The Mediating Effect of Network Competence on Organizational Performance of Medium Sized Manufacturing Enterprises in Lagos State Nigeria

Dr. Ezuma Kingsley Eze[a], Dr. Ogbodoakum Nnamdi[b], Dr. Ozuomba Chidimma Nwamaka[c], Dr. Ibrahim Aishatu Ogiri[d], Christopher Chigozie Emmanuel[e]

[a, c]University of Agriculture and Environmental Sciences, UAES, Umuagwo, Imo State Nigeria, [b]Business School of Management and Commerce, Abuja Nigeria, [d]Department of Economics, Federal University of Lafia, [e]Department of Communication, Faculty of Modern Language and Communication, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia
Email: ogbodoakumnnamdi@gmail.com, i.aishatu@socsci.fulafia.edu.ng, chrisemmathegreat@mail.com
Corresponding Author Email: ezumaekingsley@yahoo.com

Abstract
The goal of this study is to investigate how network competence influences the organizational performance of medium-sized manufacturing businesses in Lagos State, Nigeria. The conceptual links in the Nigerian setting are examined in this study. 245 samples of owners and managers of medium-sized manufacturing companies participated in the current study, which was carried out using a standardized questionnaire. Descriptive analysis (mean values, frequencies, and percentages) was conducted using the Statistical Package for Social Sciences (SPSS), whereas inferential statistics were conducted using Structural Equation Modelling (SEM) with AMOS. Additionally, in order to confirm the results of the mediation test, the mediating effect analysis was conducted using bootstrapping. Additionally, organizational performance was measured using Human Resources Development (HRD) performance indicators, which include effectiveness, efficiency, development, satisfaction, innovation, and quality. The results show that better organizational performance is a direct result of integrating knowledge creativity and network competence practices. In particular, network competence helps to foster some level of trust both inside and outside of linked businesses. Furthermore, in order to guarantee performance and serve as a guiding principle for businesses, methods pertaining to the development of individuals' abilities and knowledge must be followed. The association between organizational performance and knowledge innovation in medium-sized businesses in Lagos State, Nigeria, is partially mediated by network competence. To assist owners and managers in implementing the best practices for

human resource development, which include cultivating creativity and network competency, which can open the door for innovations in the company.

Keywords: HRD, Knowledge Creativity, Network Competence, Organizational Performance

Introduction

The capacity to successfully build and maintain relationships both inside and outside of an organization, using those contacts to obtain information, assistance, and collaboration, is referred to as network competence (Wegner, et al., 2023). It's an essential organizational skill that affects a company's capacity to compete and its level of success, particularly in terms of innovation and resource acquisition (Khan & Jafar, 2022). As a mediator between technology use and performance, network competence has a major impact on the organizational performance of medium-sized manufacturing businesses in Nigeria (Yli-Renko, et al., 2020). Research indicates that performance is influenced by human capital predictors through the process of network competence (Khan & Jafar, 2022). It serves as a bridge, and only when network competency is there can the adoption of technology result in better performance (Yli-Renko, et al., 2020). Gaining network competency improves an organization's capacity to use human resources efficiently, which improves results. Additionally, network competency practices combined with efficient technology use result in better organizational performance and increased trust between interdependent businesses (Duke & Edu, 2023).

Every company wants to perform better than its competitors in its sector. However, surviving and expanding in the current competitive business environment is the largest challenge for small and medium-sized enterprises (SMEs) that lack the necessary resources, such as capital, competencies, technology, and pertinent knowledge and information needed to run their business more successfully (Parida, et al., 2017). According to Perin et al (2016), SME owners' incapacity to build strong relationships with pertinent parties prevents them from accessing necessary knowledge and information and financial resources, which in turn leads in subpar performance. As compared to SMEs in developed nations like the US and the UK, Nigerian SMEs are known to lag far behind in terms of GDP and export contribution (Nuryakin, et al., 2018). One of the possible causes of Nigerian companies' low involvement is their inability to obtain necessary resources (Tehseen, et al., 2018). Researchers therefore think that building network competency may help entrepreneurs have access to these vital resources in order to attain better business performance (Wegner, et al., 2023).

The trust of the new global order is focused towards self-reliance and self-sufficiency, which in essence has given impetus to the adoption of small and medium sized enterprises, as a propelling force to achieve that purpose (Ogunyomi & Bruning, 2015; Olatunji, 2013).The organizational performances of these medium sized organizations have become critical to researchers, human resource development practitioners as well as captains of industries recently (Alagaraja, 2012; Swanson & Holton, 2010). While small percentage owner/managers who are the owners of these organizations were of the opinion of adopting practices that encourage human resource development practices, a large percentage of the owner/managers looks hoodwinked about the gains of human resource development practices in their medium sized enterprises (Mahmud & Hilmi, 2014; Ogunyomi & Bruning, 2015).

Meanwhile, Siepel, Cowling and Coad, (2017) contended that any firm that do not consider the development of their human capital from the inception even though they grow to maturity, it is most likely to fail. This suggests that as a company moves through its life cycle, its ability to acquire labor skills and specialization plays a critical role in determining its development and survival chances. As stated by Asah et al. (2015), Sheehan & Shanahan (2017), Siepel et al. (2017), and others, organizations that do not have a human capital development strategy plan to improve human resources or specialized skills like network task competences, knowledge for creativity, at adolescence are likely to die off even after high growth. As a result, motivating owners and managers of businesses, including small and medium-sized enterprises, to implement human capital development practices can enhance individual performance competencies, which in turn can improve the enterprise's organizational performance (Alagaraja, 2012; Olatunji, 2013; Swanson & Hilton, 2010). While some empirical researches have concentrated on HRD and HRM Perspectives on Organizational Performance (Alagaraja, 2012; Ogunyomi & Bruning, 2015), others have highlighted the influence of human resource development on organizational performance (Katou, 2008; Gamage, 2007).

However, the mediating influence of network competence on the organizational performance of medium-sized SMEs and human capital determinants like knowledge creativity have not been examined by researchers. A small number of research have attempted to address it, but they have done so in isolation. For instance, social and human capital predict lifelong learning involvement (Knipprath & Rick, 2015). When considered collectively, earlier studies appeared to concentrate on topics relating to HRD and organizational performance generally, rather than the unique mediation role of network competence and medium-sized firm success. Therefore, little is known about the relationship between network competence's mediating influence on the performance of medium-sized SMEs and human capital predictors like knowledge creativity. If this knowledge gap is not filled, SMEs' performance could suffer significantly. Therefore, the purpose of this paper is to determine how the organizational performance of medium-sized manufacturing businesses might be influenced by human capital predictors, such as knowledge creativity and the mediating role of network competence.

Literature Review and Hypotheses Generation
Organizational Performance
In the area of human resource development, a lot of attention has been paid to comprehending the practices that can result in organizational performance (Alagaraja, 2012; Katou, 2009; Sung & Choi, 2014) as well as the elements that lead to non-performance, which is frequently associated with failure in developing countries (Mahmud & Hilmi, 2014; McCormick & Pedersen, 1996; Ogunyomi & Bruning, 2015). However, economics, sociology, psychology, industrial engineering, human resource management, and other fields have all been linked to organizational performance, according to study on this phenomenon (performance) (Swanson & Hilton 2010). These fields of study are measured differently using particular indicators and concepts to define performance or performance improvement to meet each need or purpose. The HRD discipline, however, looks at the performance and analysis areas from the viewpoints of the individual, the process, and the organization. Quantity, length, and quality are further attributes of output metrics (Swanson, 1994; cited in Swanson & Hilton, 2010).

The Small And Medium Enterprisies (SMEs)
SMEs are small and medium-sized companies with staffing levels that fall within specific ranges. SMEs are defined by Holmes and Farrill (2005) as businesses with less than 200 employees. According to Asah et al. (2015), SMEs face several competitive hurdles because of their capacity to react swiftly to shifting market conditions. Over 90% of African business operations are currently SMEs, which also account for over 50% of the continent's GDP and employment (Saravanan, Gupta, & Ghatak, 2008). Since SMEs in Nigeria account for more than 90% of job opportunities, or roughly 70% of all jobs created annually, especially in the manufacturing sector, they are crucial to the growth of the country's economy (Agwu, 2014; Eniola & Ektebang, 2014). However, many owners and managers seem content with the state of their businesses and pay little attention to issues related to skill development in order to improve performance, even though SMEs are crucial for socioeconomic activities like innovation, economic growth, and employment creation. However, research indicates that even after experiencing rapid expansion, SMEs that failed to take into account specialized talents like knowledge creativity during adolescence are likely to fail (Asah et al., 2015; Siepel et al., 2017). Since traditional networking, which is not competency driven, appears to be outdated, a network competence approach is required to further improve performances (Torkkili et al., 2016). The Nigerian SMEs are categorized in Table 1.

Table 1
Classification of SMEs based on Dual criteria (SMEDAN, 2013)

Size	No. of employees	Total capital base excluding land & building
Micro	≤ 9	Less than 5,000,000.00 Naira
Small	10 – 49	5,000,000 to 50,000,000.00 Naira
Medium	50 – 199	50,000,000 to 500,000,000 Naira
Large	Greater than 200	Greater than 500 million Naira

Source: (SMEDAN, 2013).

Knowledge Creativity
Knowledge creativity is imperative and vital to the performance and success of every SMEs (Mitra, Abubakar, & Sagagi, 2011; Mojca Duh, 2014), improvements on the existing methods and manner of production activities have been attributed to the good policies put in place to encourage knowledge creativity in the work place and beyond (Purcarea, Andreea & Benavides, 2013). You and Bie (2017), identified creativity (innovation) as the driver of economic growth, in the Schumpeterian theory of the gale of creative disruption which he adjudged as the bane of every entrepreneurial activity. This implies organization that invests in knowledge creation of individuals or groups delivers increasing customers demand and stake holders' value (Hills, 2009; Mitra et al., 2011). Thus, efforts should be made to link knowledge creation alongside enterprise plans to foster organizational performance (Mojca Duh, 2014).The ability and drive of an individual to continuously seek out and use the findings of scientific study, new thoughts, innovations, and patents in practice can be characterized as creativity in the context of businesses. An organization must continuously evolve and become a future entity in order to thrive in the twenty-first century (Sokol & Figurska, 2021, p.19). Long-term success involves not only foresight but also forward-thinking, or influencing the future. As a result, those who learn, create knowledge, and transform it into innovations are at the forefront these days. In light of the aforementioned, a creative company should focus on developing creative knowledge workers, who are the source of both creativity and

knowledge (Sokol & Figurska, 2021, p.20). It is highly desirable for an individual to be able to carry out specific tasks in such an organization and exhibit behaviours that yield the desired outcomes. Therefore, predictors—that is, the traits and attributes of an individual that constitute a certain potential that may be unlocked through proper management, motivation techniques, and organizational support—should be used to measure the effectiveness of action, including engaging in creative endeavours or the capacity to apply knowledge (Sokol & Figurska, 2021).

Network Competence
Building relationships and collaborating based on expertise are made possible by network competence (Chaudhuri & Boer, 2016; Torkkeli, Kuivalainen, Saarenketo, & Puumalainen, 2016). Businesses work together to build on each other's strengths to achieve success, supporting the idea that businesses can no longer develop independently as they lack the expertise and knowledge foundation necessary to spur performance (Jagongo & Kinyua, 2013; Peña, 2002). This can help close geographical gaps in marketing and understanding. In this way, industry leaders can investigate the benefits of network competency by making plans to institutionalize technological learning and innovations in their companies. This will help them create technically skilled managers who can manage creative and technical collaboration to increase productivity (Bager et al., 2015; Walter, Auer, & Ritter, 2006). Furthermore, it is thought that implementing network competency in the workplace and fostering interorganizational cooperation can improve enterprise performance.

Theoretical Fornication of Organizational Performance of Medium Sized Enterprise
Network competence is supported and explained by human capital theory, which was selected to conceptualize and explain the relationship between knowledge creativity, organizational performance, and network competence. The section discusses the theory's explanations in detail with regard to the predictor of organizational performance.

Human Capital Theory
According to Gary Becker's 1964 human capital theory, formal or informal education raises a person's performance level and, thus, their earning potential (Gattiker, 1995; quoted in Gamage, 2007). In a similar vein, Dimov and Shepherd (2005) define human capital theory as the entirety of the information that a person has gained by education and experience in various fields and applies to enhance the calibre of work performance. Based on the work of Schultz (1971), Psacharopoulos and Woodhall (1997), and Sakamoto and Powers (1995), Olaniyan & Okemakinde (2008) contend that the implementation of education and development policies forms the theoretical basis of human capital theory. Accordingly, obtaining knowledge and innovative ideas as well as networking with competency skills to manage network tasks and organizations' performance can eventually result from obtaining higher education training and experiences from other domains, such as human capital development (Asah et al., 2015; Purcarea et al., 2013; Ratinho, Harms, & Walsh, 2015). The human capital theory is used in this study to explain knowledge creativity, network competency, and organizational performance based on the previously mentioned understanding.

Resource Based-View
The "resource-based view of the firm" or resource-based view (RBV) is a managerial paradigm that identifies the strategic resources that a company might use to gain a sustained competitive edge. A management paradigm called the Resource-Based View aids companies in comprehending how to acquire and preserve a competitive edge. RBV is predicated on the notion that a firm's competitiveness and success are dictated by the calibre of its resources. Analysing a company's resources and skills to choose strategies that are most likely to yield positive returns appears to be a major focus in management literature, despite criticism (Baraldi et al., 2007). This has drawn a lot of attention over the past 10 years and is based on the firm's RBV. According to Hooley et al. (2005, the resource-based viewpoint, which highlights the significance of critical resources in gaining a competitive advantage, developed to counteract the Porterian view of competition's overwhelming determinism (Fahy et al., 2005, Teck-Yong, 2005). However, scholars like Camelo-Ordaz et al. (2003) point out that a company's ability to maintain a competitive edge depends not only on its competitive architecture, or how well it aligns with its strategy, but also on how well its resources align with the set of crucial strategic industrial factors. Nonetheless, several of the fundamental concepts of RBT seem to provide some difficulties for academics. The resource-based view of competitive advantage, according to Baraldi et al. (2007), is predicated on the ideas that organizations vary in how they control key strategic resources and that resources are not entirely transferable between enterprises. This offers a loosening of the presumptions that businesses have the same level of control over strategic resources (Numan & Naude, 2009, p.3). Regarding competitive advantage, it should be mentioned that the RBV would contend that a company has a sustained competitive advantage when it is putting into practice a value-creating strategy that none of its rivals, either present or potential, are also pursuing at the same time and when these rivals are unable to replicate the advantages of this strategy. In summary, a resource needs to be uncommon, valuable, unique, and non-replaceable in order to have the potential to provide a long-term competitive advantage. According to this, the RBV implies that a business can only establish a sustainable competitive advantage if it possesses organizational, human, or physical assets that are valued, uncommon, unique, and non-replaceable (Numan & Naude, 2009, p.3).

Relationship between Knowledge Creativity and Network Competence
In today's globalized corporate environment, knowledge innovation and network competency are essential. These days, organizations confront numerous obstacles due to competitiveness and a shortage of skilled professionals to handle shifting client needs (Mitrega et al., 2012; Ritter, 1999; Torkkeli et al., 2016). To rebase the existing shift and march it in a way that would make sense and add value, a new strategy must be used. Purcarea et al. (2013) support this idea by arguing that innovative or creative information gained from internal or external organizational learning sources is crucial to a company's growth and success. While external learning can come from working with outside companies to exchange expertise, internal learning can come from on-the-job training (Purcarea et al., 2013). According to Torkkeli et al. (2016), this implies that networking embedding might facilitate innovative learning, unleash human potential, and build competencies that enable the achievement of organizational success. In contrast, Sapienza et al. (2006), referenced in Torkkeli et al. (2016), contended that while network embedding of firms does not always lead to organizational performance in the operation of medium-sized firms, the associated development of organizational capabilities helps the firms achieve sustainable organizational performance.

Accordingly, companies must work together based on knowledge, skills, experience, or capabilities since these are the main resources or assets that drive performance (Hills, 2009; Purcarea et al., 2013). Therefore, the degree of inter-business relationships and collaboration that the businesses are able to establish over time in their areas of interdependency is critical to the survival of the majority of organizations (Mitrega et al., 2012; Peña, 2002; Thornton et al., 2014). Thus, the following theory is proposed:

H1. There is a positive relationship between knowledge creativity and network competence in the manufacturing medium sized enterprise.

Relationship between Knowledge Creativity and Organizational Performance
According to Mitra et al. (2011), knowledge innovation is essential to every organization's performance and success. According to Schumpeter's (1942) notion of the gale of creative disruption, which he deemed to be the bane of all entrepreneurial SMEs' activities, innovation is the primary driver of economic growth (quoted in Sodri et al., 2012). In order to boost knowledge and creativity and drive performance or meet growing stakeholder value and customer demand, businesses must identify, develop, and manage their talents and potential (Hill, Jones, & Schilling, 2014; Hills, 2009). Lack of investment in knowledge for creativity has been blamed in literature reports for the economic difficulties that the majority of developing nations face (Leitch, 2006; Mitra et al., 2011). Organizational performance can result from investing in knowledge for creativity (Leitch, 2006; Mitra et al., 2011; Peterson & Fleet, 2004). Therefore, it is hypothesized:

H2: There is a positive relationship between knowledge creativity and organizational performance of medium sized manufacturing enterprises.

Mediating Effect of Network Competence
The literature has hardly examined the mediating function of network competency. Nonetheless, the literature has similar research on network competency. For instance, Ritter (1999) found that certain businesses prioritized activities related to the development of products and processes, with empirical research demonstrating the significance of cooperation among interconnected firms. Therefore, it was hypothesized how a certain ability could be found and applied to handle the network requirements of the business and relationship development in a unique way. In another study, Torkkeli et al. (2016) investigated the relationship between network competency and the expansion of both domestic and foreign SMEs in the Nordic region. According to a study by some academics, network competence is a complex dynamic capability that basically allows organizations to mold their relationships with external partners. This allows them to optimize various business relationship portfolios and reallocate valuable resources like time, money, and technical skills from one business relationship to another (Mitrega et al., 2012). From this vantage point, they noted that network competence capability is present and quantifiable for a variety of business partners, particularly suppliers and customers. In a different study, Chaudhuri and Boer (2016) looked into how collaborative competence mediated the relationship between NPD success and product-process complexity and New Product Development (NPD) order winners. The study's findings demonstrated that NPD order winners, product winners, and product-process winners all had a direct impact on NPD success in addition to the mediating role of collaborative competency (Chaudhuri and Boer, 2016). On the other hand, no research has been done on how network competency influences medium-sized businesses' (SMEs') organizational success. A major obstacle to the development of theories and instruments for

tracking the performance of SMEs, especially medium-sized manufacturing SMEs, is the paucity of data on the use of network competence as a mediator in characterizing the impact of network competence on SMEs' performance. Consequently, this study suggests network competence as a mediator on the organizational performance of medium-sized SMEs based on the thorough literature assessment. Therefore, it is hypothesized:

H3: There is a positive relationship between network competence and organizational performance of the medium sized manufacturing enterprises.

Network Competence, Knowledge Creativity and Organizational Performance
Network competence is sine qua non with knowledge creativity. For the reason that network competence has to do with knowledge driven relationship building (Ritter, 1999; Torkkeli et al., 2016) organizations can collaborate in terms developing competences that would guarantee innovation among the partnering firms to achieve performance, owing to the current business competiveness, which demands businesses to develop certain competencies in order to realize their set objectives. For example, Universiti Malaya, Malaysia can network with Universiti Putra Malaysia in the area of capabilities such as knowledge and skill development to train managers with certain competencies to the mutual benefit of the partners vice versa thus, this can lead to organizational performance (Chaudhuri & Boer, 2016). We therefore hypothesize:

H4: Network competence mediates the relationship between knowledge creativity and organizational performance.

Based on the description above, this study suggested a strong and positive correlation between the dependent variable, organizational performance of SMEs, and one predictor variable, such as knowledge creativity. One predictor variable and the mediator variable, network competency, are likewise significantly correlated. This study therefore makes the premise that the use of human capital predictors like knowledge creativity and the indirect use of network competence will have a favourable impact on the organizational performance of medium-sized manufacturing SMEs. There is also a presumption that all participants, stakeholders, employees, and clients of the company will be satisfied if all the factors in this study are applied correctly. Consequently, there would be more jobs and a lasting knowledge foundation for Nigerian manufacturing SMEs in Lagos State, which will also operate as a starting point for other economic sectors.

Materials and Methods
Methodology
Only owners and managers of medium-sized manufacturing businesses in Lagos State, Nigeria, who are conscious of their companies' performance, were eligible to participate in this study. Nigeria's Lagos state was selected due to the fact that it has the greatest concentration of medium-sized businesses in the country (SMEDAN, 2013). Simple random probability sampling techniques were used in this study to accomplish this, giving the population being studied an equal chance of being chosen. There are 619 (N population) registered medium-sized manufacturing businesses in Lagos State, Nigeria, according to SMEDAN, 2013. Using Yemane's calculation, the sample size result for the medium-sized businesses is 242.9 samples. Therefore, the study's sample size is around 243. The 243 was chosen from a table of random integers using a formula suggested by Yamane (1967). N= the population of interest was divided using the cluster sampling technique, and the particular

business to be employed for the study was then further identified using random chance sampling. To account for missing or unreturned questionnaires, an extra 10% of the overall sample size was added (Singh & Masuku, 2013). Consequently, 258 of the 267 questionnaires that were delivered to the medium-sized manufacturing company industrial cluster in Lagos State, Nigeria, were returned. Furthermore, 245 responses—or 91.8 percent—were accurately answered or were fully valid cases throughout the Exploratory Data Analysis (EDA). 245 respondents were used as the sample size.

Measures
Questionnaires are the primary data gathering instrument used in this investigation. There were five sections to the measuring device. The demographic details and general business information are included in Sections A and B. Effectiveness, efficiency, development, satisfaction, innovation, and quality are the six characteristics that were used to describe the dependent variable for organizational performance in Section C. The effect variable, network competence, is included in Section D. In contrast, the knowledge creativity independent variable is found in section E.

Instrument for Measuring Organizational Performance of Medium Sized Enterprise
The instrument employed in this study to measure organizational performance was created by Katou (2009) and is a five-point Likert scale with six dimensions: efficiency, effectiveness, development, satisfaction, innovation, and quality. Numbers 1 through 5 of the 25 items in Section C pertain to how owners and managers can successfully accomplish their planned goals. One example of this is the question, "How are effective strategies aligned to the mission and goal statement of my enterprise?" With a sample item (My firm employed the fewest resources to reach its aims), Section C (6-9) discusses the owner/manager's attempt to effectively maximize the fewest resources to achieve its goal. The general norms regarding the impact of training and development on enhancing people's ability to perform well with a sample item are covered in Section C (10–13) (My employee skills are developed for current and future challenges and opportunities); the degree to which all stakeholders of the firm are satisfied with a sample item (My organization pays attention to stakeholder's needs); and the degree to which the organization places a great deal of emphasis on the development of new products or new product creation with a sample item (My organization lay much emphasis on the development of new products and services). Sections C (20–25) deal with how well SMEs' owners and managers can produce high-quality manufactured goods using a sample item (my company hired workers to produce products without errors). The composite measure of organizational performance had a scale coefficient of α of 0.92.

Network Competence Questionnaire (NCQ)
A five-point Likert scale was used to measure the network competence items based on the current research. The Network Competence question was completed using a previous researcher's questionnaire (Ritter et al., 2002; Torkkeli et al., 2016, 2012). Of the 15 items, Section D (26–30) is related to general network competence about collaboration involving other partners with a sample item (I initiated meetings and discussions with those in our firm involved in relationships with our partners). Section D (31-35) evaluates the extent to which the relationships between partners have improved their organizations' set objectives with a sample item (I monitored the extent to which relationship with our partners work to our advantage). A sample item (I exchange confidential information with our partners) is

connected to the sharing of important and private information between integrating partners in Section D (36–40). The scale coefficient α for the composite network competence measure was 0.86;

Knowledge Creativity Instrument
Hosseini and Kamal (2012) validated the Questionnaire Pedagogical Content Knowledge (PCKQ), which has 20 items on a five-point Likert scale. Of these 16 items, section H (41-44) relates to general knowledge about knowledge for creativity with a sample item (I think that you have to spend some time every day coming up with new ideas); section H (45-51) relates to using knowledge to create competitive advantage by creating new things with a sample item (Knowledge creativity is the driving force for competition in my enterprise); and section H (52-56) relates to creating the right environment and developing talents through training. Composite knowledge creativity was 0.96.

Results
Measurement Model Validation
Construct validity, or the degree to which a set of measured items represents the theoretical latent constructs that they are intended to measure, was investigated using confirmatory factor analysis (CFA) (Hair et al, 2006). In addition to observing the model's convergent and composite dependability, CFA provides metrics for overall degree of fit and model specification (Bagozzi, Yi, & Phillips, 1991). To evaluate the measurement of factor loading for items, first and second order CFA were performed; items with factor loading less than 0.5 were eliminated. The construct validity of each construct was tested using second order CFA, which looked at both convergent and discriminant validity. Meanwhile, the criteria for fit indices to test for a model fit according to Hair (2010) is as follows; chi-squared (CMIN x^2 = (100-200); CAMIN/DF = X^2/DF: GFI = >.90; CFI = >.90; IFI=>.90; TLI = >.90; RMSEA = <.082). The CFA supported our anticipated three-factor structure for the study variables based on the model fitness = x^2(141) =250.622; P>=0.05; =.000 x^2/DF=1.777; GFI=.904; CFI=.977; IFI=.977; TLI=.972; RMSEA = .056. This suggests that the three constructs have empirical support from our CFA results.

Table 2
Construct validity (AVE and CR) and Items factor loading Final CFA Fitted Measurement Model of the study

Variables	C.R	AVE
Knowledge creativity	0.964	0.711
Organizational Performance	0.923	0.673
Network Competence	0.859	0.754

Note; CR = Construct/composite reliability; AVE= Average Variance Extracted; CFA= confirmatory factor analysis. Additionally, each construct's AVE is compared to the squared correlations (shared variance) between it and every other construct in the model to assess the discriminant validity of the constructs (Fornell & Larcker, 1981; Hair et al., 2006; Farrell, 2010). According to Table 3 below, if a pair of constructs' AVE is higher than their squared correlation coefficient, discriminant validity is considered to be valid (Farrel, 2010). Because the constructs are different from one another, the discriminant validity assumption is not broken.

Table 3
The study constructs AVE, Correlations and squared correlation

Variables	KN	OP	NC
Knowledge creativity	**0.843**		
Organizational performance	0.697***	**0.820**	
Network competence	0.700***	0.747***	**0.868**

Keep in mind that AVE is the square root of average variance. The values that are bolded are extracted, and the values that are starred (*** significant level) represent correlations between the variables. NC stands for network competency, KN for knowledge creativity, and Op for organizational performance.

Table 4
Shows the descriptive statistics of the owner/manager

Demographic	Frequency	Percentage
Gender		
Male	190	77.6
Female	55	22.4
Age of owners/managers		
> 35 years	53	21.6
35 – 40 years	62	25.3
41 – 45 years	43	17.6
46 – 50 years	37	15.1
< 50 years	50	20.4
Marital Status		
Single	27	11.0
Married	201	82.0
Separated	8	3.3
Divorced	4	1.6
Widower	5	2.0
Level of Education		
Never attended school	6	2.4
Primary school	6	2.4
Secondary school	21	8.6
Diploma /degree	108	44.1
Master's degree, above	104	42.4
Have you attended training		
Yes	223	91.4
No	22	8.6
Type of training		
Manufacturing machine operator	61	24.9
Trading	112	45.7
Mechanical engineer	43	17.6
Civil engineer	27	11.0
Others specify	2	.8
Training duration		
< 1 year	38	15.5
1 year	85	34.7
2 years	51	20.8

Demographic	Frequency	Percentage
3 years	47	19.2
>3 years	24	9.8
Business Establishment		
1-5 years ago	63	25.7
6-10 years	132	53.9
11-15 years	36	14.7
Over 16 years	14	5.7
Number of founders		
1 founder	156	63.7
2founder	69	28.2
3 founder	20	8.2
No of employees		
50 -100	187	76.3
101-150	44	18.0
151-199	14	5.7
Industrial sector		
Manufacturing	245	100.0
Non-manufacturing (i.e. service)		
Trading		
Others specify		

Gender
According to the output result in Table 4, only 22.6% of respondents who are owners or managers of medium-sized manufacturing businesses are female, whereas 77.4% of respondents are male. The lower ratio of women may be explained by their cultural background and their responsibility for caring for the family and children. It might also be related to the fact that some business settings are less welcoming to businesses run by women. This supports earlier researchers' results that men are more likely to work in manufacturing than in other industries like clothing or food selling (Gamage, 2007; Isaga et al., 2015).

Age of the Owners/Managers
According to Table 4's age distribution of owners and managers, 21.6% are under 35. However, 25.3% are between the ages of 35 and 40. 17.6%, however, are between the ages of 41 and 45. In a similar vein, 15.1% are in the 46–50 age range. However, 20.6% of those over 50 were found to be older. According to the findings, people between the ages of 35 and 40 are thought to be nimbler and more productive, possessing a high degree of sound thinking, maturity, and orientation to take business risks and be independent. This supports the idea that 90% of Nigerian businesses are SMEs based.

Marital Status
According to Table 4's findings, 81.9% of owners and managers were married, while 11.1% were single. 2.1% are widowers, 1.6% are divorced, and 3.3% are separated. This indicates that married individuals make up a higher proportion of business owners and managers who run their companies alone. This indicates that married persons have higher degrees of commitment.

Level of Education
According to Table 4's findings, 42.0%, 44.4%, and 8.6% of the owners/managers, respectively, possess a master's degree or higher, a diploma, or a secondary school certificate. Primary school students and those who never went to school make up 2.5% of the population. According to the results, a greater proportion of medium-sized businesses in Lagos State, Nigeria—44.4%—are run and owned by educated individuals who hold first- and diploma degrees.

Training
According to Table 4, 91.4% of owners and managers participate in training, whilst 8.6% do not. This indicates that a higher proportion of managers and owners of medium-sized manufacturing businesses participate in trainings. This runs counter to earlier research that found that SMEs' owners and managers do not attend training, which is thought to be the cause of many of their failures (Mahmud & Hilma, 2014; Hills & Stewart, 2000).

Types of Training
In response to a question concerning the training model described in Table 4. According to the response, 25.1% of owners and managers received instruction on how to use manufacturing equipment. While 11.1% received instruction as civil engineers, 46.1% attended trader's training, 16.9% received mechanical engineering training, and the remaining 8% received other types of training. This indicates that a greater proportion of owners and managers involved in manufacturing had trader's training. This means knowing the specifics of the market, such as when to increase and decrease production of commodities while taking market forces into account. The next step is manufacturing machine operator, who must possess both mechanical engineering and a fundamental understanding of how to operate manufacturing machinery.

Training Duration
According to Table 4's outcome about training duration, 15.6% of owners and managers participated in training for less than a year. 20.2% of owners/managers participated in two years of training, compared to 35.0% who attended for just one year. Furthermore, 19.3% of the owners/managers that responded completed three years of training. In the meantime, 9.9% of the managers and owners had been in training for more than three years. Training is essential for organizational success, as evidenced by the length of time and degrees of training. Essentially, in order to improve performance in medium-sized manufacturing (SMEs), training-related difficulties should be upheld.

Business Establishment
Table 4 of the study report reveals that 26.7% of the companies were founded within a one-to-five-year timeframe. Furthermore, of these companies, 53.5% were founded within a space of six to ten years, whilst 14.4% were founded between eleven to fifteen years. When combined, just 5.3% of these businesses have been in operation for more than sixteen years in total.

Number of Founders
According to the output result in Table 4.1, a single owner or manager created 63.8% of SME businesses. Of the enterprises under examination, 8.2% were created by three

owners/managers, whereas 28.0% were determined to have been founded by two owners/managers. This suggests that the majority of medium-sized businesses were founded and run by a single owner/manager.
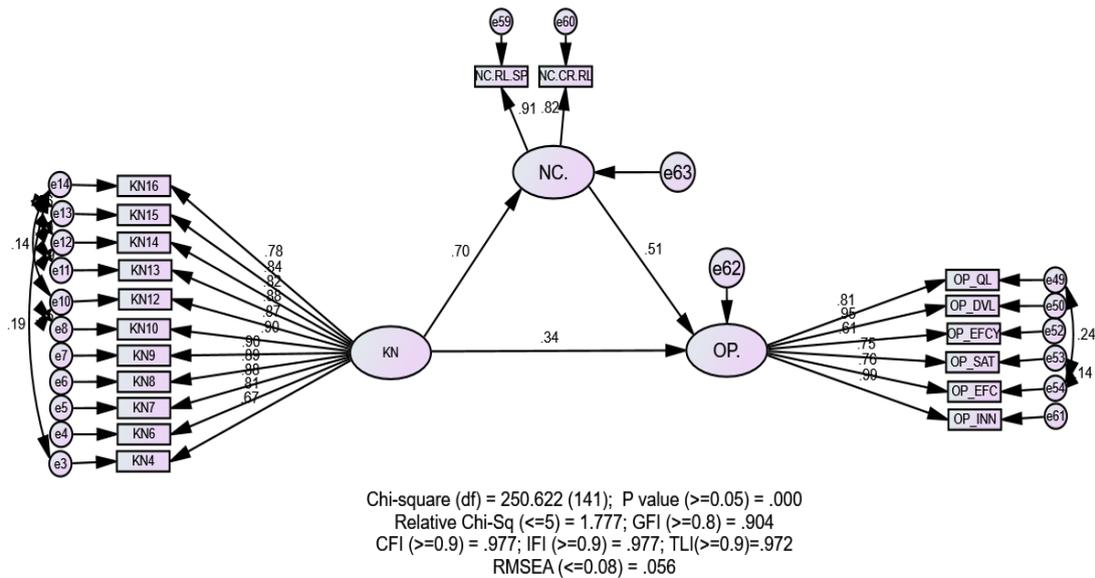
Number of Employees
SMEDAN (2013) used the number of employees, which varies from 50 to 199, to categorize medium-sized businesses (SMEs). In light of this, Table 4.1's results showed that 78.6% of medium-sized SMEs had between 50 and 100 employees, making them fit into this category. Similar to this, 18.0% of employees between 101 and 150 were classified as medium-sized SMEs. Only 5.7% of medium-sized SMEs were found to have between 151 and 199 employees. This suggests that the study's findings were used to determine the various percentages of medium-sized SMEs in Lagos, Nigeria, that practiced different levels. It demonstrates that compared to other SMEs, medium-sized SMEs have the highest staff concentrations (SMEDAN, 2013).

Industrial Sector
Regarding the industrial sector, Table 4 shows that the manufacturing medium-sized sector of SMEs in Lagos, Nigeria, was the exclusive focus of this study.

Structural Model Estimation
An expressive depiction of a structural link between constructs is called a structural model. One of the two-step methods utilized for data analysis was the structural model, which was also used to assess the predictive power of the independent predictor variable and dependent variable in this study. In order to ascertain whether an independent variable, like knowledge creativity, can forecast the dependent variable, organizational performance, the model is put up. The proposed link between the independent, dependent, and mediator variables is shown in Figure 1. According to Tabachnik and Fidel's (1996) recommended range of 100 to 200 for the Chi-Square = CMIN (X2) value, the overall model fitness of the proposed structural model was accessed. Consequently, 250.622 (141) is the Chi-square for the proposed structural model. .000 is the P value (>=0.05). According to Bentler (1990) and Mash and Hocever (1985), the relative Chi-square DF for the relative chi-square (CMIN/DF) must be less than 5.0. As a result, the study's relative chi-square of 1.777 is within the advised range. According to Chau (1997) and Segars and Grover (1993), the GFI must be more than 0.8; hence, the GFI of 0.904 in this study is higher than the suggested value of 0.8. For the three fit indices to be more than >.09 in the range of CFI>.977, IFI>.977, and TLI>.972, respectively, CFI, IFI, and TLI must be greater than 0.9. Byrne (2001) states that in order to satisfy the requirements for model fitness, the RMSEA should be less than.08. As advised, the RMSEA in this study is.056. When considered together and in light of the fit index results, the proposed structural model for this investigation is considered to satisfy the model fitness requirements.

Chi-square (df) = 250.622 (141); P value (>=0.05) = .000
Relative Chi-Sq (<=5) = 1.777; GFI (>=0.8) = .904
CFI (>=0.9) = .977; IFI (>=0.9) = .977; TLI(>=0.9)=.972
RMSEA (<=0.08) = .056

The hypothesized relationship between the dependent variable: organizational performance and the mediator variable network competence, have been tested. The summary of the regression weight coefficient are presented in Table 5.

Table 5
The regression path coefficient and its significance

Construct		Construct	Estimate	S.E	C.R.	P.value	Results
NC.	⬅---	KN	0.725	0.077	9.448	0.000	Significant
OP	⬅---	KN	0.247	0.052	4.733	0.000	Significant
OP	⬅---	NC.	0.354	0.053	6.717	0.000	Significant

Note: NC=Network Competence, Op= Organizational Performance; KN= Knowledge Creativity,

The path (arrow) and coefficients showing the extent to which each external construct influences the corresponding endogenous constructions are shown in table 5. For instance, there is a 0.725 route coefficient between network competency and knowledge creativity. According to this figure, there would be a 0.725-unit rise in network competence for every unit increase in knowledge creativity. Knowledge creativity significantly improved network competence indirectly, in line with the contributions made by each individual (b=.725, ρ = 0.000). Organizational performance was also significantly impacted directly by knowledge creativity (b=.247, ρ =.000). Thus, H1 and H2 are generally supported by the results. Additionally, with regard to H3, the route from network competency to organizational performance was similarly supported at (b =.354, ρ =.000).

Mediation Analysis
To test for mediation effect, Firstly, we begin by modelling the simple effect of independent variable, knowledge creativity on the dependent variable, organizational performance. As shown in figure 2,
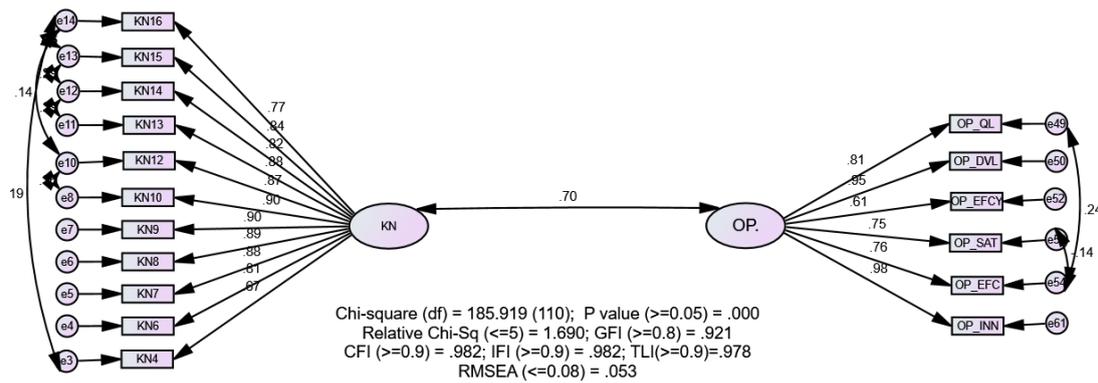
Figure 2. Showing the direct mediation model between knowledge creativity and organisational performance. The direct effect test result is 0.70 with a significant effect p-value of less than 0.000. Second, as illustrated in figure 3, we incorporate network competence, the mediator, into the model. Using AMOS graphics, the direct effect's coefficient value decreased from 0.70 to 0.34, but it was still significant at 0.000. It is referred to as partial mediation in this instance. Therefore, results for the total, indirect, and direct effect test for mediation estimation were determined and are displayed in Table 6 below in order to test for the significant indirect effect of network competence on the relationships between knowledge creativity and organizational performance on individual paths.

Table 6
Distinguishing the standardized total, direct and indirect effect of model and their P-Values

		Total effect	Direct effect	Indirect effect	Type of mediation
KN →OP	beta	0.697	0.342	0.355	Partially mediated
	P value	0.005	0.008	0.013	

Based on these interactions, the suggested H4 hypotheses test was developed in order to quantify the considerable indirect effect of network competence in the relationship between organizational performance and human capital, which is a predictor of knowledge creativity. Consistent with the aforementioned finding, the standardized regression weight of the direct impact of knowledge creativity on SMEs' organizational performance was significant (β =.342, ρ = 0.008), as was the standardized indirect effect of knowledge creativity on network competence via SMEs' organizational performance (β =.355, ρ = 0.013). This hypothesis is supported by the indirect test. The results showed that the association between knowledge creativity and SMEs' organizational performance is partially mediated by network competency. If the independent variable has a large direct effect on the dependent variable, partial mediation takes place. When mediation enters the model, the direct effect is diminished since some of the effects have been transferred through the mediator. Partial mediation is the term used to describe a mediation effect that is diminished but still meaningful. According to the partial mediation, network competence greatly enhances the association between SMEs' organizational performance and knowledge creation. Thus, the study demonstrates that network competence acts as a mediator in the relationship between SMEs' organizational performance and knowledge creation. Consequently, the relationship between knowledge creativity and organizational performance was further strengthened as a result of the implementation of network competence.

Bootstrapping

According to Zainudin (2015), bootstrapping is essentially a resampling technique used to re-confirm the mediation test's outcome. To validate the mediation test, bootstrapping was carried out in this investigation by resampling a 500-bootstrap sample and computing the bias correction at a 95% confidence interval. Accordingly, network competence partially mediates the relationship between knowledge creativity and organizational performance of the manufacturing SMEs in Lagos State, Nigeria, according to the results of standardized direct and indirect effects. Consequently, the mediation analysis supports H4, which suggests that knowledge creativity influences organizational performance indirectly through network competence rather than directly. We compared the mediation and bootstrapping results, as indicated in table 7, using the standard process as described by Zainudin (2015).

Table 7
Bootstrapping result for knowledge creativity to organizational Performance

	Indirect effect	Direct effect
Bootstrapping results	0.355	0.342
Bootstrapping p-value	0.013	0.008
Results	Significant	Significant
Type of mediation	Partial mediation since direct is also significant	

Standardized total effect knowledge creativity-network competence-organizational performance
= 0.697; p<0.005 significant

Discussion

Theoretical Significance of the Study

The results of this study go beyond those of earlier research on knowledge and innovation, which only found a direct linear association between organizational success and knowledge creativity. The idea about the role of network competence and knowledge creativity in promoting organizational performance has benefited greatly from this study's ability to specifically link the indirect influence of knowledge creativity on organizational performance through network competence. First, it confirms that SMEs with network competency perform better organizationally than their rivals. Second, the results show that knowledge creativity can lead to better organizational performance by motivating firms to invest and improve their network capacities through firm practice outcomes like product and quality innovations.

Practice Significance of the Study

The results of this study have some practical ramifications for HRD experts, policymakers, and owners/managers regarding the relationship between network competence and knowledge creativity and how they affect organizational performance in the subject area. Firstly, since the practice of knowledge creativity such as creativity and innovation concern, process of producing and using new knowledge and capitalizing on the ideas to influence changes that would offer good company value. This implies that corporate success would result from medium-sized business owners' and managers' investments in HRD, which fosters the development of human capital for innovative knowledge (Gurteen, 1998). In the meantime, this study clarifies the mediating mechanism that links management style and knowledge creativity to enhance organizational performance. It also emphasizes the strategic significance of network competence in companies for attaining organizational performance.

Therefore, the better the level of performance, the more the owner/managers of medium-sized SMEs apply and implement their network competency capabilities.

Policy Significance of the Study
Medium-sized businesses' (MEs') organizational performance is greatly impacted by network competence, and policy interventions can be very important in promoting this competency. Good networking makes it easier to access resources, information, and assistance, which boosts competitiveness, growth, and innovation. To give MEs the abilities and information they need to create and run efficient networks, governments might fund training initiatives. Facilitating networking among MEs through events and online platforms can assist them make connections with suppliers, clients, and partners. Policies that support cooperation between MEs and other institutions, such research centers and universities, can foster innovation and information exchange. Improved innovation and competitiveness can result from partnerships between public and private organizations that make it easier for resources and knowledge to be shared. Establishing industry clusters, in which MEs are situated near one another, can promote cooperation and information exchange. MEs can increase their visibility and access to resources by creating online platforms that link them with possible partners and clients.

Limitations and Future Research
The following limitations would be taken into account when interpreting the study's conclusions. The first restriction stems from the fact that this study was limited to a Nigerian locality; a wider range of sample would be recommended. Even though the study has surely helped us understand how network competence mediates organizational performance, it should be considered preliminary until it is replicated in future research using samples from a wider range of organizations and occupations in the public and private sectors. Additionally, the current study's findings are restricted to medium-sized manufacturing SMEs in Lagos State, Nigeria; as a result, they might not be applicable to micro, small, and large businesses in Nigeria. This study only looks at the relationship between owner/manager outcome variables and the organizational performance of medium-sized SMEs; further longitudinal and experimental research would help validate the causal pathways examined in this study. Even though this is a major outcome variable in the majority of empirical studies, in order to validate the findings presented in this study, future research, both within and outside the subregion, should look at different sets of owner/manager outcomes, such as organizational effectiveness and SMEs growth in other economic sectors, like the non-manufacturing sector. Lastly, testing the existing model with different knowledge types, including owner/manager leadership styles, and its impact on organizational performance should be the main focus of future research.

Conclusion
Enhancing knowledge of a potential mechanism by which knowledge creativity influences organizational performance in medium-sized SMEs is the aim of this study. The study's findings indicate that knowledge creativity and network competence are positively correlated in medium-sized manufacturing enterprises. Knowledge creativity was found to significantly improve network competence. The outcome also demonstrates that organizational performance was significantly impacted directly by knowledge innovation. For the medium-sized manufacturing businesses in the research region, the route from network competency

to organizational performance was also supported. Additionally, it was determined that the relationship between knowledge innovation and organizational performance is partially mediated by network competence. Nonetheless, it was discovered that there was a considerable standardized indirect effect of knowledge creativity on network competence through the organizational performance of SMEs. Lastly, it is hoped that the results presented here, which show how the network of competence mediates the relationship between knowledge creativity and organizational performance, will encourage those who want to conduct additional HRD research in Nigeria, the subregion, and beyond.

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