

WEST AFRICAN JOURNAL OF BUSINESS AND MANAGEMENT SCIENCES
FACULTY OF BUSINESS ADMINISTRATION
IMO STATE UNIVERSITY, OVERRI
NIGERIAN EDITION
VOL. 11 NO. 1 MARCH 2022
MANAGERIAL NETWORKING AND ORGANISATIONAL PERFORMANCE OF MANUFACTURING
COMPANIES IN RIVERS STATE.

MACAULAY ENYINDAH WEGWU
Department of Management, Faculty of Management Sciences,
University of Port Harcourt, Nigeria

AND

PRINCEWILL, SUNNY JOSHUA
Department of Management, Faculty of Management Sciences,
University of Port Harcourt, Nigeria

Abstract

This study investigated the relationship between managerial networking and organisational performance of manufacturing companies in Rivers State. It was hypothesized that managerial networking (business exchange and political networking) does not have significant relationship with organisational performance. Data were collected through cross-sectional survey from 87 managers and supervisors and analysed to generate descriptive outputs, with the aid of the Statistical Package for Social Sciences (SPSS) version 27. Moreover, two hypotheses were tested using Partial Least Squares (PLS)-Structural Equation Modelling (SEM). Results suggested that higher levels of business exchange and political networking are associated with higher level of organisational performance. It was recommended that managers of manufacturing companies should (i) always keep in touch with clients/customers to seek the best option to satisfy their needs, negotiate agreements and coordinate plans as well as ensure that employees work in synergy; (ii) managers should ensure they foster a cordial relationship with government officials and their agencies as well as allocate reasonable resources to preserve and sustain the relationship.

Keywords: Business Exchange, Managerial Networking, Organisational Performance, Political Networking

Introduction

Performance is the focal point of any organisation (Okeke, EthelMary, & Okeke, 2018) because through performance, organisations can accomplish its goals and objectives. Furthermore, there is need for organisations to increase their performance amid the forces of globalization, innovation, and changes in consumer preferences, customer needs and economic environment (Payal, Ahmed& Debnath, 2019). In order to achieve optimal performance, managers deem it necessary to form organic networks and synergy with their employees and stakeholders (Afshan, Sobia, Kamran & Nasir, 2012).

Organisational performance is one of the most critical subjects (Hendry, 2012) in management literature, and it is of great concern for both profit- and non-profit organisations. Stafford and Miles (2013) submits that organizational performance enhances the ability of a

firm to accomplish its mission, through sound management over a given period of time. According to Upadhaya, Munir and Blount (2014) organisational performance aids the ability of an organisation to stay in operation. In the same line of thought, organisational performance plays an important role in increasing the market value of an organisation (Banafa, Muturi & Ngugi, 2015). Moreover, organisational performance is decomposed into Market Share, Growth, Profitability, Innovation and Stakeholder (Customers, Employees, Community) Satisfaction (Choi, 2002; Payal, Ahmed & Debnath, 2019).

Consequently, an organisation is said to perform very well if there is a high manifestation of these five indicators. Many manufacturing companies in Nigeria have performed far below expectation in terms of profitability. This is attributable to high costs of production and the prevailing macroeconomic conditions (Enekwe, Okwo & Ordu, 2013). Most of these companies lack unfettered access to loans while the costs of borrowing are quite high. The business environment has remained very unfriendly, with many businesses, regardless of their years of existence, witnessing a downward trend in their profit earnings (Odusanya, Yinusa & Ilo, 2018). In recent years, a sizeable number of the companies have relocated to neighbouring African countries, including Ghana (Ekpo, 2018). In all, it seems that manufacturing companies in Rivers State are not deploying the requisite managerial networking mechanisms that will create a surge in performance. This series of performance inadequacies have required that a prompt investigation should be carried out to empirically interrogate the nexus between managerial networking and organisational performance of manufacturing companies in Rivers State in order to arrive at recommendations.

Managerial networking is an all-encompassing activity performed by managers as a means of building and sustaining relationships (interpersonal or informal) within and outside their organisations (Peng & Luo, 2000). Managerial networking is significant in creating a healthy atmosphere for managers from other departments to coordinate plans and solve related problems (Peng & Luo, 2000; Luo, 2003). According to Goldsmith and Eggers (2004), managerial networking is significant because it is used to draw and gain more resources for the organisation. Managerial networking, also facilitates learning (Moe, 2005), helps to foster relationships with stakeholders (Li & Zhang, 2007; O'Leary & Bingham, 2009), and it is an avenue to build trust and help to create a shared sense of values and norms, which is essential for organisational performance (Akkerman & Torenvlied, 2011). This type of networking enables managers to do things effectively (Fonseka, Yang & Tian, 2013; Su, Xie & Wang, 2015). Furthermore, for this study, managerial networking is a combination of business exchange and political networking (Peng & Luo, 2000; Li & Zhang, 2007).

Li, Poppo and Zhou (2008) opined that business exchange (business networking) which is a critical component of managerial networking is important in helping management cultivate a relationship with stakeholders, negotiate agreements and coordinate plans, as well as satisfying the needs of clients. It also aids the building of a relationship with other companies, competitors, industries and suppliers to acquire important information and resources (Anwar & Shah, 2018).

Peng and Luo (2000) submitted that political networking helps managers improve firm performance through a relationship with other companies, government officials, and their agencies. According to Acquaah (2007), political relationships with the government enhances organisational performance. Similarly, Li and Zhang (2007) reveal that political networking is a

vital facet to the well-being of the organization, because it creates the links, allocates substantial resources, and maintain a good relationship with government officials and their agencies (Chung, 2012).

Purpose of the study- the purpose of the study was to determine the relationship between managerial networking and organisational performance of manufacturing companies in Rivers State.

Research hypotheses- The following hypotheses stated in their null form were formulated for this study.

H₀₁: There is no significant relationship between business exchange and organisational performance of manufacturing companies in Rivers State.

H₀₂: There is no significant relationship between political networking and organisational performance of manufacturing companies in Rivers State.

Significance of the study- the study will be of great significance to industry experts in taking decisions in respect to optimising organisational performance, and also widen the scope of knowledge of management practitioners.

Scope of the study- the scope of the study covered the limited available literature on the subject matter, the study area which was conducted in Rivers State alone, and the respondents which were limited to only a few of those at the managerial levels.

Review of related literature

Theoretical Background.

Social Network Theory (SNT)

Social Network Theory (SNT) also referred to as network theory or network analysis was developed by Moreno and Jennings (1938). It is based on the examination of social relationships amongst actors in a network (Wasserman & Faust, 1994). An essential principle of SNT is that relationships and contacts with other players in the network are more important than individual (Borgatti & Li, 2009; Jorgensen & Ulhoi, 2010). SNT discusses the advantages of extensive networks with other actors and associates.

Granovetter (1973), posits that social networking help to acquire new knowledge, new resources, and information that gives a firm a competitive edge over in the industry. It also helps to access new information promptly and also help to build a network with others (Burt 1992). Social networking presents benefits acquiring financial and non-financial resources to build effective managerial networking. Managers' relationship or interaction has an influence on managerial networking (Wu, 2011). Thus, from the aforementioned, it is lucid that managerial networking falls well within the theme of social network theory.

The Resource-Based View (RBV)

Organisational performance falls within the sphere of the Resource-Based View. The origin of the Resource-Based View (RBV) is stated in the work of Penrose (1959) and established by Barney (1991). The RBV of a firm postulate that differences in firm performance occur when a firm possesses valuable resources that others do not have (Wernerfelt, 1984). Specifically, the RBV of a firm is focused on the inside of the firm (its resources and capabilities) to improve the

performance of the organisation (Penrose, 1980; Wernerfelt, 1984; Grant, 1991; Peteraf, 1993; Makhija, 2003).

The RBV is an efficiency-based explanation of performance, and is one of the key theories used to explain the role of enhanced performance (Peteraf & Barney, 2003; Akio, 2005). It has been used by various management scholars (Newbert, 2007; Ahmed & Othman, 2017) to elucidate organisational performance. Furthermore, the theory emphasizes on the concept of difficult-to-replicate features of the firm as sources for superior performance and competitive advantage (Hamel & Prahalad, 1996). In the relationship between managerial networking and organisational performance, the RBV offers a useful lens for understanding this connection. Basically, the RBV argues that “companies possess resources, a part of which enables them to attain competitive advantage, and a further part which leads to superior long-term performance” (Wernerfelt, 1984, p.108).

Hoopes, Madsen & Walker (2003), stated that this theory is applied to explain differences in performance within an industry. Helfat and Peteraf, (2003) pointed out that through RBV a firm’s resources are strengthened, its competitive capabilities improved and performance enhanced. The RBV makes organisations accomplish superior performance by formulating strategies on their internal capabilities (Henry, 2008). Furthermore, it holds that companies can earn sustainable returns and perform optimally, if and only they have superior resources (Lockett, Thompson & Morgenstern, 2009). Thus, the RBV work as a main driver of companies to create competitive advantage by concentrating on the organisation’s resource and increase their organisational performance.

Managerial Networking

Managerial networking as defined by Peng and Luo (2000) is the extent at which managers from different organisations cultivate relationships, that aids organisational performance (Luo, 2003; Li & Zhang, 2007). Lechner and Dowling (2003) defined managerial networking as the relationship of entrepreneurs, businessmen, owners and managers with financial institutions, government and other companies (Su, Xie & Wang, 2015).

Managerial networking allows organisations to exploit their environment in terms of resources and information; and it enables organisations to buffer environmental shocks, such as changes in political, economic, or technical demands (Meier & O’Toole, 1999). Managerial networking integrates and complements the intricate relationships (McGuire, 2002), that are necessary to enhance organisational performance (Berry, Jeffrey & Arons, 2003).

Moe (2005) in recognising the importance of managerial networking noted that it aids activities performed by managers to develop and maintain relationships (interpersonal or informal relationships) with others within and outside of their organisations (Li & Zhang, 2007). Managerial networking is a vital tool to acquire resources for organisations (Luo, 2003; Li & Zhang, 2007).

Dimensions of Managerial Networking

Business Exchange

Business exchange (business networking) involves interacting and relating with managers, offering assistance, meeting clients and consulting people (Moe, 2005). Chung (2012) defines business exchange as a relationship between a firm and its customers, supplier

and competitors in the industry. In the views of Anwar and Shah (2018) business exchange is defined as building relationships with other businesses, competitors, industries and suppliers to access valuable information and resources etc.

Peng and Luo (2000), in emphasizing the importance of business exchange submitted that it enables managers to meet with buyers, suppliers, vendors or subcontractors to negotiate agreements and coordinate plans, it is an avenue for a manager to assist an employee in another department to solve a problem that he/she is more knowledgeable about, it creates a platform where managers from different units work together in order to coordinate plans and attend to problems affecting the firm, and managers also interact with clients to discover how best to satisfy their needs. Furthermore, business exchange is significant because it gives organisations (manufacturing companies) easy access to high-quality raw materials and services (Park & Luo, 2001), and help to reduce different costs, create new opportunities, and generate knowledge spillovers (Turkina, 2018). Through business exchange, managers work in synergy with their subordinates and other managers which in turn aid performance (Jarvenpaa & Immonen, 1997; Hemetsberger, 2003).

Political Networking

Koppenjan and Klijn (2004) define political networking as “a relatively unchanging form of interaction between mutual dependent actors”. Chung (2012) asserted that political networking is the relationship with government, their agencies, and political bodies to access scarce resources controlled by the government. Political networking is important to organisations because it provides monetary and non-monetary benefits such as tax concessions, faster license processing, cheaper land and reductions in other restrictions which in turn facilitate business process and performance (Park & Luo, 2001).

A critical importance of political networking is improved access to finance. Others include increased business prospects, forecasted earnings, and increase in fixed and collateralize assets (Faccio, Masulis & McConnell, 2006). Thus, it follows that managers use political networking to navigate the uncertain waters better and, hence lead their companies to superior performance (Li & Zhang, 2007). Furthermore, through political networking, organisations can maintain a good relationship, spend effort on fostering the right connections, and also allocate substantial resources to maintain a good relationship with government officials and their agencies (Li & Zhang, 2007; Akkerman & Torenlid, 2011).

Chung (2012) submitted that political networking helps managers to get the benefits of government policies, regulations and resources because it serves as a link between managers, government and its agencies. Due to the importance of government in developing and supporting industries, organisations having a good political network with government officials and its agencies can rely on such network to obtain information and funding, which can enhance their performance (Nwokorie, 2017).

Organisational Performance

Kirby (2011) and Dozier (2016) defined organisational performance as the actual outcome of an organisation measured against the set goals or targets. Organisational performance is how the efficiency and effectiveness of organisations is measured in terms of efforts made to attain set objectives (Ewrierhurhoma & Onouha, 2020).

Thus, organisational performance plays a significant role as a catalyst to the development and economic growth of any organisation (Devinney, Richard, Yip & Johnson, 2005). According to Upadhaya, Munor and Blount (2014), organisational performance consists of three specific areas of firm outcomes: (a) financial performance (return on assets, return on investment); (b) product-market performance (sales, market share); and (c) shareholder return (total shareholder return economic value added).

This study adopts both the financial and non-financial performance (market share, growth, profitability, innovation, stakeholder (customers, employees, community) satisfaction as indicators for organisational performance.

Market share is a desired asset among competing companies (Greene, 2007). Market share is a key indicator of market competitiveness (that is, how well a firm is doing against its competitors) (Sarkissian & Schill, 2010). Market share is usually used to express a competitive position (Pearce & Robinson, 2003), has formed a basis for measuring the performance of competing companies (Farris, Neil, Phillip & David, 2010), which has created a system where companies make decisions with respect to their performance (Aremu & Lawal, 2012; Daniel, 2018). Increased market share can be equated with success, while decreased market share is a manifestation of unfavorable actions by companies and usually equated with failure (Sarkissian & Schill, 2010).

Growth is a gradual and continual process, a critical factor for the success of the business, and also the source of evolution and development of an organisation's performance (Asimakopoulos, Samitas & Papadogonas, 2009). Penrose (2006) define growth as the product of an internal process in the development of a firm and an increase in quality and/or expansion. According to Vijayakumar and Devi (2011), growth is a rise in the sales of a firm, expansion and diversification of its business through merger, growth in profits, product and service development, and also an increase in employee turnover. Growth is the most significant benchmark that displays improvement concerning an organisation's specific goals (Chu, 2012). Growth is implicit and needs vigor and resources (Schoonjans, Cauwenberge & Bauwhede, 2013). Chu (2012) in submitting the significance of growth to organisations, asserted that, it leads to annual employee turnover, it puts the firm above the recommended benchmark in the industry, and enable the firm maintain a steady assets growth (Hamann, Schiemann, Bellora, & Guenther, 2013).

Profitability has been of principal concern for organisations, because financial performance has implications on the health, survival and ultimate performance of organisations (Oke & Afolabi, 2011). Vijayakumar and Devi (2011) define profitability as the consistent nature of cash inflow of a firm or the earning of a firm. The profitability of a firm is defined as the state or condition of yielding a financial profit or gain (Alshatti, 2015). Muya and Gathogo (2016) averred that profitability depicts the efficiency and performance of an organisation in translating its resources to profits. Thus, profitability is a major determinant of organisational performance and is made up of an essential aspect of the firm's financial report (Margaretha & Supartika, 2016). According to Gitman and Zutter (2012), profitability is significant in the performance of an organisation, an important subject in a firm's financial report, and an indicator of an organisation's ability to generate earnings. In his view, Yazdanfar, (2013), revealed that

profitability is one of the important preconditions for good success, and high performance. It aids the firm to know its ability and capacity to generate earnings within a specific period of time (Pratheepan, 2014). Furthermore, profitability is important to a firm because, it attracts outside capital and leads to superior performance in the long run (Abata & Migiros, 2016). Profitability aids organisations to be socially responsible and in the payment of taxes which is beneficial to the economy (Odusanya, Yinusa & Ilo, 2018). By knowing and understanding a firm's profitability, bring about the expected feedback through its performance (Payal, Ahmed & Debnath, 2019).

Innovation is the improvement in products and service, the introduction of new products, and venturing into new markets (Wang & Ahmed, 2004). Bigliardi (2013) defined innovation as the production, diffusion, and conversion of existing and new knowledge to produce new or modified products or services. Likewise, in describing innovation from the context of developing countries, innovation is the adoption of new products, services, management, processes and technologies developed elsewhere and possible modifications made (Egbetokun, Richmond, Oluseye & Edward, 2016). According to Liu, Chen, and Tsai (2005) innovation is highly helpful to organisations. Crespi and Zuniga (2011) submitted that innovation is an indicator of performance globally because it encourages competitiveness. Innovation is a vehicle for high productivity, employment rate, and annual sales growth (Raza, 2014).

Stakeholder satisfaction is a performance measure that reflects the degree of satisfaction of key players within and outside the firm (Neely, 2007). Freeman (1984) explicitly stated that no organisation can perform or succeed without the support of its stakeholders. Stakeholders are individuals or people and groups or entities that are critical to the success of an organisation (Freeman, 1984; Donaldson & Preston, 1995; Laplume, Sonpar & Litz, 2008). Yang, Huang and Wu (2011) defined stakeholder satisfaction as difference between the achievements and expectations of stakeholders in the actual performance of companies. Stakeholders are significant in the performance and success of organisations by the recognition gained as a result of customer or user satisfaction from the use of a product or service, satisfaction from an employee leading to optimal performance, and a crisis-free operating environment due to the satisfaction from the host community (Strong et al., 2001; Wang & Huang, 2006). Thus, managers are expected to consider stakeholders in the operation of their businesses if they want their organisations to perform optimally (Chukwu & Timah, 2018).

Empirical Review

There are several studies on the performance construct at employees, organisational and management levels (Mozael, 2015; Brito & Sauan, 2016; Elena-Iuliana & Maria, 2016; DeNisi & Murphy, 2017). Other studies investigated it under customer intimacy (Brock & Zhou, 2012), operational excellence (Gooderham, 2016) and entrepreneurial orientation (Soares & Perin, 2019). Apart from paying attention to managerial networking (Park & Luo, 2001; Peng & Luo, 2000; Acquaah 2007), various scholars have also have paid considerable attention to managerial networking in public, private, and non-profit organisations (Moe, 2005; Selden, Sowa & Sandfort, 2006; Johansen & LeRoux, 2012; Su, Xie & Wang, 2015).

They submitted that managerial networking is particularly significant where there is no stable legal and regulatory environment that allows for purely "business is business" purposes

(Zucker, 1986; Redding, 1990). However, it appears there is a dearth of research concerning managerial networking in the manufacturing sector (Nwokorie, 2017; Madukwe, Owan & Nwannunu, 2019), and in a developing country like Nigeria (Nwokorie, 2018).

In a bid to restore and stimulate the ailing performance of manufacturing companies, the Federal Government of Nigeria initiated the Vision 20-2020, a programme aimed at transforming the Nigerian economy to become one of the twenty (20) leading economies in the world by the year 2020. The objectives of the Vision 20-2020 were focused on making Nigerian economy the 20th and 12th largest economy of the world by 2025 and 2050 respectively ahead of Canada, Italy, Korea among others (Skyscraper City, 2006; Obamuyi, Edun & Kayode, 2012; Kayode & Ilesanmi, 2014).

The performance narrative of manufacturing companies in Rivers State has been bleak as most of them struggle under the weight of low market share, slow growth, poor profit margin, low level of both innovation, and stakeholder satisfaction (Engum, 2009; Cherry, 2012; Cuz & Tripa, 2015). In the same vein, Oke, Walumbwa and Myers (2012) raised an alarm that manufacturing companies in Nigeria experience poor performance as a result of low market share, stunted growth and poor profit margin.

Buzzell, Bradley and Sultan (1975) and O'Regan (2002) stated that companies with increased market share, growth and profitability behave very differently from companies with a perceived decrease in these components. Buzzell, specifically noted that high market share leads to rise in turnover on investment, companies' growth (increasing size and resources), causes higher rate of performance, and lower exit rate (Pe' rez & Castillejo, 2006).

In Nigeria, the manufacturing companies are experiencing slow pace of innovation to catch up with challenges of the business environment. There seem to be no appreciable improvement in their products, services and processes (Enebeli-Uzor, 2012). Adebisi and Gbegi (2013) submit that it has been observed that most manufacturing companies still deploy obsolete methods, processes and technologies at work.

Also, there is a growing concern of stakeholder dissatisfaction for manufacturing companies in Nigeria. Employees in this sector are often forced into the labour market due to industries winding up. Moreover, customers often complain of substandard products, which results in customer disloyalty and poor patronage. Furthermore, there are issues of revolts or uprising from host communities

Research Methodology

Research Design

We adopted the quasi-experimental research design which is cross-sectional in nature because the study subjects were not under the control of the researcher.

Population for the study

The population of this study is all the manufacturing companies in Rivers State. Following the records of the Manufacturing Association of Nigeria (MAN), there are 32 registered manufacturing companies in the state. Out of which, eighty-five (87) respondents which involved managers and supervisors participated in the study.

Sampling procedure- judgmental sampling method was adopted. This informed the selection of members who are well knowledgeable on the dynamic processes pertaining to the study variables.

Data collection sources- the data collection sources was the Primary and secondary data sources.

Data collection method- data collected through the primary source involved the use of questionnaire design which comprised of sections A and B. Section A contained seven items pertaining to the demographic details of the respondents (e.g. gender, age, marital status). Section B comprised eight (8) items on the dimensions of managerial networking.

Scale of measurement- Data collected in respect of business exchange, operational performance with five indicators, and political networking with three indicators were measured on a five point Likert scale

Validity of the Instrument

The study adopted face, content and construct validity to ascertain the validity of the questionnaire

Face validity- the questionnaire was face validated by 7 production managers in the manufacturing sector, and two senior lecturers in management department.

Content validity- the content validity was ensured by conducting a thorough, extensive and intensive research on the rich literature regarding the study variables in order to accommodate the multidimensional facets of the constructs.

Construct validity- the construct validity ensured that the questionnaire showed the fundamental theories of the variables.

Reliability of the Research Instrument

This study deployed the Cronbach's alpha coefficient criterion for reliability. All items that satisfied the 0.7 benchmark were accepted.

Data Analysis Techniques - the data on the demographic details of the respondents were analysed using descriptive method, while data on the univariate were analysed using means and standard deviation. Skewness and Kurtosis criteria were also used to check for normality of data distribution. The PLS 3.2.6 was used to assess the measurement model through the factor loadings of reliability of the indicators. Partial Least Squares-Structural Equation Modelling (PLS-SEM), with the aid of Smart PLS 3.2.6 were used to test the hypotheses.

Data Presentation and Analysis Results

Fieldwork, Data Cleaning and Demographic Report

The questionnaire was administered to 98 respondents. A total of 87 copies of the questionnaire were all properly filled and retrieved, representing 88.7% response rate. All the responses were entered into the IBM@SPSS version 27.0 for subsequent analysis. The demographic summary of the respondents is shown in table 4.1

Table 4.1: Demographic Characteristics of the respondents

		Frequency	Percentage	Valid Percent	Cumulative
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					Percentage
Gender	Male	77	85.5	85.5	85.5
	Female	10	11.5	11.5	100.0
	Total	87	100.0	100.0	
Age	20-35	51	58.6	58.6	58.6
	36-50	30	34.5	34.4	93.0
	51-above	6	7.0	7.0	100.0
	Total	87	100.0	100.0	
Marital Status	Single	30	34.5	34.5	34.5
	Married	40	46.0	46.0	80.5
	Separated	10	11.5	11.5	92.0
	Divorced	7	8.0	8.0	100
	Total	87	100.0	100.0	
Educational Qualification	WAEC-OND	10	11.5	11.5	11.5
	HND/Bachelor	31	35.6	35.6	47.1
	Masters above	46	52.9	52.9	100
	Total	87	100.0	100.0	
Position in the Organisation	Managers	49	56.3	56.3	56.3
	Supervisors	38	43.7	43.7	100.0
	Total	87	100.0	100.0	

Source: Research Data (SPSS Output) 2022

Table 4.1 shows that 77 respondents (85.5%) were males and 10 (11.5%) females. For age, respondents within 51 years old and above were the least with only 6 respondents (7.0%), while those who are 20 years to 35 years old were the highest with 51 (58.6%). Respondents who are 36 years to 50 years old were 30, representing 34.5% of the total number of respondents. Hence, most of the managers in the industry are in their early-life ages. For marital status, 40 respondents (46.0%) were married, 30 (34.5%) were single, 10 (11.5%) were separated, while 7 (8.0%) were divorced. On highest level of educational attainment, 31 respondents (35.6%) have Higher National Diploma and Bachelor Degree, 10 respondents (11.5%) have The West African School Certificate and Ordinary National Diploma, while 46 respondents (52.9%) have Master Degree and above.

Thus, a great number of managers and supervisors in the sector are well educated. Furthermore, for position in the companies, there are 49 managers, representing 56.3% of the total number of respondents, while 38 (43.7%) are supervisors.

Univariate Analysis

This study analyses the dimensions of the independent variable and the measures of the dependent variable together with their indicators in terms of their means, standard deviations, skewness and kurtosis. This study followed mean categorization recommended by Asawo (2009), where mean values (M) between 1.0-2.4, 2.5-3.4, 3.5-4.4 and 4.5 above were classified as low, moderate, high and very high, respectively.

As regards skewness and kurtosis for test of normality (Weston & Gore, 2006), the study considered values between -2 and +2 as acceptable in order to prove normal univariate

distribution (George & Mallery, 2010; Gravetter & Wallnau, 2014). Table 4.2 shows that output for univariate analysis and test for normality.

Table 4.2 Descriptive statistics on the Latent Variables

Latent Variable	N	Mean	Std Deviation	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Std Error	Stat	Std Error
BE	87	3.89	1.41	2.15	0.98	0.72	0.39
PN	87	2.90	0.64	0.93	1.18	2.07	1.62
OP	87	3.14	0.42	1.77	0.92	2.23	0.48

Note: BE=Business Exchange, PN=Political Networking, OP=Organisational Performance

Source: SPSS Computation from Data, 2022

Table 4.2 shows that, for normality, all the variables are reasonably acceptable with the largest values being 2.15 and 2.23 for skewness and kurtosis, respectively. We did not carry out further test of normality since PLS-SEM is robust, even under conditions where data are barely normally distributed. Also, table 4.2 shows that business exchange manifested highly (M = 3.89, SD = 1.41), political networking was perceived to be moderate (M = 2.90, SD = 0.64), while organisational performance manifested moderately (M = 3.14, SD = 0.42).

Thus, most of the managers and supervisors perceive that they possess a high level of ability to negotiate agreements and coordinate plans with buyers, suppliers, or vendors, be of assistance to someone from another department, partake in seminars and meetings and interact with clients on the best way to meet their needs. In addition, majority of the respondents also agreed that their company moderately spend effort on fostering connections, dedicate substantial resources and maintain a good relationship with government officials and their agencies

Multivariate Analysis

This section pertains to the analysis, presentation and interpretation of data concerning the relationship between the predictor and criterion variables of the study. Managerial networking variable is dimensional zed into business exchange and political networking, while organisational performance is a one-dimensional construct with multiple indicators.

The model has the two chosen dimensions of managerial networking that draw two (2) paths to organisational performance. Henseler, Ringle and Sinkovics (2009) recommended that, when using partial least squares structural equation modeling (PLS-SEM), the minimum sample size should be at least 10 times the highest number of structural paths connecting a particular reflective construct. Thus, the minimum number of cases for this study is $10 \times 2 = 20$. Hence, there is no problem using PLS-SEM as analytical tool in this study since there are 87 cases.

Assessment of Measurement Model

The measurement (outer) model specifies the relationships between the latent variables and their observables. It involved the assessment of the reliability and validity of the constructs using factor loadings, indicator reliability and the Average Variance Extracted. In the case of

factor loadings, any score above 0.70 is satisfactory (Hulland, 1999). Moreover, a squared loading above 50% signifies that the indicator exhibits a satisfactory degree of reliability.

Table 4.3 reveals the (factor) loadings, indicator reliability, and the reliability and convergent validity (AVE) of the constructs, based on the Smart PLS 3.2.6 output of the measurement model.

Table 4.3: PLS-SEM Assessment Results of Measurement Models

Latent Variable	Indicators	Convergent Validity			Internal Consistency Reliability		
		Loadings	Indicator Reliability	AVE	Composite Reliability ρ_c	Reliability Coefficient ρ_A	Cronbach Alpha (CA)
		> 0.70	> 0.50	> 0.50	> 0.70	> 0.70	0.70-0.95
BE	BE ₁	0.715	0.511	0.610	0.805	0.782	0.733
	BE ₂	0.817	0.668				
	BE ₃	0.744	0.554				
	BE ₄	0.732	0.536				
	BE ₅	0.896	0.803				
PN	PN ₁	0.739	0.546	0.533	0.819	0.789	0.751
	PN ₂	0.727	0.529				
	PN ₃	0.724	0.524				
OP	OP ₁	0.752	0.565	0.565	0.829	0.771	0.742
	OP ₂	0.737	0.543				
	OP ₃	0.719	0.517				
	OP ₄	0.743	0.552				
	OP ₅	0.804	0.646				

Note: BE= Business Exchange, PN= Political Networking, OP= Organisational Performance

Source: SmartPLS 3.2.6 output on research data, 2022

Table 4.3 shows the outer loadings (*lk*) of the observable variables of the facets managerial networking, including the indicators of organisational performance. With respect to the dimensions of managerial networking, all loadings scored above 0.70, which range from BE₁ (*lk*=0.715) to BE₂ (*lk*=0.896). Moreover, all the manifest indicators of organisational performance scored above 0.70, which range from OP₃ (*lk*=0.719) to OP₅ (*lk*=0.804).

Furthermore, table 4.3 indicates that, when the factor loadings were squared (indicator reliability), all response items of the model explained more than 50% of the indicators variance, with BE₁ having the lowest indicator reliability score (*lk*²=0.501), while BE₅ has the highest indicator reliability score (*lk*²=0.803). In addition, values for composite reliability, reliability coefficient and Cronbach's alpha for the constructs are well above the recommended cut-off of 0.7 (Hair Jr., Babin & Krey, 2017), thus satisfying conditions for reliability. Moreover, the values of AVEs are above 50% (Fornell & Larcker criterion, 1981). Thus the model did not pose convergent validity problem.

Next is table 4.4 which shows the output for the test of discriminant validity.

Table 4.4: Test of Discriminant Validity - Fornell and Larcker (1981) criterion

Latent Variable	AVE	BE	PN	OP
BE	0.610	0.781		
PN	0.533	0.437	0.730	
OP	0.565	0.287	0.303	0.752

Note: AVE=Average Variance Extracted, BE=Business Exchange, PN=Political Networking, OP=Organisational Performance. The off-diagonal values are the correlations between latent variables, while the diagonal values in (bold) denote the square roots of AVEs.

Source: SmartPLS 3.2.6 output on research data, 2022

Table 4.4 indicates that all the diagonal figures (square roots of the AVEs) exceed 0.7; and are far greater than the off-diagonal figures (correlations between the constructs), thus confirming that each construct sufficiently discriminates itself from any other one in the model. Therefore, the model does not have discriminant problem.

Assessment of the Structural Model

This section comes immediately after the data has been confirmed to fit the measurement model. The hypotheses were tested by bootstrapping 500 samples from the primary sample via random replacement. This is preceded by observing the observed path coefficients (β) and their corresponding *t-values*, as well as the coefficients of determination (R^2 or predictive accuracy). Also evaluated was the predictive relevance (Q^2) of the model as an alternative to goodness-of-fit, using the cross validated redundancy blindfolding procedure, with omission distance of 7 (Tenenhaus et al. 2005; Hair et al., 2017).

Lastly, the effect size of each path in the model using Cohen's f^2 (Cohen, 1988) was evaluated by recording the various R^2 values after omitting each of the dimensions of the exogenous variable. Table 4.5 shows the results path relationships, path coefficients, standard errors and t-statistics of the hypothesized model, while figure 2 also shows path relationships between the dimensions of managerial networking (business exchange and political networking) and organisational performance.

Table 4.5: Results of Hypotheses Testing

Null Hypothesis	Path (Relationship)	Path Coefficient (β)	Standard Error	t-Statistic	Decision
H ₀₁ :	BE -> OP	0.388	0.178	2.044	Supported
H ₀₂ :	PN -> OP	0.457	0.077	1.357	Supported

Note: BE=Business Exchange, PN=Political Networking, OP= Organisational Performance. T-statistic greater than 1.96 at 0.05% level of significance, β values of 0,10 to 0.29, 0.30 to 0.49 and 0.50 to 1.0 are weak, moderate and strong correlations respectively (Cohen, 1988).

Source: SmartPLS 3.2.6 output on research data, 2022

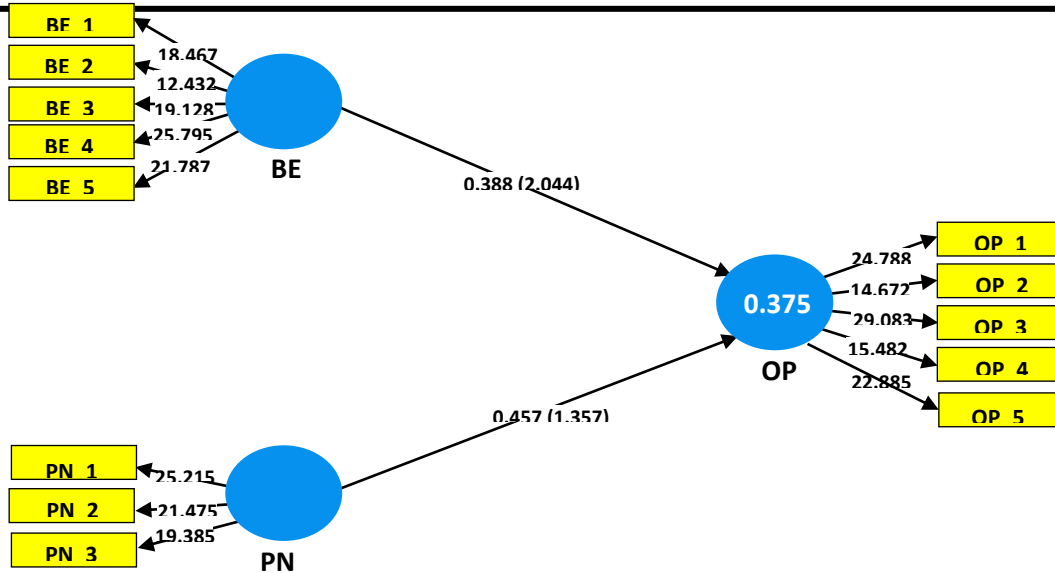


Figure 2: Smart PLS 3.2.6 output for test of hypotheses (H_1 and H_2), using 500 bootstrapped samples.

Note: BE=Business Exchange, PN=Political Networking, OP=Organisational Performance.

Table 4.5 and figure 2 indicate that there are positive and significant paths between business exchange and organisational performance ($\beta = 0.388$, $t = 2.044$) and political networking exchange and organisational performance ($\beta = 0.457$, $t = 1.357$). Therefore, H_1 and H_2 were supported.

Assessment of Predictive Accuracy (R^2)

The statistic that reveals the combined effect of all the dimensions of the exogenous variable on the endogenous variable is the R-squared (R^2). According to Hair et al., (2014), the R^2 is the “variance explained in each of the endogenous constructs”. Hence it is a measure of the model’s predictive accuracy (p. 20). Closely related to the R^2 is the adjusted R^2 . The adjusted R-squared make amends for the weakness in R^2 by revealing the present of variation explained by only those dimensions of the independent variable that in reality affect the dependent variable.

Moreover, although the adjusted R^2 statistic is interpreted in the same way as the ordinary R^2 , it sometimes records less value (not more) than that of R^2 . The bootstrapping procedure was deployed to determine the R^2 and Adjusted R values of the endogenous variables as could be seen in Table 4.6.

Table 4.6: Results of Predictive Accuracy (R^2)

Exogenous Variables	Endogenous Variable	Predictive Accuracy (R^2)	Adjusted R^2
BE	OP	0.375	0.378
PN			

Note: BE=Business Exchange, PN=Political Networking, OP= Organisational Performance. Reference values for R^2 : 0.19=weak; 0.33=moderate; 0.67=substantial, Chin (1988).

Source: SmartPLS 3.2.6 output on research data, 2022

Table 4.6 indicates that the model $OP = f(BE, PN)$ recorded a moderate and positive R^2 of 0.375. This means that all the dimensions of managerial networking (business exchange and political networking) jointly explained 37.5% of the variance of organisational performance, while other unidentified variables are responsible for the remaining 62.5%. Thus, the model has a moderate predictive accuracy.

Assessment of Predictive Relevance (Q^2)

Furthermore, the predictive relevance (Q^2) of the model as an alternative to goodness-of-fit was evaluated; using the cross-validated redundancy blindfolding procedure with an omission distance of 7 in the data matrix was used to create estimates of residual variances. Using these estimates as input, the blindfolding procedure predicted the removed data points.

It was repeated until every data point was removed and the model re-estimated. Table 4.7 shows the output for predictive relevance ascertained through a cross-validated redundancy blindfolding method, with an omission distance of 7.

Table 4.7: Construct Cross-validated Redundance (Total Q^2)

Endogenous Latent Variable	SSO	SSE	$Q^2 = 1 - SSE/SSO$
BE	1372.000	1372.000	
PN	1372.000	1372.000	
OP	1372.000	1206.722	0.1205

Note: BE=Business Exchange, PN=Political Networking, OP= Organisational Performance. Q^2 =Predictive Relevance; SSE=Sum of Squares of Prediction Errors; SSO=Sum of Squares of Observations. Reference value: $Q^2 > 0$ = satisfactory predictive relevance (Hair et al., 2014).

As can be seen in table 4.7, the bundle of exogenous latent variables presented a non-negative cross-validated redundancy index ($Q^2 = 0.1205 > 0$). This means that the path model predicts the originally observed values very well. Hence, the dimensions of managerial networking (business exchange and political networking) are relevant in predicting organisational performance.

Assessment of Effect Sizes (f^2)

The effect size of each path in the model was evaluated by means of Cohen's f^2 (Cohen, 1988). Effect size is the observed variation on the dependent variable due to the omission of an exogenous variable (Chin, 1998).

Mathematically, effect size (f^2) =
$$\frac{R^2_{variablepresent} - R^2_{variableabsent}}{1 - R^2_{variablepresent}}$$

Below is table 4.8 which shows the effect sizes of the dimensions of managerial networking on organisational performance.

Table 4.8: Effect Sizes of the exogenous latent variables on endogenous variable

Endogenous Variable	Exogenous Variable	R-Squared Present	R-Squared Absent	f^2 -Effect Size	Remark on Effect Size
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OP	BE	0.375	0.251	0.1984	Medium
	PN	0.375	0.147	0.3648	Large

Note: BE=Business Exchange, PN=Political Networking, OP=Organisational Performance.
Reference values: f^2 less than 0.020=no effect; f^2 , 0.020=small effect; f^2 , 0.15=medium effect; f^2 , 0.35=large effect (Cohen, 1988).

Source: SmartPLS 3.2.6 output on research data, 2022

Table 4.8 indicates that political networking has a large effect ($f^2 = 0.3648$) on organisational performance, while business exchange has medium effect ($f^2 = 0.1984$) on organisational performance. Thus, political networking contributes more to the explained variation (R^2) on organisational performance.

Interpretation of Results, Findings and Discussion

Having tested the hypotheses, we interpret the results and state the findings. Table 4.9 summarizes the results. Table 4.9: Summary of Results on the Tests of Hypotheses H1 and H2

Null Hypothesis	Path (Relationship)	Path Coefficient (β), (t-value)	Predictive Accuracy R^2	Effect Size- f^2	Predictive Relevance- Q^2	Decision
H ₀₁ :	BE -> OP	0.388(2.044) Significant	0.375 Moderate	0.1984 Medium	0.1205 Relevant	Supporte d
H ₀₂ :	PN -> OP	0.457(1.357) Significant		0.3648 Large		Supporte d

Note: BE=Business Exchange, PN=Political Networking, OP=Organisational Performance.

Source: SmartPLS 3.2.6 output on research data, 2022

Table 4.9 shows that there is a moderate predictive accuracy of managerial networking (bifurcated into business exchange and political networking) on organisational performance. In particular, the table suggests that a unit increase in managerial networking will predict an increase on organisational performance by about three-eight (37.5%). The remaining five-eight (62.5%) are due to other factors that are not captured by the model. This means that the ability of the manufacturing companies to achieve their goals and objectives will be enhanced by about three-eight when they make a unit improvement to constantly meet subcontractors to negotiate agreements and coordinate plans correctly, work in synergy to solve problems as well as interact with customers to attend to their needs. Thus, it is plausible that more variables have to be included to increase the explanatory power of the model, after establishing a theoretical basis.

Specifically, Hypothesis one (H₀₁) states that “there is no significant relationship between business exchange and organisational performance”. Table 4.8 indicates that business exchange (BE) has a positive, moderate and significant relationship with organisational performance. Therefore, H₀₁ was supported. It means that the more the manufacturing companies improve their ability to constantly meet subcontractors to negotiate agreements and coordinate plans correctly, work in synergy to solve problems as well as interact with customers to attend to their needs, the more will they be able to perform, at least moderately.

This finding supports the submission of Luo, Huang and Wang (2011), who studied Guanxi (a Chinese word for "networks" or "connections" - business exchange and political networking) and organisational performance and concluded that business exchange influence the overall effect size of the firm's performance and thus affirming that it is a booster of performance. In a related study, Sheng, Zhou and Li (2011) submitted that business exchange plays significant role on organisational performance by being more beneficial than other facets of managerial networking.

The second hypothesis (H_{02}) which is stated as "there is no significant relationship between political networking and organisational performance". Table 4.8 reports that political networking (PN) has a positive, high and significant relationship with organisational performance. Hypothesis two was, therefore, supported.

Thus, it can be declared that, the more manufacturing companies seeks to maintain a cordial relationship with government officials and their agencies by devoting substantial resources, the outcome will be a superior performance. This finding is also in tandem with the submission Su, Xie and Wang (2015), that through political networking, managers also attract financial resources to their organisations from both government and financial institutions. The finding further agrees with Anwar and Shah (2018), who examined managerial networking and innovation (as a key performance indicator) and found that the antecedents and outcomes of managerial networking (business networking and political networking) significantly and positively contribute to innovation.

Conclusion, Recommendations and Limitations of the Study

It was concluded that managerial networking (business exchange and political networking) have significant relationship with organisational performance. Precisely, the study found a positive, moderate and significant relationship between business exchange as a dimension of managerial networking and organisational performance. It was also concluded that there is positive, high and significant relationship between political networking as a dimension of managerial networking and organisational performance.

Based on the summary of findings and conclusions made above, the following recommendations were put forward to assist the manufacturing companies in Rivers State to achieve optimal performance:

Firstly, managers should always keep in touch with clients to seek the best option to satisfy their needs, negotiate agreements and coordinate plans as well as ensure employees work in synergy. Secondly, managers should ensure they foster a cordial relationship with government officials and their agencies as well as allocate reasonable resources to preserve and sustain the relationship.

Furthermore, this study is not without limitations. They exist due to the following reasons:

Firstly, cross-sectional survey: As a result of data being generated from a single setting through cross-sectional survey. The study did not capture the dynamic relationship between managerial networking and organisational performance. Generally, it is a longitudinal investigation that provided information on the dynamic relationships among variables.

Secondly, dimensions and measures: The study considered only a few indicators of the study variables. Thus, making it limited in depth of construct. Thirdly, geographical spread: The

study was limited to only manufacturing firms in Rivers State and not the entire country, thereby limiting the geographical spread of this study.

Finally, sampling errors: Only the managers and supervisors working in manufacturing firms in Rivers State were used as the sampling frame. Thus, a sample taken from the chosen population may have led to sampling error.

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