaining powers from the suppliers and the consumers.

CONCLUSIONS

The results of this study show that network capability directly affects organizational performance, organizational learning, and competitive advantage. The impact of network capability on organizational performance is also mediated by learning organization and competitive advantage. This result is expected to give reinforcement to the resources-based viewed theory which states that the organization's achievement cannot be separated from the resources which have valuable, rare, inimitable, and non-substitutable characteristics. The organization that constantly thrive should establish cooperation with either external or internal parties from sustainable network capability development.

REFERENCES

Acostaa, A. S., Crespo, Á. H., & Agudo, J. C. (2018). Effect of market orientation, network capability and entrepreneurial orientation on international performance of small and medium enterprises (SMEs). *International Business Review*, *27*(6), 1128–1140. https://doi.org/10.1016/j.ibusrev.2018.04.004

Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, *27*(1), 17–40. https://doi.org/10.5465/AMR.2002.5922314

Aly, W. O. (2016). The Learning Organization: A Foundation to Enhance the Sustainable Competitive Advantage of the Service Sector in Egypt. *Journal of Public Management Research*, *2*(2), 37. https://doi.org/10.5296/jpmr.v2i2.9583

Amin, M. (2015). The effect of entrepreneurship orientation and learning orientation on SMEs' performance: an SEM-PLS approach. *J. for International Business and Entrepreneurship Development*, *8*(3), 215. https://doi.org/10.1504/jibed.2015.070797

Asyraf, W. M., & Afthanorhan, B. W. (2013). A comparison of partial least square structural equation modeling (PLS-SEM) and covariance based structural equation modeling (CB-SEM) for confirmatory factor analysis. *International Journal of Engineering Science and Innovative Technology (IJESIT)*, *2*(5), 198–205.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99–120.

Basu, S., & Gupta, R. (2013). Explorations of Strategic Orientation (SO) Dimensions on Small Firm Growth and the Challenge of Resources. *European Journal of Business and Management*, *5*(20), 2222–2839.

Baum, J. A. C., Calabrese, T., & Silverman, B. S. (2000). Dont go it alone: Alliance network composition and startups' performance in Canadian biotechnology. *Strategic Management Journal*, *21*(3), 267–294. https://doi.org/10.1002/(SICI)1097-

0266(200003)21:3<267::AID-SMJ89>3.0.CO;2-8

Chen, Y., Coviello, N., & Ranaweera, C. (2020). How does dynamic network capability operate? A moderated mediation analysis with NPD speed and firm age. *Journal of Business and Industrial Marketing*, (June). https://doi.org/10.1108/JBIM-01-2020-0050

Deutscher, F., Zapkau, F. B., Schwens, C., Baum, M., & Kabst, R. (2016). Strategic orientations and performance: A configurational perspective. *Journal of Business Research*, *69*(2), 849–861. https://doi.org/10.1016/j.jbusres.2015.07.005

Dyer, J. H., & Singh, H. (1998). The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage. *The Academy of Management Review*, *23*(4), 660–679. https://doi.org/10.5465/AMR.1998.1255632

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What Are They? *Strategic Management Journal*, *21*, 1105–1121. https://doi.org/10.1108/ebr-03-2018-0060

Gebauer, H., Worch, H., & Truffer, B. (2012). Absorptive capacity, learning processes and combinative capabilities as determinants of strategic innovation. *European Management Journal*, *30*(1), 57–73. https://doi.org/10.1016/j.emj.2011.10.004

Gulati, R., Nohria, N., & Zaheer, A. (2000). Strategic Networks. *Strategic Management*, *21*, 203–215. https://doi.org/10.1201/9781420031393.ch1

Hair., J., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate Data Analysis* (Seventh Ed).

Helfat, C. E., & Peteraf, M. A. (2009). Understanding dynamic capabilities: Progress along a developmental path. *Strategic Organization*, *7*(1), 91–102. https://doi.org/10.1177/1476127008100133

Hurley, R. F., & Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: An integration and empirical examination. *Journal of Marketing*, *62*(3), 42–54. https://doi.org/10.2307/1251742

Hussein, N., Mohamad, A., Noordin, F., & Ishak, N. A. (2014). Learning Organization and its Effect On Organizational Performance and Organizational Innovativeness: A Proposed Framework for Malaysian Public Institutions of Higher Education. *Procedia - Social and Behavioral Sciences*, *130*, 299–304. https://doi.org/10.1016/j.sbspro.2014.04.035

Jiang, X., Liu, H., Fey, C., & Jiang, F. (2018). Entrepreneurial orientation, network resource acquisition, and firm performance: A network approach. *Journal of Business Research*, *87*(February), 46–57. https://doi.org/10.1016/j.jbusres.2018.02.021

Joseph F. Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (second Edi). https://doi.org/10.1007/s10995-012-1023-x [doi]

Karami, M., & Tang, J. (2019). Entrepreneurial orientation and SME international performance: The mediating role of networking capability and experiential learning. *International Small Business Journal: Researching Entrepreneurship*, *37*(2), 105–124. https://doi.org/10.1177/0266242618807275

Koch, T., & Windsperger, J. (2017). Seeing Through the Network: Competitive Advantage in the Digital Economy. *Journal of Organization Design*, *6*(1). https://doi.org/10.1186/s41469-017-0016-z

Kurniawan, R., Manurung, A. H., Hamsal, M., & Kosasih, W. (2020). Orchestrating internal and external resources to achieve agility and performance: the centrality of market

orientation. *Benchmarking: An International Journal*, 1–39. https://doi.org/10.1108/BIJ-05-2020-0229

Lee, C., Lee, K., & Pennings, J. M. (2001). Internal capabilities, external networks, and performance: A study on technology-based ventures. *Strategic Management Journal*, *22*(6–7), 615–640. https://doi.org/10.1002/smj.181

Leufvén, M., Vitrakoti, R., Bergström, A., Ashish, K. C., & Målqvist, M. (2015). Dimensions of Learning Organizations Questionnaire (DLOQ) in a low-resource health care setting in Nepal. *Health Research Policy and Systems*, *13*(1), 1–8. https://doi.org/10.1186/1478-4505-13-6

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance. *The Academy of Management Review*, *21*(1), 135–172.

Lumpkin, G. T., Wales, W. J., & Ensley, M. D. (2011). Entrepreneurial Orientation Effects on New Venture Performance: the Moderating Role of Venture Age. *Academy of Management Proceedings*, *2006*(1), N1–N6. https://doi.org/10.5465/ambpp.2006.22898263

Marsick, V. J., & Watkins, K. E. (2009). Demonstrating the value of a Organizational Learning Culture: The Dimensions of the Learning Organization Questionnaire. *Advances in Developing Human Resources*, *5*(2), 132–151. https://doi.org/10.1177/1523422303251341

Messersmith, J. G., & Wales, W. J. (2013). Entrepreneurial orientation and performance in young firms: The role of human resource management. *International Small Business Journal*, *31*(2), 115–136. https://doi.org/10.1177/0266242611416141

Mu, J. (2013). Networking capability, new venture performance and entrepreneurial rent. *Journal of Research in Marketing and Entrepreneurship*, *15*(2), 101–123. https://doi.org/10.1108/JRME-06-2012-0011

Mu, J., & Di Benedetto, C. A. (2011). Strategic orientations and new product commercialization: Mediator, moderator, and interplay. *R and D Management*, *41*(4), 337–359. https://doi.org/10.1111/j.1467-9310.2011.00650.x

Mu, J., Thomas, E., Peng, G., & Di Benedetto, A. (2017). Strategic orientation and new product development performance: The role of networking capability and networking ability. *Industrial Marketing Management*, *64*, 187–201. https://doi.org/10.1016/j.indmarman.2016.09.007

Noble, C. H., Sinha, R. K., & Kumar, A. (2002). Market orientation and alternative strategic orientations: A longitudinal assessment of performance implications. *Journal of Marketing*, *66*(4), 25–39. https://doi.org/10.1509/jmkg.66.4.25.18513

Parida, V., Pesämaa, O., Wincent, J., & Westerberg, M. (2017). Network Capability, Innovativeness, and Performance: A Multidimensional Extension for Entrepreneurship. *Entrepreneurship and Regional Development*, *29*(1–2), 94–115. https://doi.org/10.1080/08985626.2016.1255434

Pedler, M., Boydell, T., & Burgayne, J. (1989). The Learning Company. *Studies in Continuing Education*, *11*(2), 91–104.

Porter, M. E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*.

Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and

business performance: An assessment of past research and suggestions for the future. *Entrepreneurship: Theory and Practice*, *33*(3), 761–787. https://doi.org/10.1111/j.1540-6520.2009.00308.x

Ray, G., Barney, J. B., & Muhanna, W. A. (2004). Capabilities, business processes, and competitive advantage: Choosing the dependent variable in empirical tests of the resource-based view. *Strategic Management Journal*, *25*(1), 23–37. https://doi.org/10.1002/smj.366

Scott L. Newbert. (2008). Value, Rareness, Competitive Advantage, and Performance: A Conceptual-Level Empirical Investigation of The Resources-Based View of the Firm. *Strategic Management Journal*, *29*, 745–768. https://doi.org/10.1002/smj

Senge, P. M., & Kofman, F. (1993). Communities of commitment: the heart of learning organizations. *Organizational Dynamics*, *22*(2), 5–23. Retrieved from http://www.sciencedirect.com.ezproxy.uct.ac.za/science/article/pii/009026169390050B

Teece, D., & Pisano, G. (1994). The Dynamic Capabilities of Firms : an Introduction. *Industrial and Corporate Change*, Vol. 3, pp. 537–557. Retrieved from http://icc.oxfordjournals.org

Tenenhaus, M., Vinzi, V. E., Chatelin, Y. M., & Lauro, C. (2005). PLS path modeling. *Computational Statistics and Data Analysis*, *48*(1), 159–205. https://doi.org/10.1016/j.csda.2004.03.005

Tuan, N. P., & Yoshi, T. (2010). Organisational Capabilities , Competitive Advantage and Performance in Supporting Industries in Vietnam. *Asian Academy of Management Journal*, *15*(1), 1–21.

Vesalainen, J., & Hakala, H. (2014). Strategic capability architecture: The role of network capability. *Industrial Marketing Management*, *43*(6), 938–950. https://doi.org/10.1016/j.indmarman.2014.05.008

Walter, A., Auer, M., & Ritter, T. (2006). The impact of network capabilities and entrepreneurial orientation on university spin-off performance. *Journal of Business Venturing*, *21*(4), 541–567. https://doi.org/10.1016/j.jbusvent.2005.02.005

XU, X. (2019). Network Orientation, Dynamic Capability and New Enterprise Performance. *3rd International Conference on Advanced Education and Management Science (AEMS 2019)*, 114–118. https://doi.org/10.12783/dtssehs/aems2019/33528

Yang, B., Watkins, K. E., & Marsick, V. J. (2004). The Construct of the Learning Organization: Dimensions, Measurement, and Validation. *Human Resource Development Quarterly*, *15*(1), 31–55.

Zacca, R., Dayan, M., & Ahrens, T. (2015). Impact of network capability on small business performance. *Management Decision*, *53*(1), 2–23. https://doi.org/10.1108/MD-11-2013-0587

Zhang, D., Zhang, Z., & Yang, B. (2004). Learning organization in mainland China: empirical research on its application to Chinese state-owned enterprises. *International Journal of Training and Development*, *8*(4), 258–273. https://doi.org/10.1111/j.1360-3736.2004.00213.x

Zhao, Y., Li, Y., Lee, S. H., & Chen, L. B. (2011). Entrepreneurial Orientation, Organizational Learning, and Performance: Evidence From China. *Entrepreneurship: Theory and Practice*, *35*(2), 293–317. https://doi.org/10.1111/j.1540-6520.2009.00359.x