

ENTERPRISE RESOURCE PLANNING AND COMPETITIVE ADVANTAGE OF MAUNUFACTURING COMPANIES LISTED IN NIGERIA

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Abstract

The dynamic reality of the market and competitors' innovation capacity make it difficult for companies to achieve their goals and maintain sustainable competitive performance. To gain a competitive advantage, one of which can be done by focusing on reducing the production cost of an item to the lowest cost point but still being able to meet customer needs, which can be done by implementing ERP management for the company? The study employed the survey research design. The result of the regression analysis conducted revealed that ERP business process attributes has a significant impact on financial performance ($Adj.R^2= 0.483$, $F(5,307)= 59.253$, $p < 0.05$); ERP business process attributes has a significant impact on products ($Adj.R^2= 0.487$, $F(5,307)= 35.722$, $p < 0.05$); ERP business process attributes has a significant impact on customers ($Adj.R^2= 0.483$, $F(5,307)= 59.408$, $p < 0.05$) and ERP business process attributes has a significant impact on general performance of manufacturing firms listed in Nigeria ($Adj.R^2= 0.523$, $F(5,307)= 69.399$, $p < 0.05$). The study concluded that ERP business process attributes affects competitive advantage of listed manufacturing firms in Nigeria. The study recommended that management should ensure that there is improvement in financial performance and overall superior financial performance is ensured by efficient business processes and thus, efficient investments are made.

Keywords: ERP ease of use, Organizational structure, General performance, ERP business process attributes and Competitive advantage.

Introduction

Competitive advantage is a significant concept both in studies of strategic management and in the practice of organizations. The dynamic reality of the market and competitors' innovation capacity make it difficult for companies to achieve their goals and maintain sustainable competitive performance. To create a sustained competitive edge, companies must understand the competitive environment, adopt a strong strategy, and find the resources needed to implement the company's plan. Companies that have a competitive advantage, according to Jaya, Nasir, and Dewi (2021), are those who apply value creation tactics that are not used by competitors. Implementing a good strategy in the organization necessitates a strategy that is distinct from competitors in order to foster a competitive advantage over competitors. Several factors, including domestic and international market competition, customer demands, and rapid technical improvements, have resulted in increased pressure on businesses to gain long-term competitive advantage. (Marcos, Fabiola, Moura, Luciana, Wesley & Veiga, 2021).

Companies have used information systems to increase or preserve their competitiveness as a result of intense global commercial competition, notably to improve customer service, shorten cycle times, and cut costs. Organizations or firms, according to Syofyan and Putra (2020), are regarded living things or communities that strive to meet their creators' expectations. As owners, investors hope that their investments will have an impact on the company's success (Sofyan, Putra, & Aprayuda, 2020). Investing in information technology can help with one of these goals. Investment in information technology is required to preserve a company's vitality and competitiveness, and it is becoming increasingly important for the company's survival and growth. Investing in information technology in a business comes at a high expense and comes with a high risk. Investment in information technology, on the other hand, can provide chances to boost efficiency and streamline corporate procedures (Putra & Rahayu, 2020). When an organization's internal resources are integrated according to content, organizational capabilities are formed. In the

world of information technology, implementing Enterprise Resource Planning can help increase organizational capabilities (ERP).

ERP is a computer-based integrated system meant to manage firm transactions and promote integrated planning, real-time production activities, and prompt consumer feedback, according to Aremu, Shahzad, and Hassan (2020). Ata and Ziad, (2021) explained that having an effective ERP system may not benefit entities unless it is well implemented. ERP resources such as Resource-Based View (RBV) approach by meeting the resource-based resource criteria valuable resources, rare resources, imperfectly imitable resources, and non-substitutability (VRIN) to improve company performance (Top & Ali, 2020). Furthermore, Ghada and Reda (2020) claimed that ERP, organizational competences, and organizational core competencies could all be used to determine resource usage.

As a result, the company can use this to gain a competitive edge and maximize added value. Because an ERP system is a long-term strategic investment, and the lengthy implementation process has an impact on the entire organization, it is critical that the firm's competitive edge is maintained during the adoption phase, which could last several years (Setya & Rilo, 2021; Andrianto, 2019).

Enterprise systems supports the ERP process rather than portions of it, encapsulates the interdependence of functions, departments, people, roles, and tasks, and offer customer with a service or product in a comprehensive manner. While other scholars look at ERP from various angles, Irfan, Van, and Weigand (2020) proposed ERP from the user's standpoint. This group's research was important in that it highlighted the aspects of integration. Enterprise Resources Planning (ERP) software can integrate various functions within the organization (Romina, Olya & Tumer, 2021).

The goal of the company's integration process is to deliver products and services on time and at the proper pricing. If ERP software is used for the firm's major activity, it is expected that operations will be more effective, efficient, and that information will be shared and collaborated inside the company (Schlichter, Klyver, & Haug, 2020). The basic

purpose of ERP adoption is to integrate all functional areas of a firm so that information can flow freely between them.

Companies should achieve better profits by increasing their capabilities compared to their existing competition, according to Rehman, Mohamed, and Ayoup (2019). As a result, one of the supporting aspects for achieving organizational success is information technology capacity.

The company's ability to reengineer business processes that make fundamental changes in organizational management, as well as change management tactics such as education and training, can help it achieve the maximum competitive advantage. This improves system performance by allowing it to respond to business changes and maintaining the continuation of business processes (Kadek & Gede, 2021). One of the most recent advances is the utilization of cloud computing-based ERP, which allows for real-time business process integration and helps businesses manage effective cross-functional operations (Erwanto & Zusi, 2020). The latest ERP technology takes advantage of the advancement of digital technology (for example, the use of web-based ERP, cloud computing, and social network computing) to improve mobility, communication effectiveness, and efficiency, with the goal of increasing strategic and competitive advantages (Setya & Rilo, 2021). ERP installation flexibility is also required to bring considerable benefits to businesses and boost competitiveness.

Statement of the Problem

Numerous organizations are being engaged with competitive and chaotic condition to such an extent that they require being equipped with tools of ERP, which is fundamental to create and to get by in such tumultuous occasions and it assumes extraordinary part in the advanced world. What's more, essential reasoning assumes fundamental part in different issues at various firm levels including singular dynamic and arranging. The worst thing about many firms in Nigeria is their poor ERP performance and lack of implementation, which is frequently hampered by their inability to manage ERP business processes. This has been set up to continue to exacerbate their poor overall performance.

However, it is not improbable that in many Nigerian organizations, little emphasis has been placed on necessary deduction, which has a significant impact on their manageability. This paper, along these lines will highlight the significance of vital deduction components in hierarchical maintainability (Kadek & Gede, 2021).

It is critical for the firm to maintain its competitive advantage, value, and quality in order to continue to compete against an ever-increasing number of competitors (Mahardika & Wayansantika, 2021). A company that can preserve its competitive advantage and distinguishes itself from its competitors will provide extra value to customers and improve its sales. The corporation gains a competitive advantage by maintaining its dominance against rising competitors by providing product quality, service, and prices that satisfy the tastes and wants of consumers. To obtain a competitive edge, one strategy is to focus on lowering the production cost of a product to the lowest possible level while still meeting client expectations, which can be accomplished by implementing ERP management for the organization (Tintara & Respati, 2020; Putra, Rita and Putri, 2021). According to Aljarrah (2021), 90% of ERP implementation outrun firms' plan, and functions showed that 67% of it could be unsuccessful depending on the style ERP implementation goals.

Investment in ERP systems in companies comes with the expectation of obtaining the aims in increasing some assets and abilities along with technical and managerial competencies in order for the firm to develop opportunities and values for differential long term major benefits (Ata & Ziad, 2021). Also, majority of the studies (Aljarrah (2021); Jaya, Nasir and Dewi (2021); Marcos, Fabiola, Moura, Luciana, Wesley and Veiga (2021); Ghafoor, Nawab and Shafi, (2021); Top and Ali (2021); Ali and Anwar, (2021); Syofyan and Putra (2020); and Sofyan, Putra, and Aprayuda, (2020) on ERP business solutions implementation and processes have been carried out in developed countries with little study in an emerging economy like Nigeria as shown in the article review, also ERP effect on financial performance have looked into and with little studies on how ERP acts as a competitive advantage

to a company over its competitors. Thus, the study examined the effect of ERP business process attributes on competitive advantage of listed manufacturing firms in Nigeria. The formulated and tested hypotheses are stated as:

H₀₁: *ERP business process attributes does not have significant effect on financial performance of manufacturing companies listed in Nigeria.*

H₀₂: *There is no significant effect of ERP business process attributes on products' characteristics of manufacturing companies listed in Nigeria.*

H₀₃: *There is no significant effect of ERP business process attributes on customers' relationship of manufacturing companies listed in Nigeria*

H₀₄: *There is no significant effect of ERP business process attributes on general performance of manufacturing companies listed in Nigeria*

Review of Extant Literature

Review of the Concepts

Competitive Advantage

Competitive advantage is an edge which an entity has over its competitors (Sukawati, Widiarta, Santika & Jatra, 2020; Amir, Farhan, Peter, Otavio & Peter, 2021). The quality of product and services, pricing strategies, meeting the persistent changes in tastes and preferences of customers, strategic marketing systems among others which are part of ERP processes enables company to stand-out among increasing competitors (Tintara & Respati, 2020). Competitive advantage is the increased rate of attractiveness a firm offers compared to competitors from customers' viewpoints (Kadek & Geda, 2021; Porter, 2011). In the literature on competition strategy, competitive advantage is regarded within the framework of value creation as anything that increases income over costs (Hoanet al., 2021).

Competitive advantage, according to Mahardika and Wayansantika (2021), is based on the features or dimensions of each firm that enable it to provide better services (i.e., better value) to clients than competitors. The visible values of a firm for customers that outweigh the price paid by the client are characterized as competitive advantage (Nur, Veera & Shereen, 2021). Firm's performance in a competitive environment is attributable to its

unrivaled competitive advantage (Rono, Michael & Joyce, 2021). Kuo (2021) identified three distinct strategies to achieve competitive advantage: low cost, differentiation advantage, and a successful focus strategy. Competitive advantage is described as the heart of a company's success in a competitive market, yet many organizations have lost sight of competitive advantage in their quest for further expansion and diversification. He claims that a value generation implementation is the source of competitive advantage (Hoan, Tran, Thi & Dinh, 2021; Vanda, Anna & Tuckova, 2021). Competitive advantage is identified based on the level of financial performance of a firm, product quality, customers, and general operational performance.

Financial Performance

Performance is a generic concept applicable to any of an organization's operations over a period of time; often in regard to past and future expenditures, performance, obligation, transparency or capital (Ali, Maryam, & Aghdas, 2016). Performance according to Vanda, Sanaz and Mohammad (2021) is the ability of a corporation to make money from any of its activities (operating, investing and financing activities). Several quantitative and qualitative measures have been adopted in literature to measure financial performance such as Return on Equity (ROE), Return on Assets (ROA), Return on Investment (ROI), and Return on Investment Capital (ROIC) (Eze, Bello, & Adekola, 2017; Hisham, Saad, & Jasim, 2019; Hoque & Najeeb, 2018; Sukawati, Widiarta, Santika, & Jatra, 2020; Sara & Hani, 2020). However, this paper adopted a qualitative approach.

Products

A product is something that is made with the purpose of being sold in the marketplace (Aremu & Hassan, 2018). The use of products satisfies the needs of customers and contributes to the consumer's happiness (Otley, 2016). Product is one of the main components of marketing and all marketing operations center around the product. (Ali & Anwar, 2021; Aljarrah, 2021). A product can be defined as a good, idea, method, information, object, or service that is the end result of a process and serves as a need or want satisfier (Andrianto, 2019;

Aremu, Shahzad & Hassan, 2020). It is more than just a collection of physical characteristics; it is also a collection of perceived benefits that meet the needs of customers (Ata & Ziad, 2021; Erwanto & Zusi, 2020; Irfan, Van & Weigard, 2020). As a result, handling product decisions should be handled with great care. A terrible product not only tarnishes the company's reputation, but it also has a negative impact on the product's pricing, dissuades channel members, and diminishes the credibility of promotional tactics (Ghafoor, Nawab & Shafi, 2021; Jaya, Nasir & Dewi, 2021; Karimi (2010; Kedak & Geda, 2021).

Customers

A customer is a person or company who purchases goods and services. A customer becomes a consumer when he or she uses the goods or services i.e., where there is some consumption. Customers can be categorized as B2C which stands for Business-to-Customer (B2C), Business-to-Business (B2B), C2B which is Customer-to-Business (C2B). A customer is a person, a group of people, or an organization who receives or may receive goods, services, products, or ideas from another person or firm in exchange for money or something of equal worth. The customer is the reason for the existence of any firm (Rehman, Mohamed & Ayoub, 2019). Typically, the higher the number of customers, the more successful the firm, and vice versa. Businesses need customers to buy their products or services (Romina, Olya & Tumer, 2021).

Gaining customers' loyalty increased revenue and business growth (Sara & Hani, 2020). Satisfied customers would promote and refer your firm to other potential customers, resulting in more sales. In summary, a business cannot function without customers, hence a customer is essential to any company's success (Setya & Rilo, 2021).

General Performance

General performance includes the genuine yield or consequences of an association as estimated against its planned yields (or objectives and goals) (Top & Ali, 2021). Sliman and Alalaya (2015) stated that, hierarchical execution envelops three explicit spaces of firm results: (a) monetary execution (benefits, return on resources, profit from speculation,

and so forth); (b) item market execution (deals, piece of the overall industry, and so on); and (c) investor return. Lately, numerous associations have endeavoured to oversee hierarchical execution utilizing the reasonable scorecard philosophy where execution is followed and estimated in different measurements, for example, monetary execution (for example investor return), customer administration, social duty (for example corporate citizenship, local area outreach) employee stewardship. The actual association doesn't play out any work however its supervisors are playing out their allocated works and in a blend of these performed works is called association execution (Sofyan, Putra & Aprayuda, 2020; Temitope & Ayodeji, 2021; Tintara & Respati, 2020).

Enterprise Resource Planning

ERP systems are information system software modules that share a central database and share information (Xu & Wang, 2018). They include functionalities for sales and marketing, product development and design, field service, production, inventory control, distribution, process design, management, and procurement industrial facilities management, quality, manufacturing, human resource, finance and accounting, and information services (Kocaaga, Demirel, & Zaim, 2018; Yusuf, Adepaju & Olomu, 2017; Setya & Rilo, 2021). According to Irfan, Van, and Weigard (2020), ERP systems are the most comprehensive business information systems that have surfaced, and they provide a solid informational foundation for operational processing as well as decision making under the condition of successful implementation.

ERP, according to Ghada and Reda (2020), is more of a methodology than a piece of software that integrates functions from various departments inside an organization into a single system by combining several software programs. ERP entails overall system management of an organization, the change management, organizational structure, system simplicity, project planning and management as well as information technology infrastructure (Syofyan & Putra (2020; Tapang & Joseph, 2018; Sliman & Alalaya, 2015).

Change Management

Organizational change refers to changes in an organization's structure, technology, and/or personnel that are either planned or unanticipated (Williams, 2016). The goal of an organizational change is, in general, to adapt to the environment and/or to increase performance (Kimhi & Yarden, 2019). In both academic research and industrial practice, change has remained at the forefront (Cross, 2019; Kassim, Tahajuddin, Shahzad, Isa, & Mat, 2010). Change management is defined by Korir, Mukotive, Loice, and Kimeli (2012) as the successful implementation of needed process, technology, or organizational changes by executive leaders, managers, and frontline employees working together.

Moran and Brighton (2011) define change management as the process of continually renewing an organization's direction, structure and capabilities to serve the ever-changing needs of external and internal customers. Due to its importance, change management is becoming imperative, and needs appropriate managerial skills and strategy as one of the key success factor of ERP (Cross, 2019).

ERP Ease of Use

One of the key goals of Enterprise Resource Planning is to simplify ordinary but vital business tasks (Kuno, 2021). While battling to comply with regulations and fulfill consumer demands, effective ERP tools and systems make it easier for growing businesses to manage scattered assets, communicate with partners, and monitor more complicated supply chains (Ghafoor, Nawab & Shafi, 2021). Naturally, the ERP systems that businesses adopt must be well-suited to the job, and ease of use is a key consideration (Erwanto & Zusi, 2020; Aremu & Hassan, 2018).

When these companies are compelled to participate in major training programs or overhaul their existing productivity measuring systems, they often experience a significant loss of momentum, which can result in significant earnings losses. In this present highly competitive environment, it's difficult to carry on with business as usual when your old system no longer works and your new one takes an eternity to learn (Ata & Ziad, 2021).

Organizational Structure

Yusuff, Arfan and Hassan (2019) defined organizational structure as a mechanism which links and co-ordinates individuals within the framework of their roles, authority and power. It also assumes a level of operation that necessitates the collaboration of many people in order to be successful (Kedak & Gede, 2021). This emphasizes the importance of defining the many tasks that should be performed by distinct individual jobs (job descriptions), how they should be performed (operation procedures), expected performance standards, line of authority, and so on, in order to avoid confusion and conflict. Simply, organizational structure is the formal division, grouping, and coordination of job duties (Kuo, 2021). Tintara and Respati (2020) stated that structure is not a coordination mechanism and it affects all organizational process. Organizational structure represents a useful tool that directs individuals' behaviors through shared values, norms, and goals (Setya & Rilo, 2021).

However, it has been characterized as a technique in which the organizations are differentiated and integrated themselves by the allocation of work roles and activities (Sweta & Hirak, 2020). In recent years, researchers have sought to determine which structure brings the most advantages for organizations and they have suggested that organizational structures should be responsive to a variety of individual needs in businesses (Vanda, Anna & Zuzana, 2021; Williams, 2016). The structure of an organization is vital to successful implementation of ERP (Top & Ali, 2021; Sana & Hani, 2020; Putra & Rahayu, 2020).

ERP Project planning and management

According to Aremu and Shahzad (2015), a project is defined as a self-contained effort with a distinct objective and set of circumstances to be handled by artificial structures or technical systems. It involves efficiently coordinating and managing personnel to execute a task with a unified aim or objective. Project planning is a field that deals with how to accomplish a project within a specific timeline, typically with defined stages and resources (Ata & Ziad, 2021). Project management, according to Aljarrah (2021), is the discipline of planning, coordinating, and managing resources in order to

achieve certain project goals and objectives. Integration management, scope management, time management, cost management; quality management, human resource management, communication management, and procurement management are all aspects of project management (Andrianto, 2019).

In order to achieve the requirements of a project assigned, project managers must use their personal knowledge, skills, tools, and approaches to an activity. To ensure the effective achievement of the project objectives, project management entails planning, organizing, making decisions, directing, coordinating, monitoring, scheduling, and managing all combined operations.

IT Infrastructure

An internet infrastructure exists outside of the data center, which comprises transmission medium that control transmission paths. Internet service providers develop, build, and operate internet infrastructures (ISPs) (Putra & Rahayu, 2020; Romina, Olya & Tumer, 2021). IT infrastructure consists of all components that somehow play a role in overall IT and IT-enabled operations. It can be used for internal business operations or developing customer IT or business solutions (Sara & Hani, 2020). Nearly every part of today's organizations is powered by technology, from individual employee labour to operations to goods and services. Technology may be utilized to improve communication, create efficiency, and increase productivity when properly networked. Businesses may experience connection, productivity, and security challenges such as system disruptions and breaches if an IT infrastructure isn't properly implemented.

Overall, whether or not a business is lucrative depends on how well its infrastructure is implemented (Tapang & Joseph, 2018). A well-designed information systems infrastructure is dependent on a well-coordinated implementation that allows for rapid modification. As a result, businesses can use the system to ensure adaptability, which is critical when dealing with new business or administrative initiatives (Top & Ali, 2021).

Underlying Theory (Resource Based-View Theory)

Edith Penrose popularized the resource-based viewpoint in 1959. The two critical assumptions of RBV are that resources must also be heterogeneous and immobile. The first assumption is that skills, capabilities and other resources that organizations possess differ from one company to another. These resources can be physical or invisible (Barney, 2010). This means that resources can include intangible assets such as managerial skills, technology, corporate and/or brand image, corporate culture, information, and reputation. With RBV, the unit of analysis is the resources within the firm and a competitive advantage is created from the internal environment (through possessing and deploying firm-specific resources) as compared to the external market (Kuo, 2021).

Barney (2010) suggested that in order to sustain a competitive advantage via the resource-based view, a company must possess resources which are valuable, rare and inimitable. Supporters of this viewpoint claim that instead of looking for competitive advantage in the competitive world, companies should look for it within their own walls. The Resource-Bases View (RBV) theory was employed in this research since it is used to connect ERP strategy with corporate resources, as well as a method of designing strategies to gain a competitive edge. RBV theory is also a theory that describes what organizations do to compete so that they can manage their resources in accordance with their skills and gain a competitive advantage.

The company has a collection of capabilities and resources, according to the RBV hypothesis. Companies can get a competitive advantage if they have certain competencies and resources. Furthermore, RBV theory suggests that when one organization or firm has valuable resources while another does not, differences in organizational performance are possible. As a result, a firm is viewed as a unique number of traits and competences that influence its evolution and strategic progress from the RBV perspective.

Review of Past Related Studies

Bestman and Monday (2021) investigated the influence between enterprise resource planning

and organizational performance of deposit money banks in Rivers State, Nigeria. The study made use of cross-sectional survey research design. The result of the Pearson Product Moment Correlation analysis conducted proved that enterprise resource planning has strong influence on the measures of performance; revenue growth and profitability of deposit money banks in Rivers State, Nigeria. Ali and Hajj (2019) offered insights regarding the implementation of ERPS and their influence on organizational performance. The outcomes of the survey revealed a technology gap, indicating that businesses are hesitant to adopt ERP as the businesses are uncertain about the cost benefit of its implementation.

Setya and Rilo (2021) assessed the role of technological capability as a moderating variable in ERP implementation's impact on operational performance of Indonesian businesses that have been using ERP for at least three years. The findings revealed that ERP implementation has an influence on operational performance but there is no effect of technology capability as a moderating variable on the effect of ERP implementation on operational performance. Putra, Rita and Putri (2021) examined the effect of Enterprise Resource Planning (ERP) system implementation on company performance with organizational capabilities as a mediating variable. It was reported that organizational performance and capability improved with the implementation of ERP. Aljarrah (2021) determined the impact of Enterprise Resource Planning System of human resources on the employees' performance Appraisal in Jordan. Their findings demonstrated that the Enterprise Resource Planning System's System Quality, Information Quality, and User Satisfaction all have a substantial impact on performance appraisal, however Service Quality has no impact. Najadi, Jannat, Ismail and Nouf (2021) examined the impact of the ERP system on the performance of accountants and the difficulties and challenges faced by the accountants in Oman in using the ERP system. Survey research design was adopted while a snowball sampling technique was employed. Their study found that ERP systems have an impact on accountants' performance, and that while ERP systems can save costs and improve accountants'

performance and work efficiency, they are costly to establish and require proper training and adequate knowledge.

Sara and Hani (2020) investigated the influence of ERP usage on Saudi SMEs' financial and non-financial performance. The elements that contribute to the effective and successful implementation of an ERP system were identified through an exploratory study. A structural equation modeling (SEM) tool was adopted and the results depicted that management support, user satisfaction, and training significantly impact the ERPs usage, while ERP systems enhance SMEs' performance. Sweta and Hirak (2020) in assessing the ERP system's strengths and shortcomings, conducted a comparative study between the traditional technique and the modern ERP system with emphasis of the different aspects of the ERP system, such as HRM, CRM, SCM, business intelligence, inventory system management, and financial management. It was reported the ERP benefits outscore its limitations. Ghada and Hassan (2019) examined the relationship between applying the Enterprise Resource Planning system and operational performance using structural equation modeling and found that all of the variables used to assess the impact of the ERP system (represented by the system's components) had a direct and indirect impact on operational performance, as well as access to the quality of tourism services supplied. Also, Hoque and Shah (2018) debated whether an Enterprise Resource Planning system is appropriate in a lean manufacturing setting and proved that Enterprise Resources Planning systems had interactional impacts on the link between lean practices and business performance.

Adejare, Arfan and Hassan (2018) examined the mediating role of enterprise resource planning (ERP) system adoption on the relationship between performance of medium enterprises (PMEs) and organizational culture (OC), communication process (CP), organizational structure (OS), information technology readiness (ITR), technological change (TC), government policy (GP), information access (IA) and technology infrastructure support (TIS). The findings revealed that CP, ERP, GP, IA, ITR, OC, OS, TC, TIS, and TMS had strong direct associations with

ERP and PME, however GP has no significant relationship with ERP adoption. Furthermore, there is no significant relationship between IA, ITR, OC, OS, and TC and PME, although ERP system adoption moderated the relationship between CP, OC, OS, TC, and TIS and PME.

Alomari and Mohd (2019) investigated the role of business process attributes in assessing Enterprise Resource Planning (ERP) systems toward competitive advantage mediated by forms of control. The data was gathered from 114 Malaysian manufacturing companies and examined using a survey. Overall, the data revealed that forms of control play a key role in mediating the beneficial relationship between ERP systems and firm competitive advantage. Furthermore, after properly assessing ERP systems using business process attributes, the results revealed a considerable effect of ERP on forms of control and competitive advantage. The results also showed that the use of ERP systems results in a sustained competitive advantage in the long run and that more forms of control help firms achieve future firm goals.

According to Ata and Ziad (2021), a lack of awareness of the relationship between ERP systems and competitive advantage must be studied utilizing each of the ERP business process features (i.e., integration, standardization, routinization, and centralization). The data was reviewed using the following approach based on the 114 functional answers: Software for structural equation modeling (SEM): partial least squares (PLS). The findings provided empirical evidence for the significance of each ERP attribute in determining a company's competitiveness. Evidently, there is a link between these characteristics and the competitive advantage. Azeez, Hatem and Abbas (2020) identified the role of the enterprise resource planning applications in supporting economic cost management within an attribute-based costing technique. The study used a statistical questionnaire to collect data from a random sample of accounting, administrative, technical, and engineering department employees. The researcher used a statistical program (SPSS) to conduct the hypothesis test on a sample of 50 participants. After computing a set of statistical measures such as arithmetic mean, standard deviation, coefficient of

variance, and percentage weight, the hypothesis was tested and accepted. The most noteworthy findings argued that an enterprise resource planning system can offer all of the precise data needed to adopt an attribute-based costing technique.

Priskilla, Elsy and Shendy (2020) identified the influence of the management control system (MCS) on intellectual capital through the implementation of Enterprise Resource Planning (ERP) as an intervening variable. Data was gathered through a survey of 57 managers from 36 Indonesian enterprises that have installed ERP systems. The partial least square method was utilized to explain relationships between variables in this study. Results suggested that belief system and boundary system have a positive influence towards intellectual capital through the implementation of ERP as an intervening variable on the companies that implement the ERP system in Indonesia.

Methodology

The survey is a field survey research which the data are derived through the administration of structured questionnaire. Survey monkey form was used as a means of administering of the research instrument. The study respondents are the managers and employees of the five selected listed manufacturing firms in Nigeria (Guinness Nigeria Plc, GlaxoSmithKline Plc., Vita Foam Nigeria Plc., Nestle Nigeria Plc., and PZ Nigeria Plc.). According to the records of the firms' human resource departments, the firms have a total of 5,023 staff. A sample size of 370 was derived using the Taro Yamane formula, while purposive sampling method was used to select the respondents with verse knowledge of ERP business process attributes and competitive advantage.

The research instrument was subjected to reliability test through Pilot Study using Cronbach Alpha test. The pilot study was conducted on a partial scale, which entails conducting 10% of the questionnaire's chosen sample to assess the instrument's validity and reliability. This will be carried out using 10% of the 370 respondents who are employees of Cadbury Nigeria Plc. Therefore, 37 employees of Cadbury Nigeria Plc were used for the pilot study representing 10% of 370 respondents

chosen for the study. The Cronbach Alpha Coefficient ranges from 0.762 to 0.909 indicating that the research instrument is reliable. Multiple regression analysis was used in estimating the formulated equations with the Statistical Package for Social Sciences (SPSS 23.0), with statistical significance set at a level of 5%.

The developed regression equations in testing the formulated hypotheses were:

$$FPR_i = \alpha_0 + \beta_1CHM_i + \beta_2EEU_i + \beta_3OSE_i + \beta_4EPM_i + \beta_5ITF_i + \mu_i \dots\dots \text{Equation 1}$$

$$PRS_i = \alpha_0 + \beta_1CHM_i + \beta_2EEU_i + \beta_3OSE_i + \beta_4EPM_i + \beta_5ITF_i + \mu_i \dots\dots \text{Equation 2}$$

$$CUR_i = \alpha_0 + \beta_1CHM_i + \beta_2EEU_i + \beta_3OSE_i + \beta_4EPM_i + \beta_5ITF_i + \mu_i \dots\dots \text{Equation 3}$$

$$GPR_i = \alpha_0 + \beta_1CHM_i + \beta_2EEU_i + \beta_3OSE_i + \beta_4EPM_i + \beta_5ITF_i + \mu_i \dots\dots \text{Equation 4}$$

Where:

Competitive advantage is proxy by: FPR - Financial Performance, PRS - Products, CUR -

Customers, GPE - General Performance (GPE); and ERP business process attributes are measured by: Change management (CHM), ERP Ease of Use (EEU), Organizational Structure (OSE), ERP Project planning and management (EPM), and IT Infrastructure (ITF). α_0 = intercepts, β_{1-4} represents the coefficients, and μ_i = error term.

Results and Discussion of Findings

Out of the 370 copies of the structured questionnaire administered, 313 copies were properly filled and returned, reflecting 84.59% return rate. Thus, the analysis was based on the respondents’ opinion as obtained from the returned copies of the questionnaire. Four hypotheses were tested and the results are presented in Tables 1 – 4 respectively.

Hypothesis one (Ho1): ERP business process attributes does not have significant effect on financial performance of listed manufacturing firms in Nigeria.

Table 1: Result of Regression Estimate Test for Hypothesis One

Variables	Coefficient	St. Error	T-stat	Prob.
(Constant)	2.528	0.915	2.761	0.006
CHM	0.140	0.059	2.379	0.018
EEU	0.131	0.057	2.310	0.022
OSE	0.210	0.060	3.488	0.001
EPM	0.217	0.062	3.510	0.001
ITF	0.164	0.050	3.252	0.001
Adjusted R ²	0.483			
F-stat	59.253 (0.00)			

Dependent Variable: FPR

Source: Authors’ Work (2022)

The regression equation of ERP business process attributes on financial performance is expressed as:

$$FPR_i = \alpha_0 + \beta_1CHM_i + \beta_2EEU_i + \beta_3OSE_i + \beta_4EPM_i + \beta_5ITF_i + \mu_i \dots\dots \text{Equation 1}$$

$$FPR_i = 2.528 + 0.140CHM_i + 0.131EEU_i + 0.210OSE_i + 0.217EPM_i + 0.164ITF_i + \mu_i$$

Interpretation (Hypothesis One)

The result of the regression estimate in testing hypothesis one as shown in table 1 showed that all the attributes of ERP (Change Management (CHM) ($\beta = 0.140$, $t=2.379$, $p= 0.018$), ERP Ease of Use (EEU) ($\beta = 0.131$, $t=2.310$, $p= 0.022$),

Organizational Structure (OSE) ($\beta = 0.210$, $t=3.488$, $p= 0.001$), ERP Project planning and management (EPM) ($\beta = 0.217$, $t=3.510$, $p= 0.001$), and IT Infrastructure (ITF) performance ($\beta = 0.164$, $t=3.252$, $p= 0.001$), positively and significantly influence financial performance.

The implication of the statistical values is that improvements in all the ERP attributes would boost the financial performance of the companies. The value of the coefficient of multiple determinations (Adjusted R²) of 0.483 means that 48.3% changes in the financial performance of the manufacturing

companies listed in Nigeria is a reflection of overall changed in the changes in ERP attributes. Judging from the probability of the F-statistics of 0.000 being less than the 5 per cent chosen significance level, it is evidenced that ERP business process attributes significantly impact the financial performance of manufacturing firms listed in Nigeria, thus the study did reject the null hypothesis one and accepted the alternate hypothesis which implies that ERP attributes has significant impact on the financial performance of manufacturing companies listed in Nigeria.

Discussion

The significant positive impact of ERP attributes on the financial performance derived aligned with the study of Bestman and Monday (2021) and stated that enterprise resource planning has strong influence on the measures of performance, revenue growth and profitability of deposit money banks in Rivers State, Nigeria. Likewise, that of Sara and Hani (2020) examined the

impact of an ERPs usage on the financial and non-financial performance of the Saudi SMEs; Putra, Rita and Putri (2021) which found that ERP system's implementation positively and significantly impact company performance and organizational capabilities; the studies of Najadi, Jannat, Ismail and Nouf (2021) and Aljarrah (2021) which concluded that the ERP system does have an impact on accountant's performances and even though ERP system helps in reducing cost and improving accountant's performance and work efficiency, implementing the system is expensive and requires proper training and adequate knowledge. However, it contradicted the report of Ali and Hajj (2019) who obtained that companies were reluctant to embrace the use of ERP due to the fact that its negative implications outweighed the benefits.

Research Hypothesis 2 (Ho2): There is no significant effect of ERP business process attributes on products' characteristics of listed manufacturing firms in Nigeria.

Table 2: Result of Regression Estimate Test for Hypothesis Two

Variables	Coefficient	St. Error	T-stat	Prob.
(Constant)	2.844	0.906	3.139	0.002
CHM	0.103	0.058	1.763	0.079
EEU	0.083	0.056	1.472	0.142
OSE	0.094	0.060	1.575	0.116
EPM	0.357	0.061	5.830	0.000
ITF	0.202	0.050	4.063	0.000
Adjusted R ²	0.487			
F-stat	60.270 (0.000)			

Dependent Variable: PRS

Source: Authors' Work (2022)

The regression equation of ERP business process attributes on products is expressed as:

$$PRS_i = \alpha_0 + \beta_1CHM_i + \beta_2EEU_i + \beta_3OSE_i + \beta_4EPM_i + \beta_5ITF_i + \mu_i \dots \dots \dots \text{Equation 2}$$

$$PRS_i = 2.844 + 0.103CHM_i + 0.083EEU_i + 0.094OSE_i + 0.357EPM_i + 0.202ITF_i + \mu_i$$

Interpretation of Result (Hypothesis Two)

As shown in Table 2, the regression estimate for the test of hypothesis Two, all the ERP attributes positively influence the products. However, only ERP Project planning and management (EPM) ($\beta = 0.357$, $t = 0.061$, $p = 0.000$), and IT infrastructure (ITF) ($\beta =$

0.202 , $t = 0.050$, $p = 0.000$) have significant impact while Change management (CHM), ($\beta = 0.103$, $t = 1.763$, $p = 0.079$), ERP ease of use ($\beta = 0.083$, $t = 1.472$, $p = 0.142$), and Organizational Structure ($\beta = 0.094$, $t = 1.575$, $p = 0.116$) have insignificant effect on the products. The results proved that improvements in ERP attributes would enhance the products designs, quality, branding and other characteristics of the companies' products. The value of the Adjusted R² of the regression estimate of 0.487 implies that 48.7% variations in the products characteristics resulted from the combined changes

in the ERP business process attributes. Based on the probability of the F-Statistics of 0.000 which is less than 0.05 chosen significance level of the study; the null hypothesis is rejected, while the alternate hypothesis accepted. This means that ERP business process attributes has a significant impact on products of manufacturing firms listed in Nigeria.

Discussion

The significant impact of ERP business process attributes on products of manufacturing companies listed in Nigeria derived in this study agreed to the reports of Sweta and Hirak (2020) and Hoque and Shah (2018) who’s in their study deliberated whether Enterprise Resources Planning system fits within a lean manufacturing environment

and showed that Enterprise Resources Planning system play are interactional roles on the relationship between lean practices and business performances, indicating the moderating effects of Enterprise Resources Planning system on their relations. Likewise, that of Ghada and Hassan (2019) and Adejare, Arfan and Hassan (2018). Therefore, ERP business process attributes is germane to determination of products characteristics in Nigeria manufacturing companies.

Research Hypothesis 3 (Ho3): There is no significant effect of ERP business process attributes on customers’ relationship of listed manufacturing firms in Nigeria.

Table 3: Result of Regression Estimate Test for Hypothesis Three

Variables	Coefficient	St. Error	T-stat	Prob.
(Constant)	2.764	0.892	3.097	0.002
CHM	0.250	0.057	4.354	0.000
EEU	0.102	0.055	1.848	0.066
OSE	0.140	0.059	2.382	0.018
EPM	0.208	0.060	3.448	0.001
ITF	0.142	0.049	2.902	0.004
Adjusted R ²	0.483			
F-stat	59.408 (0.000)			

Dependent Variable: CUR

Source: Authors’ Work (2022)

The regression model of ERP business process attributes on customers is expressed as:

$$CUR_i = \alpha_0 + \beta_1CHM_i + \beta_2EEU_i + \beta_3OSE_i + \beta_4EPM_i + \beta_5ITF_i + \mu_i \dots\dots\dots \text{Equation 3}$$

$$CUR_i = 2.764 + 0.250CHM_i + 0.102EEU_i + 0.140OSE_i + 0.208EPM_i + 0.142ITF_i + \mu_i$$

Interpretation of Result (Hypothesis Three)

The regression estimate result of the test of hypothesis three as presented in Table 3 indicated that all the ERP business attributes (Change management (CHM) ($\beta = 0.250$, $t=4.359$, $p= 0.000$); Organizational Structure (OSE) ($\beta = 0.140$, $t=2.382$, $p= 0.018$); ERP Project planning and management (EPM) ($\beta = 0.208$, $t=3.448$, $p= 0.001$); IT infrastructure (ITF) ($\beta = 0.142$, $t=2.902$, $p= 0.004$) positively and significantly influence the customers except for ERP ease of use (EEU) ($\beta = 0.102$, $t=1.848$, $p= 0.066$). The positive impact of all the

measures of the ERP business process attributes proved that customers’ improvement could be achieved through successful implementation of ERP in manufacturing companies in Nigeria.

The Adjusted R² of 0.483 implies that 48.3% changes in customers could be attributed to overall changes in the ERP process attributes of the listed manufacturing companies in Nigeria. Also, the probability value of the F-statistics of 0.000 which is less than the 5 per cent chosen significant level of the study proved that ERP process attributes exert significant impact on customers to firm relationship. Therefore, the third hypothesis of this study is hereby rejected while the study accepted the alternate hypothesis and concluded that ERP process attributes significantly impact customers’ relationship of listed manufacturing companies in Nigeria.

Discussion

The findings of this study proved that improvements in customers' relationship of listed manufacturing firms in Nigeria can be attributed to ERP business process attributes. This is also the position of Azeez, Hatem and Abbas (2020), Ata and Ziad (2021) as well as that of Priskilla, Elsy and Shendy (2020) result suggested that belief system and boundary system have a positive influence

towards intellectual capital through the implementation of ERP as an intervening variable on the companies that implement the ERP system.

Research Hypothesis 4 (Ho4): There is no significant ERP business process attributes on general performance of listed manufacturing firms in Nigeria.

Table 4: Result of Regression Estimate Test for Hypothesis Four

Variables	Coefficient	St. Error	T-stat	Prob.
(Constant)	3.010	0.836	3.603	0.000
CHM	0.043	0.054	0.803	0.423
EEU	0.243	0.052	4.687	0.000
OSE	0.159	0.055	2.882	0.004
EPM	0.227	0.056	4.012	0.000
ITF	0.163	0.046	3.555	0.000
Adjusted R ²	0.523			
F stats	69.399 (0.000)			

Dependent Variable: GFR

Source: Authors' Work (2022)

The regression model of ERP business process attributes on general performance is expressed as:

$$GPR_i = \alpha_0 + \beta_1 CHM_i + \beta_2 EEU_i + \beta_3 OSE_i + \beta_4 EPM_i + \beta_5 ITF_i + \mu_i \dots \dots \dots \text{Equation 4}$$

$$GPR_i = 3.010 + 0.043CHM_i + 0.243EEU_i + 0.159OSE_i + 0.227EPM_i + 0.163ITF_i + \mu_i$$

Interpretation of Result (Hypothesis Four)

As shown in Table 4, all the five measures of the ERP process attributes have positive and significant effect on general performance (ERP ease of use (EEU) ($\beta = 0.243$, $t=4.687$, $p= 0.000$); Organizational Structure (OSE) ($\beta = 0.159$, $t=2.882$, $p= 0.004$); ERP Project planning and management (EMP) ($\beta = 0.227$, $t=4.012$, $p= 0.000$); IT infrastructure (ITF) ($\beta = 0.163$, $t=3.555$, $p= 0.000$); except for Change management which also has positive but insignificant influence on the general performance of listed manufacturing companies in Nigeria ($\beta = 0.043$, $t=0.044$, $p= 0.423$).

The positive impact of all the ERP process attributes proved that successful implementation of ERP processes in manufacturing companies in Nigeria will improve the overall performance.

The coefficient of multiple determinations (Adjusted R²) of 0.523 indicated that 52.3% changes in the

combined ERP process attributes would yield 52.3% changes in the overall performance of manufacturing companies listed in Nigeria. ERP business process attributes using proxies used in this study, while the remaining 48% variations in general performance of listed manufacturing firms in Nigeria are caused by other factors not included in this model. This shows a strong explanatory power of the model. Based on the probability value of the F-Statistics of 0.000 which is less than the chosen significance level of 5 per cent, this study therefore did reject the null hypothesis which means that ERP business process attributes has a significant impact on general performance of manufacturing firms listed in Nigeria.

Discussion

The findings of this study on the significant impact of ERP process attribute aligned with the reports of Behera and Dhal (2020) which examined the impact of ERP systems on the performance of central public sector enterprises and stated that performance indicator like return on assets, return on invested capital, return on equity, and return on sale have a significant impact on ERP Adopter when it compares with ERP non- adopter working in mineral and metal sector. The findings also aligned with the

study of Noori, Jubair and Eman (2019) who examined the impact of accounting and administrative information systems on the performance of institutions and showed the importance of management and planning followed by constraints on efficiency and procedures related to the performance of institutions. The study aligned with Andrianto (2019) result that obtained that it is the application of ERP has a positive impact on user performance components.

Conclusion

The result of the hypothesis one concluded that ERP business process attributes has a significant impact on financial performance of manufacturing firms listed in Nigeria. Hypothesis two concluded that ERP business process attributes has a significant impact on products of manufacturing firms listed in Nigeria. Hypothesis three concluded that ERP business process attributes has a significant impact on customers of manufacturing firms listed in Nigeria. Hypothesis four concluded that ERP business process attributes has a significant impact on general performance of manufacturing firms listed in Nigeria.

It was concluded that the variables of ERP business process attributes (Change management, ERP Ease of Use, Organizational Structure, ERP Project planning and management, IT Infrastructure) have a significant joint influence on competitive advantage of listed manufacturing firms in Nigeria. It is concluded that ERP business process attributes are seen as necessary that can help in utilizing their competitive advantage in the industry.

References

- Ali, J. B., & Anwar, G. (2021). Porter's generic competitive strategies and its influence on the competitive advantage. *International Journal of Advanced Engineering, Management and Science*, 7(6), 42-51.
- Aljarrah, M. (2021). The impact of enterprise resource planning system of human resources on the employees' performance appraisal in Jordan. *Transactions on environment and development*, 17(1), 351-359.
- Andrianto, A. (2019). Impact of Enterprise Resource Planning (ERP) implementation on user performance: Studies at University of Jember. *IOP Conf. Series: Journal of Physics: Conf. Series*, 1(2), 1-9.
- Aremu, A. Y., Shahzad, A., & Hassan, S. (2020). The empirical evidence of enterprise resource planning system adoption and implementation on firm's performance among medium-sized enterprises. *Global Business Review*, 2(1), 1-30.
- Ata, I., & Ziad, A. J. (2021). ERP business process attributes to create competitive advantages. *International Journal of Business and Economics Research*, 10(1), 40-49.
- Awolusi, O., & Oladepo, I. O. (2013). ERP and organizational performance in Nigerian manufacturing firms: An empirical analysis. *Global of Commerce and Management Perseptive*, 1(1), 12-23.
- Erwanto, E. D., & Zusi, H. (2020). Factors affecting success of ERP (Enterprise Resource Planning) system implementation. *International Humanities and Applied Sciences Journal*, 3(1), 12-24.
- Fabiola, K., Moura, D. L., Silva, V. S., Wesley, S., & Veiga, D. P. (2021). Competitive advantage and dynamic capability in small and medium-sized enterprises: a systematic literature review and future research directions. *Review of Managerial Science*, 1(1), 10-21.
- Ghada, A. M., & Reda, E. F. (2020). Enterprise Resource Planning system and its impact on tourism companies' operational performance. *Journal of Sustainable Tourism and Entrepreneurship (JoSTE)*, 1(1), 69-85.
- Ghafoor, M. G., Nawab, S., & Shafi, K. (2021). Enterprise Resource Planning systems and knowledge management: A review of the literature and conceptual framework. *Journal of Management and Research*, 8(1), 179-211.

- Irfan, A., Van, G., & Weigard, H. (2020). Enterprise resource planning systems implementation and firm performance: An empirical study. *Journal of Information Systems Engineering and Management*, 5(1), 1-16.
- Jaya, Y. F., Nasir, M., & Dewi, P. (2021). The Impact of external environment on competitive advantage through SME differentiation strategy in Central Java. *Universal Journal of Management*, 9(2), 38-43.
- Kadek, K. U., & Gede, M. S. (2021). Competitive advantages in mediating supply chain management on company performance (Empirical study at Agro-technology SME in Tabanan, Bali, Indonesia). *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 5(4), 355-360.
- Mahardika, P. M., & WayanSantika, I. (2021). Strategies for creating competitive advantage through product development, design and quality (Case study on the ZARA brand in badung regency). *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 5(1), 279-284.
- Panorama Consulting Group. (2018). *2010 Erp Report*. Retrieved October 23rd, 2021, from <https://www.panorama-consulting.com/wp-content/uploads/2016/07/2010-ERP-Report.pdf>
- Putra, D. G., & Rahayu, R. (2020). IT Governance (Information Technology Governance). *Journal of IT*, 1(1), 10-21.
- Putra, G. D., Rita, R., & Putri, A. (2021). The influence of enterprise resource planning (erp) implementation system on company performance mediated by organizational capabilities. *Journal of Accounting and Investment*, 22(2), 221-241.
- Rehman, U. S., Mohamed, R., & Ayoup, H. (2019). The mediating role of organizational capabilities between organizational performance and its determinants. *Journal of Global Entrepreneurship Research*, 9(30), 1-23.
- Romina, C., Olya, H., & Tumer, M. (2021). The effects of external and internal factors on competitive advantage-moderation of market dynamism and mediation of customer relationship building. *Sustainability*, 13(2), 20-29.
- Schlichter, J., Klyver, K., & Haug, A. (2020). The moderating effect of ERP system complexity on the growth-profitability relationship in young SMEs. *Journal of Small Business Management*, 59(4), 621-626.
- Setya, M. A., & Rilo, P. (2021). The Effect of Enterprise Resource Planning (ERP) on performance with information technology capability as moderating variable. *Journal of Economics, Business, and Accountancy*, 24(1), 1-11.
- Sliman, S. A., & Alalaya, M. M. (2015). Practices of competitor accounting and its influence on the competitive advantages: An empirical study in Jordanian manufacturing companies. *Global Journal of Management and Business Research: D Accounting and Auditing*, 15(3), 13-23.
- Sofyan, R., Putra, D. G., & Aprayuda, R. (2020). Does the information on the internet media respond to the stock market? 152, pp. 510–520. Proceedings of the 5th Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship PICEEBA-5 2020).
- Syofyan, R., & Putra, D. G. (2020). The role of Good Corporate Governance (GCG) implementation in Indonesian company. 124. 819–825: Proceedings of the 4th Padang International Conference on Education, Economics, Business and Accounting (PICEEBA-2 2019).
- Tintara, D. G., & Respati, R. N. (2020). The effect of product differentiation, service differentiation, and image differentiation on competitive advantage. *American Journal of*

Humanities and Social Sciences Research (AJHSSR), 4(12), 316-321.

efficiency, fulfillment, system availability, and privacy. *Amazonia Investiga*, 10(38), 70-81.

Top, C., & Ali, B. J. (2021). Customer satisfaction in online meeting platforms: Impact of