



## Online Intermediation and Competitiveness of Oil and Gas Exploration and Producing Companies in the South-South Region of Nigeria

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### ABSTRACT:

This study examined the relationship between online intermediation and the competitiveness of oil and gas exploration and producing companies in the South-South Region of Nigeria. The study adopted a cross-sectional survey research design. The population of this study comprises all the oil and gas companies that operate in the South-South region of Nigeria. There are 131 companies involved in oil and gas exploration and production in the South-South region of Nigeria. Since the study population is small, the researcher handled the entire population. Two senior managers in the operations and finance of each company were considered for this study. Therefore, the total number of respondents became 262 from the 131 companies involved in oil and gas exploration and production in the South-South region of Nigeria. Primary data was collected using a 5-point Likert-scale questionnaire. The hypotheses were tested using Spearman's Rank Order Correlation Coefficient with Statistical Package for Social Sciences version 23.0. The findings revealed a significant positive relationship between online intermediation and the competitiveness of oil and gas exploration and producing companies in the South-South Region of Nigeria. Therefore, the study recommended that the management of oil and gas exploration and producing companies should invest in robust online platforms and digital technologies that facilitate efficient intermediation. This includes exploring or developing online platforms that connect oil and gas companies with relevant services, suppliers, and partners to streamline operations.

### KEYWORDS:

Online Intermediation, Firm Competitiveness, Reliability, Flexibility, Product Quality



## INTRODUCTION

Online intermediation is a contemporary employment model that has gained prominence recently. This explains a change in how people work that is characterized by short-term, flexible, and task-based employment arrangements. Unlike traditional full-time jobs, the gig economy allows individuals to work as freelancers or independent contractors, temporarily taking on projects or tasks. One of the key features of the gig economy is the use of digital platforms to connect workers with employers or clients. These platforms are crucial in facilitating the gig economy by creating a marketplace where individuals can offer their skills or services and find opportunities (Kaine & Josserand, 2019). Mangold, Stier, Breuer, and Scharnow (2022) defined online intermediaries as those social network sites or internet search engines that act as mediators between those who are the information producers (gig companies or individuals that render gig services) and the citizens (those who need these services, products, and or information). The traditional intermediation was the type where agents or employees sit somewhere and mediate between the seller and the buyer, however, the newer form is the type where intermediaries are done through the media as well as other online review aggregators, and producers are often simultaneously subjected to public evaluation by these multiple intermediaries (Sharkey, Kovacs & Hsu, 2023).

Lopez-Vega, Tell, and Vanhaverbeke (2016) argued that the increasingly open innovation environment that exists in this contemporary business environment has a lot of external solutions and collaborations are now very common in finding the right innovation solution or partner where people can easily locate what they want. The adoption of technology and its online involvement has so many benefits for businesses as it has in the past increased profitability and other sustainable factors (AlZayani, Mohammed & Shoaib, 2023); it has transformed the facets of interaction between businesses and customers and also resulted in improved services and customer satisfaction (Shahid Iqbal, Ul Hassan, & Habibah, 2018).

The purpose of this paper therefore was to examine the relationship between online intermediation and the competitiveness of oil and gas exploration and producing companies in the South-South region of Nigeria.

The research question of the study included:

- i. What is the relationship between online intermediation and the reliability of oil and gas exploration and producing companies in the South-South region of Nigeria?
- ii. What is the relationship between online intermediation and flexibility of oil and gas exploration and producing companies in the South-South of Nigeria?
- iii. What is the relationship between online intermediation and product quality of oil and gas exploration and producing companies in the South-South of Nigeria?

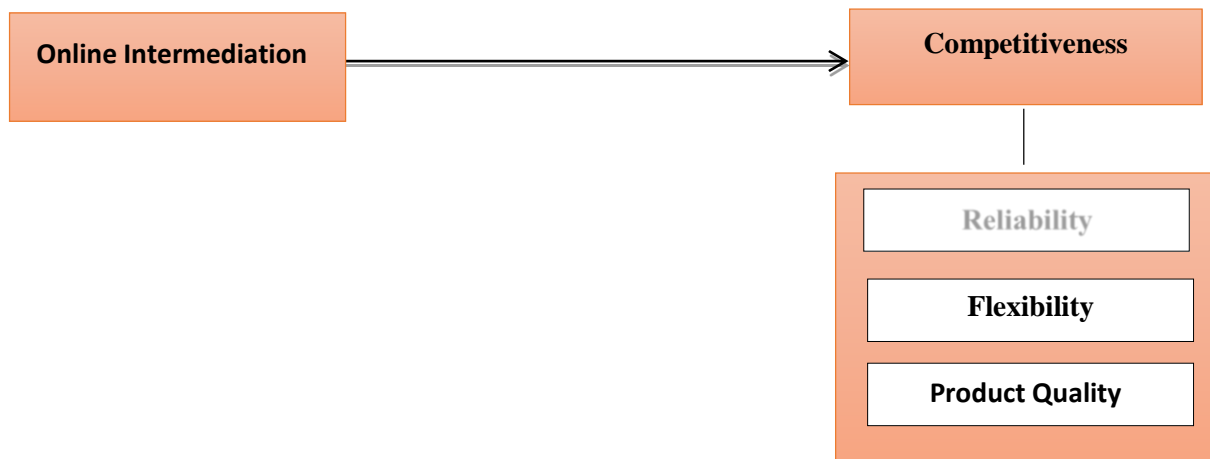


Figure 1: Conceptual model for the relationship between online intermediation and competitiveness  
**Source:** Desk Research (2024)

## LITERATURE REVIEW

### Theoretical Foundation

#### Resource-based view theory

The resource-based view (RBV) of the firm was first introduced by Edith Penrose in her seminal work "The Theory of the Growth of the Firm," which was published in 1959. Resource-based theory (RBT) is a strategic management framework that holds the view that the internal resources and capabilities of a firm are the primary drivers of competitive advantage (Barney, 1991). Developed in the late 20th century, Penrose's RBT suggests that a firm's unique bunch of resources—such as tangible assets, human capital, organizational capabilities, and intangible assets like brand reputation or technological know-how—are the key determinants of its ability to achieve a sustainable competitive advantage in the marketplace.

According to RBT, not all resources are equally valuable or rare, and firms need to possess resources that are not easily replicated by competitors to achieve a lasting competitive edge. The theory emphasizes the importance of these resources in creating value for customers, and stakeholders, and majorly leading to superior performance and market positioning (Khanra, Kaur, Joseph, Malik & Dhir, 2022). One important aspect of the Resource-based theory is the concept of resource heterogeneity and immobility (Gerhart & Feng, 2021). Resource heterogeneity highlights the idea that firms differ in the types and amounts of resources they possess, which makes them unique.

Resource immobility, on the other hand, suggests that these resources cannot be easily transferred or replicated by competitors. RBT encourages firms to identify and acquire resources that are valuable and difficult for competitors to acquire or imitate. By so doing, businesses can build a sustainable competitive advantage that goes beyond short-term strategies, fostering long-term success in dynamic and competitive business environments. RBT has become an important theory in the field of management, offering a guide to businesses in understanding the importance of their internal and external resources in shaping their competitive positions. A good knowledge of this enhances the ability of managers to harness these resources to the benefit of their organizations.

### Online intermediation

Mangold, Stier, Breuer, and Scharkow (2022) defined online intermediaries as those social network sites or internet search engines that act as mediators between those who are the information producers (gig companies or individuals that render gig services) and the citizens (those who need these services, products, and or information). The traditional intermediation was the type where agents or employees sit somewhere and mediate between the seller and the buyer, however, the newer form is the type where intermediaries are done through the media as well as other online review aggregators, and producers are often simultaneously subjected to public evaluation by these multiple intermediaries (Sharkey, Kovacs & Hsu, 2023).

Lopez-Vega, Tell, and Vanhaverbeke (2016) argued that the increasingly open innovation environment that exists in this contemporary business environment has a lot of external solutions and collaborations are now very common in finding the right innovation solution or partner where people can easily locate what they want. The adoption of technology and its online involvement has so many benefits for businesses as it has in the past increased profitability and other sustainable factors (AlZayani, Mohammed & Shoaib, 2023); it has transformed the facets of interaction between businesses and customers and also resulted in improved services and customer satisfaction (Shahid Iqbal, Ul Hassan, & Habibah, 2018). Also, production efficiency, efficient allocation of resources, unlock the full potential of environmental sustainability, increase network (Li, Dai, & Cui, 2020); enhances massive information gathering and its disposal, and the superior performance and integration of the components parts of the business (Büyüközkan and Göçer, 2018); it also affects customers' trust and loyalty (Ismail, 2023). Despite the numerous benefits of online intermediation, some authors have revealed some negative effects it may have on businesses. Kiel, Arnold, and Voigt (2017) asserted that it can increase competitive dynamics and impose financial and environmental burdens on businesses, especially in the manufacturing and service industries. (Bryce (2013) in their study posited that online intermediation could lead to some societal concerns about the psychological, social, and physical effects like loss of jobs as machines will take over some, and exposure to sexually explicit materials. However, the benefits of technology in business cannot be overemphasized as the superior performances of the top global players in all sectors be it in logistics, marine, aviation, oil and gas, and so on, can be attributed to the adoption of some advanced online intermediation in running of their businesses. This has made decision-making, control, planning, and other management functions easier as their branches have been littered all over the earth and functioning efficiently.

Dubey and Sahu (2022) revealed in their study that the use of information technology and other online intermediation in educational activities has seen a huge growth in recent years and this has helped students even in remote areas to get an education irrespective of the area or location they find themselves and also has ensured the participation of all stakeholders be it students, instructors, and so on. Sun, Tang, and Zuo (2020) supported this view and added that due to the cost-effectiveness, reusability, and adaptability of information technology in education, the use of technology in learning has become a popular mode of imparting knowledge and promoting educational opportunities and that many higher citadels of learning are moving away from the conventional mode of learning to using the Information Technology (IT) system.

Carrel and Ebner (2019) added that technology has changed the entirety of man and that this has occurred in our banking, fashion, shopping, learning, etc., and all professions are seeking to benefit from the use of technology. Voordijk and Dorrestijn (2021) posited that the concept of technology is centered on the philosophical view of human beings and their well-being and therefore the innovations and creativities in technology and that it should take a middle position so that human beings are not affected negatively in the innovations. They further argued that in recent times, people in smart cities can be accessed and that security issues have been under check as any move anyone make can be detected by technological gadgets

### **Firms' competitiveness**

Chikán, Czakó, Kiss-Dobronyi, and Losonci (2022) posited that the concept of firm-level competitiveness is widely used in the field of management, however, it is scarcely related to the analysis of the effectiveness of functional operations. The concept of competitiveness can be viewed in many ways by scholars of management depending upon their convenience, however, firm competitiveness is defined as the ability of a firm to produce superior goods and services better than that of other competitors either in the local market or at the international scene (Basu, 2011). The Government of the United Kingdom's Department of Trade and Investment defined firm competitiveness as a firm's ability to produce the right goods and services, in the right quality, at the right price, and at the right time (Budd & Hirmis, 2012).

Firm-level competitiveness can be defined as a firm's ability to design, produce, or market products superior to those offered by competitors to price, and non-price qualities. Competitiveness determines the ability of a firm to conquer new markets, outplay others in the market, attract investment, and grow. It is therefore important for entrepreneurs and policymakers, to understand how competitive their organizations or countries are relative to others, and how their competitive position changes over time (Fagerberg & Srholec, 2017). Huggins and Thompson (2017) identified five main determinants of firm competitiveness which are; market access, raw materials, transportation cost, availability and cost of energy, and cost of labor.

This they argued when put right by any organization can place them ahead of other competitors by reducing their price, making available quality raw materials, and other associated costs that can raise the price of their products. Sahoo, Le, and Rath (2022) also identified determinants of firm competitiveness which are; talent, cost competitiveness, innovation policy, energy policy, legal and regulatory system, and physical infrastructure. Jambor and Babu (2016) identified economies of scale, market concentration, product differentiation, and entry barriers are important determinants of a firm's competitiveness. Dvouletý and Blažková (2021) in their research on the competitiveness of Small and Medium-sized businesses in the Czech Republic.

They identified the age and size of the firm, the geographical location of the firm, and the strategic management of the firm. Suroso, Fahmi, Tandra, and Haryono (2023) in their research about the agro-food export in Indonesia identified determinants of firm competitiveness which include; strategic management, technological adoption, collaboration and partnership, risk management techniques, financial management techniques, and human capital. Firm competitiveness has now become a buzzword and also multi-disciplinary as it has combined the aspects of economics, management, politics, history, and culture (Owuso, 2023). Firms need to be active and innovative in other to remain in business or be booted out by others.

Firm competitiveness can be achieved in many different ways depending on the industry the geographical location or other factors surrounding the business. In the fast-paced and ever-evolving landscape of business, firm competitiveness stands as a critical determinant of success. Competitiveness goes beyond merely having a superior product; it encompasses a holistic approach that involves strategic planning, operational efficiency, innovation, and adaptability. A competitive firm is one that not only meets but exceeds customer expectations while maintaining financial viability (Falciola, Jansen & Rollo, 2020). The journey to firm competitiveness is a multifaceted expedition that involves various dimensions.

### **Measures of firm competitiveness**

The measures of firm competitiveness adopted in this study are reliability, flexibility, and product quality.

#### **Reliability**

The concept of reliability cuts across many fields of life whether in science, business, mathematics, research, engineering, statistics, economics, humanities, etc. The American Society for Quality (2023) defined reliability as the probability that a product and or service, system will perform its intended function adequately for a specified time, or will operate in a defined environment without failure. The Cambridge Dictionary defines reliability as the quality of being able to be trusted or believed because of working well or behaving well in the past. Reliability in business is very necessary for patronage as customers will have confidence in them that the product or service of an organization will satisfy the purpose for which it will be procured.

Reliability can be defined in various contexts, but it generally refers to the consistency, dependability, and accuracy of a system, process, measurement, or person. Successful business organizations are well known for the reliability of their product or service. The reliability of a firm stands as a critical dimension in understanding its overall performance and sustainability. Evaluating the reliability of a firm becomes imperative, as it provides insights into the organization's ability to consistently deliver products, and services, and meet stakeholder expectations. This comprehensive examination delves into various facets of reliability, exploring financial stability, operational resilience, strategic adaptability, and ethical considerations.

One of the key indicators of a firm's reliability is its financial stability. A stable financial foundation ensures that the firm can weather economic uncertainties, sustain operations, and invest in future growth (Rashid, 2023). Understanding the firm's financial history, liquidity, and debt management strategies becomes crucial in evaluating its long-term reliability. The strength of a firm lies in its ability to utilize its financial resources in achieving its goals and objectives as well as gaining a competitive advantage in the industry in which it competes. With the financial reliability of a firm, they can pursue long-term goals and this can put them in front in the industry in which they compete.

#### **Flexibility**

Business flexibility refers to the ability of an organization to adapt and respond effectively to changes in its internal and external environment. This adaptability allows businesses to navigate uncertainties, seize opportunities, and overcome challenges. Flexibility is a concept



that extends beyond the physical realm of bending and stretching; it embodies the ability to adapt and navigate the twists and turns of life with grace and resilience. Whether applied to the human body, the mind, or societal structures, flexibility is a fundamental attribute that enables growth, innovation, and overall well-being. In the face of life's uncertainties, individuals with a flexible mindset are better equipped to handle challenges and adapt to changing circumstances.

This mental adaptability fosters creativity, problem-solving skills, and a capacity to learn from experiences. Embracing change becomes a source of personal growth rather than a source of stress (Crespo del Granado, Rajasekharan, Pandiyan, Tomasgard, Kara, Farahmand & Jaehnert, 2023). Flexibility also plays a pivotal role in interpersonal relationships. Individuals who are open-minded and adaptable in their interactions with others are more likely to build strong connections and collaborate effectively. Understanding and appreciating diverse perspectives contributes to a harmonious and inclusive social environment.

In the professional realm, adaptability is a prized quality. In rapidly evolving industries like the Information Technology (IT), employees and organizations that demonstrate flexibility are better positioned to thrive. The ability to learn new skills, embrace new technologies, and pivot when necessary is a key factor in long-term success. Societal structures also benefit from flexibility. Legal systems, educational frameworks, and governance models that can adapt to the changing needs of their populations are more likely to foster stability and progress. Flexibility in policies allows for the accommodation of diverse needs and evolving social values. Cultivating flexibility involves a willingness to step out of one's comfort zone.

It requires a mindset that values learning and growth over the security of routine. Embracing uncertainty and ambiguity becomes a way to explore new possibilities and discover hidden potential. The journey towards flexibility involves overcoming resistance to change. This resistance often stems from fear – fear of the unknown, fear of failure, or fear of losing control (Bashir, 2023). Acknowledging these fears and developing strategies to navigate them is an integral part of building flexibility. A flexible approach to life does not mean abandoning structure altogether. Rather, it involves striking a balance between stability and adaptability. Establishing a strong foundation provides a secure base from which to explore new opportunities and navigate challenges.

In times of crisis, flexibility becomes a lifeline. The ability to pivot, innovate, and find alternative solutions can mean the difference between stagnation and progress. Resilience, a close companion of flexibility, allows individuals and communities to bounce back from setbacks stronger than before. Organizational cultures that embrace flexibility tend to be more dynamic and adaptive. They celebrate diversity, encourage creativity, and foster an environment where individuals feel empowered to voice their ideas and perspectives. This cultural flexibility contributes to the vibrancy and sustainability of communities (Leso, Cortimiglia & Ghezzi, 2023). In education, a flexible curriculum prepares students for a rapidly changing world.

### **Product Quality**

Product quality refers to the characteristics and features of a product that meet or exceed customer expectations and requirements. It is a measure of how well a product conforms to its specifications, standards, and the level of excellence it delivers in terms of performance,

durability, reliability, safety, and other relevant attributes. The American Society for Quality defines quality as the characteristics of a product or service that bear on its ability to satisfy stated or implied customer needs. Consistently delivering high-quality products is key to satisfying customer expectations and fostering long-term success in the marketplace (De Giovanni & Zaccour, 2023). Product quality is a paramount aspect that significantly influences consumer satisfaction and brand reputation.

It encompasses a multitude of factors, from the materials used in manufacturing to the design, durability, and overall performance of a product. Companies that prioritize and maintain high standards of product quality often establish themselves as leaders in their respective industries. A product's quality is a composition of various elements. The choice of raw materials, manufacturing processes, design precision, and adherence to industry standards all contribute to the overall quality. Quality control measures, testing protocols, and continuous improvement efforts further refine and ensure the excellence of a product. Perceived quality plays a pivotal role in consumer decision-making (Xiao & Zhang, 2023).

When customers have confidence in a product's quality, they are more likely to make a purchase and become repeat customers. Positive experiences with high-quality products foster brand loyalty, leading to long-term customer relationships. The quality of a product is inextricably linked to the brand's image. Consistently delivering products of superior quality enhances brand credibility and trustworthiness (Badalov, 2023). On the contrary, subpar quality can irreversibly damage a brand's reputation, resulting in loss of market share and consumer trust. In a competitive marketplace, product quality serves as a crucial differentiator. Companies that invest in maintaining or elevating the quality of their offerings stand out among their competitors.

Superior quality not only attracts more customers but also allows for premium pricing, reinforcing a brand's market position. Ensuring product quality is an ongoing process that involves continuous improvement and innovation. Companies must adapt to changing consumer preferences, technological advancements, and industry standards to stay ahead. By embracing a culture of innovation and quality enhancement, businesses can sustain their relevance and thrive in dynamic markets.

### **Online intermediation and Competitiveness**

Nasidi, Hassan, Ahmad, Garba & Gamji (2022) studied the effects of advertisement, online risks, perceived usefulness, and reliability on online shopping behavior among online shoppers in the Nigerian context. A quantitative data approach was adopted by the researchers and a structured questionnaire was used to collect data from 375 online shoppers who had prior online shopping experience in Nigeria. The researchers used Smart-PLS for data analysis and from their findings it was observed that advertising and perceived usefulness have a positive and significant effect on online shopping behavior. Also, there is a positive relationship between reliability and online shopping behavior. Onețiu, Borșan, and Chebeleu Bacter, (2021) researched the use of online platforms in the intermediation of tourism activity. A survey method was adopted in this study and the findings revealed that online platforms are increasingly in use by tourists be it in hotel reservations, air transport, and other services that tourism related. The advantage that online platforms have over the traditional way is that it has a 24-hour service, flexibility to change booking details, confirmations sent almost immediately, time saved, and the users of these platforms are unlimited also.



Biglaiser, Li, Murry, and Zhou (2020) researched intermediaries and product quality in used car markets. The researchers used both qualitative and quantitative techniques in the research. For the quantitative aspect, data was collected from 367 respondents who buy used cars with the aid of a structured questionnaire. The quantitative data collected was analyzed with Smart-PLS and the qualitative data was analyzed using INVIVO. The result of the findings revealed that dealer transaction prices are higher than unmediated market prices, and this dealer premium increases in the age of the car as a ratio and is hump-shaped in dollar value, also, used cars purchased from dealers are less likely to be resold. In a model.

From the foregoing discourse, the study hypothesized thus:

- H01:** Online intermediation has no significant relationship with the reliability of oil and gas exploration and producing companies in the South-South region of Nigeria.
- H02:** Online intermediation has no significant relationship with the flexibility of oil and gas exploration and producing companies in the South-South region of Nigeria.
- H03:** Online intermediation has no significant relationship with the product quality of oil exploration and producing companies in the South-South region of Nigeria.

## METHODOLOGY

The study adopted a cross-sectional survey research design. The population of this study comprises all the oil and gas companies that operate in the South-South region of Nigeria. From the Corporate Affairs (CAC) Office in Port Harcourt, Nigeria, are 131 companies involved in oil and gas exploration and production in the South-South region of Nigeria. Because the population of the study is small, the researcher handled the entire population for the study. The census method was then used thus used. Concerning the respondents, two senior managers in the operations and finance of each of the companies selected were considered for this study. Therefore, the total number of respondents were 262 respondents from the 131 companies involved in oil and gas exploration and production in the South-South region of Nigeria. Primary data was collected using a 5-point Likert scaled questionnaire. The hypotheses were tested using Spearman's Rank Order Correlation Coefficient with and Statistical Package for Social Sciences version 23.0.

## DATA ANALYSIS AND RESULTS

Table 1 shows the result of the correlation matrix obtained for online intermediation and measures of the firm's competitiveness. Also displayed in the table is the statistical test of significance (p-value), which makes us able to answer our research question and generalize our findings to the study population

**Correlations for Online Intermediation and Measures of Firm Competitiveness**

		Online Intermediation	Reliability	Flexibility	Product Quality
Online Intermediation	Correlation Coefficient	1.000	.638**	.866**	.779**
	Sig. (2-tailed)	.	.000	.000	.000
	N	240	240	240	240
	Correlation Coefficient	.638**	1.000	.740**	.590**

Spearman's rho	Reliability	Sig. (2-tailed)	.000	.	.000	.000
		N	240	240	240	240
		Correlation Coefficient	.866**	.740**	1.000	.733**
	Flexibility	Sig. (2-tailed)	.000	.000	.	.000
		N	240	240	240	240
		Correlation Coefficient	.779**	.590**	.733**	1.000
	Product Quality	Sig. (2-tailed)	.000	.000	.000	.
		N	240	240	240	240

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output

**Ho1:** Online intermediation has no significant relationship with the reliability of oil and gas exploration and producing companies in the South-South region of Nigeria.

Table 1 shows a Spearman Rank Order Correlation Coefficient (rho) of 0.638 on the relationship between online intermediation and reliability. This value implies that a strong relationship exists between the variables. The direction of the relationship indicates that the correlation is positive; implying that an increase in reliability was a result of the adoption of online intermediation. Therefore, there is a strong positive correlation between online intermediation and the reliability of oil and gas companies in Nigeria. Similarly displayed is the statistical test of significance (p-value) which makes possible the generalization of our findings to the study population. From the result obtained, the sig- calculated is less than the significant level ( $p = 0.000 < 0.05$ ). Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between online intermediation and reliability of oil and gas companies in south-south, Nigeria.

**Ho2:** Online intermediation has no significant relationship with the flexibility of oil and gas exploration and producing companies in the South-South region of Nigeria.

Similarly, Table 1 shows a Spearman Rank Order Correlation Coefficient (rho) of .866 on the relationship between online intermediation and flexibility. This value implies that a very strong relationship exists between the variables. The direction of the relationship indicates that the correlation is positive; implying that an increase in flexibility was a result of the adoption of online intermediation. Therefore, there is a very strong positive correlation between online intermediation and the flexibility of oil and gas companies in Nigeria. Also displayed is the statistical test of significance (p-value) which makes possible the generalization of our findings to the study population. From the result obtained, the sig- calculated is less than the significant level ( $p = 0.000 < 0.05$ ). Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between online intermediation and flexibility of oil and gas companies in south-south, Nigeria

**Ho3:** Online intermediation has no significant relationship with the product quality of oil exploration and producing companies in the South-South region of Nigeria.

Furthermore, Table 1 shows a Spearman Rank Order Correlation Coefficient (rho) of .779 on the relationship between online intermediation and product quality. This value implies that a strong relationship exists between the variables. The direction of the relationship indicates that the correlation is positive; implying that an increase in product quality was as a result of the

adoption of online intermediation. Therefore, there is a very strong positive correlation between online intermediation and product quality of oil and gas companies in Nigeria. Also displayed is the statistical test of significance (p-value) which makes possible the generalization of our findings to the study population. From the result obtained, the sig- calculated is less than the significant level ( $p = 0.000 < 0.05$ ). Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between online intermediation and product quality of oil and gas companies in south-south, Nigeria.

## DISCUSSION OF FINDINGS

The findings showed that there is a strong positive significant relationship between online intermediation and firms' competitiveness of oil and gas exploration and producing companies in the South-South region of Nigeria. This finding corroborates with Nasidi, Hassan, Ahmad, Garba, and Gamji (2022) who studied the effects of advertisement, online risks, perceived usefulness, and reliability on online shopping behavior among online shoppers in the Nigerian context and observed that advertising and perceived usefulness have a positive and significant effect on online shopping behavior. Also, there is a positive relationship between reliability and online shopping behavior. Dalmer (2017) in his research, questioned the reliability assessment of the online health information retrieved from social media to ascertain whether the health information received from social media should be evaluated differently from other online health information. His study revealed that there is an increasing role in social media's health information consumption and, studies are dominated by investigations of traditional non-social media sites.

The finding also resonates with Ling, Fern, Boon, and Huat (2016) in their research sought to understand the reliability of online customer satisfaction of Internet banking in Malacca and found that web design, content, convenience, and speed are the three major that influence the usage of the Internet banking system. Similarly, Onețiu, Borșan, and Chebeleu Bacter, (2021) researched the use of online platforms in the intermediation of tourism activity and found that online platforms are increasingly in use by tourists be it in hotel reservations, air transport, and other services that tourism related. The advantage that online platforms have over the traditional way is that it has a 24-hour service, flexibility to change booking details, confirmations sent almost immediately, time saved, and the users of these platforms are unlimited also. Busch (2019) studied self-regulation and the regulatory intermediations in the platforms economy and the role of the European Union in the transnational legal ordering in Europe. Furthermore, Richter, Kraus, Brem, Durst, and Giselsbrecht (2017) researched to ascertain the role of business models in digital entrepreneurship in a sharing economy in a Dutch context. The result of the research showed that there is a clear difference between the relevance of economic and social orientation and that the increasingly digitalized environment has caused a change in the living situation characterized by urbanity, openness to new solutions, changed working situations, and new mindsets.

## CONCLUSION AND RECOMMENDATION

The study concludes that online intermediation positively enhances firms' competitiveness in oil and gas exploration and producing companies in the South-South region. This implies that the use of online intermediation suggests that oil and gas companies in the South-South region are likely to benefit from increased market access. Online platforms can connect these

companies with a broader network of potential clients, partners, and suppliers, contributing to expanded business opportunities.

Based on the foregoing, the study recommends management of oil and gas exploration and producing companies should invest in robust online platforms and digital technologies that facilitate efficient intermediation. This includes exploring or developing online platforms that connect oil and gas companies with relevant services, suppliers, and partners to streamline operations.

## REFERENCES

- AlZayani, F., Mohammed, A., & Shoaib, H. M. (2023). The impact of smart technologies on SMEs' sustainability: the mediation effect of sustainability strategy. *Competitiveness Review: An International Business Journal*.
- Barney, J. B. (1991). The resource-based view of strategy: Origins, implications, and prospects. *Journal of Management*, 17(1), 97-211.
- Basu, S. (2011). Evolving nature of firm-level competitiveness—a technical note. *Indore Management Journal*, 3(3), 52-57.
- Bashir, M. (2023). The influence of strategic flexibility on SME performance: is business model innovation the missing link? *International Journal of Innovation Science*.
- Biglaiser, G., Li, F., Murry, C., & Zhou, Y. (2020). Intermediaries and product quality in used car markets. *The RAND Journal of Economics*, 51(3), 905-933.
- Bryce, J. (2013). The technological mediation of leisure in contemporary society. *Contemporary Perspectives in Leisure*, 123-138.
- Büyükközkán, G., & Göçer, F. (2018). Digital Supply Chain: Literature review and a proposed framework for future research. *Computers in industry*, 97, 157-177.
- Carrel, A., & Ebner, N. (2019). Mind the Gap: Bringing Technology to the Mediation Table. *J. Disp. Resol.*, 1.
- Chikán, A., Czakó, E., Kiss-Dobronyi, B., & Losonci, D. (2022). Firm competitiveness: A general model and a manufacturing application. *International Journal of Production Economics*, 243, 108316.
- Crespo del Granado, P. A., Rajasekharan, J., Pandiyan, S. V., Tomasgard, A., Kara, G., Farahmand, H., & Jaehnert, S. (2023). Flexibility Characterization, Aggregation, and Market Design Trends with a High Share of Renewables: a Review.
- Dalmer, N. K. (2017). Questioning reliability assessments of health information on social media. *Journal of the Medical Library Association: JMLA*, 105(1), 61.
- De Giovanni, P., & Zaccour, G. (2023). A survey of dynamic models of product quality. *European Journal of Operational Research*, 307(3), 991-1007.

- Dubey, P., & Sahu, K. K. (2022). Mediation analysis of students' perceived benefits in predicting their satisfaction with technology-enhanced learning. *Journal of Research in Innovative Teaching & Learning*, 16(1), 82-99.
- Dvouletý, O., & Blažková, I. (2021). Determinants of competitiveness of the Czech SMEs: findings from the global competitiveness project. *Competitiveness Review: An International Business Journal*, 31(3), 361-378.
- Fagerberg, J., & Srholec, M. (2017). Capabilities, economic development, sustainability. *Cambridge Journal of Economics*, 41(3), 905-926.
- Falciola, J., Jansen, M., & Rollo, V. (2020). Defining firm competitiveness: A multidimensional framework. *World Development*, 129, 104857.
- Gerhart, B., & Feng, J. (2021). The resource-based view of the firm, human resources, and human capital: Progress and prospects. *Journal of Management*, 47(7), 1796-1819.
- Huggins, R., & Thompson, P. (2017). Introducing regional competitiveness and development: contemporary theories and perspectives. *Handbook of Regions and Competitiveness: Contemporary Theories and Perspectives on Economic Development*, 1-31.
- Ismail, I. J. (2023). Speaking to the hearts of the customers! The mediating effect of customer loyalty on customer orientation, technology orientation, and business performance. *Technological Sustainability*, 2(1), 44-66.
- Jambor, A., Babu, S., Jambor, A., & Babu, S. (2016). The competitiveness of global agriculture (pp. 99-129). Springer International Publishing.
- Kaine, S., & Josserand, E. (2019). The organization and experience of work in the gig economy. *Journal of Industrial Relations*, 61(4), 479-501.
- Khanra, S., Kaur, P., Joseph, R. P., Malik, A., & Dhir, A. (2022). A resource-based view of green innovation as a strategic firm resource: Present status and future directions. *Business Strategy and the Environment*, 31(4), 1395-1413.
- Kiel, D., Arnold, C., & Voigt, K. I. (2017). The Influence of the Industrial Internet of Things on business models of established manufacturing companies—A business level perspective. *Technovation*, 68(1), 4-19.
- Li, K., Wang, X., & Du, T. C. (2022). Entrepreneurial orientation, online credibility, and online performance: Evidence from SMEs in a B2B electronic market in China. *Journal of Small Business Management*, 60(1), 93-118.
- Ling, G. M., Fern, Y. S., Boon, L. K., & Huat, T. S. (2016). Understanding customer satisfaction of Internet banking: A case study in Malacca. *Procedia Economics and Finance*, 37, 80-85.
- Lopez-Vega, H., Tell, F., & Vanhaverbeke, W. (2016). Where and how to search? Search paths in open innovation. *Research Policy*, 45(1), 125-136.

- Mangold, F., Stier, S., Breuer, J., & Scharkow, M. (2022). The overstated generational gap in online news use? A consolidated infrastructural perspective. *New Media & Society*, 24(10), 2207-2226.
- Nasidi, Q. Y., Hassan, I., Ahmad, M. F., Garba, M., & Gamji, M. B. (2022). Effects of Advertising, Online Risk, Perceived Usefulness, and Reliability on Online Shopping Behavior. *International Journal of Marketing, Communication and New Media*, 10(18).
- Onețiu, A., Borșan, S., Popa, C., Chebeleu, I. C., & Bacter, R. V. (2021). Use of online platforms in the intermediation of tourism activity. *Agricultural Management/Lucrari Stiintifice Seria I, Management Agricol*, 23(3).
- Owuso, S. M. (2023). Moderating Effect of Firm Size on The Relationship Between Supply Chain Collaboration and Firm Competitiveness in Paint Distribution Companies in Rivers State.
- Rashid, C. A. (2023). Social capital accounting and financial performance improvement: the role of financial information reliability as a mediator. *Journal of Islamic Accounting and Business Research*.
- Richter, C., Kraus, S., Brem, A., Durst, S., & Giselsbrecht, C. (2017). Digital entrepreneurship: Innovative business models for the sharing economy. *Creativity and innovation management*, 26(3), 300-310.
- Sharkey, A., Kovacs, B., & Hsu, G. (2023). Expert critics, rankings, and review aggregators: The changing nature of intermediation and the rise of markets with multiple intermediaries. *Academy of Management Annals*, 17(1), 1-36.
- Shahid Iqbal, M., Ul Hassan, M., & Habibah, U. (2018). Impact of self-service technology (SST) service quality on customer loyalty and behavioral intention: The mediating role of customer satisfaction. *Cogent Business & Management*, 5(1), 1.
- Sahoo, P. K., Le, V., & Rath, B. N. (2022). The determinants of firm competitiveness: Evidence from the Indian manufacturing sector. *International Journal of the Economics of Business*, 29(2), 139-159.
- Sun, L., Tang, Y., & Zuo, W. (2020). Coronavirus pushes education online. *Nature Materials*, 19(6), 687-687.
- Suroso, A. I., Fahmi, I., Tandra, H., & Haryono, A. (2023). Assessing the Effect of Internet Indicators on Agri-Food Export Competitiveness. *Economies*, 11(10), 246.
- Voordijk, H., & Dorrestijn, S. (2021). Smart city technologies and figures of technical mediation. *Urban research & practice*, 14(1), 1-26.
- Xiao, Y. X., & Zhang, R. Q. (2023). Supply chain network equilibrium considering coordination between after-sale service and product quality. *Computers & Industrial Engineering*, 175, 108848