

# Remote Work Practice And Entrepreneurial Competitive Advantage Of Medium Enterprises In Rivers State

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**Abstract:** *The study examined the relationship between remote work practice and entrepreneurial competitive advantage of medium enterprises in Rivers State. The notion of remote work has become the landmark of modern organizational practice and its role in the entrepreneurship competitive advantage should be thoroughly considered. The study adopted a cross sectional research design. The population of the study was 2,100 respondents of which a sample size of 325 managers and employees was determined using Krejcie and Morgan sampling technique. . data were collected using questionnaire and the collected data were analyzed using Pearson correlation analysis. The finding showed that flexible work arrangements correlate with market responsiveness and operational efficiency: virtual collaboration also correlates with market responsiveness and operational efficiency. Finally, telecommuting correlate with market responsiveness and operational efficiency. The study concluded that flexible work practices correlate with entrepreneurial competitive advantage of Medium enterprises in Rivers State. Therefore, the study recommended that Medium Enterprises in Rivers State should adopt Remote work practices to gain competitive advantage in the business environment.*

**Keywords:** Remote Work Practices, Flexible Work Arrangements, Telecommuting, Entrepreneurial Competitive Advantage

## Introduction

In the modern literature that revolves around medium company, in the context of medium enterprises, one construct stands out and that is the entrepreneurial competitive advantage (ECA). When we use that term, we refer to the nature of the firm in overcoming its competitors based on its unique competence including agility innovation, resourcefulness, and customer responsiveness (Teece et al., 1997). Remote work, in the digital environment, is a strategic lever that can strengthen these competencies and, at the same time, contribute to flexibility, reductions in operating costs, and increase talent retention (Spurk & Straub, 2020). In Nigeria, the Central Bank of Nigeria(CBN) and the Small and Medium Enterprises Development Agency of Nigeria(SMEDAN) defines that medium enterprises have 50-199 employees, annual turnovers of 100 million naira 1 billion naira and asset base of 50 million naira-500 million naira (excluding land and buildings).

The remote working is a constellation of practices that include virtual collaboration, digital management of tasks, and flexible work conditions that has gathered momentum in reaction to technological innovation and to COVID-19 disruption in the world (Kniffin et al., 2021). According to empirical evidence, properly conducted remote operations are likely to improve ECA by creating the capacity to reduce the overhead spending, widening the talent pool, increasing organisational agility, and driving innovation (Njoku & Uzochukwu, 2021; Savic, 2020). On the same note, remote plans are also linked to increased employee satisfaction, performance, and reduced burnout which contribute to the long-term performance and innovation (Bloom et al., 2015). The time-managing and accountability efficiencies that the remote systems trigger also strengthen competitive positioning (Wang et al., 2021).

Giving employees independence, providing creative problem solving flexibility, and introducing them to different networks makes remote working an innovative process (Tortorella et al., 2021). This approach is likely to be associated with the prospects of developing niche-market solutions, more responsive to customers, and building closer relationships because their feedback loops should be shorter (Brynjolfsson et al., 2020). The potential of such capabilities is of great importance to product and service differentiation, building brand loyalty, and maintaining relevance on the market benefiting the competitive environment in Rivers State. Flexible working practices also allow finding specialised talent without geographical limitations and, therefore, increasing organisational capabilities and strategic capability (Gibbs et al., 2021; Onodugo et al., 2020).

Even though the academic debate has heated up the discussion about remote work and its implications on organisational practice, empirical studies that establish a relationship between such practices to ECA in medium-sized firms in Rivers State are few. Past literature focusing on analyzing competitive advantage is limited, and often studies focus on the performance metrics or team behaviors, as is the case of Onuegbu et al. (2022), Emmanuel (2024), and Amachree and Nwinyokpugi (2023). Moreover, most of the researches conducted are on huge companies in the oil, gas, or telecommunications industry; hence, do not provide straightforward findings that medium-sized firms with limited capabilities can implement. Although innovation and survival are mentioned in some exceptions, e.g., Ovharhe et al. (2021), on micro-enterprises with regard to COVID-19, and Georgewill (2024) concerning entrepreneurial innovativeness and SMEs, the direct relationship between remote working and ECA in medium enterprises remains understudied. The study in question seeks to address this end by asking the question of how flexible work arrangements, virtual collaboration, and telecommuting contribute to innovation and market responsiveness and operational efficiency of medium enterprises in Rivers State.

### Statement of the Problem

Over the past years, the medium enterprises in Rivers State of Nigeria have found it really difficult to maintain entrepreneurial competitive advantage in a more dynamic and digitally influenced economy. One of those is the shift towards remote-work as a strategic response, which has become more pronounced through the occurrence of the COVID-19 pandemic, and also through the process of digital transformation. Although evidence exists that remote work has been known to support flexibility, decreased costs, and wider availability of talent, it is an unexplored phenomenon regarding long-term competitive advantage in the Nigerian setting. A consideration of the medium enterprises in Rivers State reveals a high number that are struggling with the challenges of infrastructure related constraints, the limitations characterized by the labor-market of potential workers, and the talent-retention which also limits the innovating ability of the enterprises concerned, limits their efficiency and inability to find clear paths to regeneration of their competitiveness in the faster world. The empirical research in developed economies is ambivalent, with employees having more flexibility and cost-cutting on the one hand and collaboration, team cohesion, and the organizational control all being reduced on the other (e.g., Tortorella et al., 2021; Wang et al., 2021). These findings identify the need to understand the relationship between the strategies of remote-work approaches that can be strategic in achieving entrepreneurial results in the context of developing situations.

Another issue is that there lacks any organized guidelines to exploit working distant as a competitive force. Whereas remote-work structures lead to autonomy, cost-saving, and faster responsiveness to the market (e.g., Brynjolfsson et al., 2020; Teece et al., 1997), they involve a lack of digital infrastructure, low technological absorption, and management of virtual teams in many of the firms across Rivers State (Okereafor et al., 2022). Lack of reliable communication tools, digital cultures that encompass all employees, and effective virtual leadership by remote systems destroys talent retention and the potential of innovation even further (Carillo et al., 2021). Thus, this research fills a gap in knowledge since it analyses the impacts of remote-work including flexible work, virtual cooperation, and telecommuting practices on the entrepreneurial competitive advantage taking into consideration the market responsiveness and operational efficiency in medium enterprises in the Rivers State.

### Aim and Objectives of the Study

The aim of the study was to examine the relationship between remote work practices and employee commitment of Medium enterprises in Rivers State.

The objectives of the study were to:

- i. Examine the relationship between flexible work arrangements and market responsiveness of Medium enterprises in Rivers State
- ii. Examine the relationship between flexible work arrangements and operational efficiency of Medium enterprises in Rivers State
- iii. Investigate the relationship between virtual collaboration and market responsiveness of Medium enterprises in Rivers State
- iv. Evaluate the relationship between virtual collaboration and operational efficiency of Medium enterprises in Rivers State
- v. Examine the relationship between telecommuting and market responsiveness of Medium enterprises in Rivers State
- vi. Assess the relationship between telecommuting and operational efficiency of Medium enterprises in Rivers State

### Research Questions

These research questions guided the study

1. What is the relationship between flexible work arrangements and market responsiveness of Medium enterprises in Rivers State
2. How does flexible work arrangements relate to operational efficiency of Medium enterprises in Rivers State
3. What is the relationship between virtual collaboration and market responsiveness of Medium enterprises in Rivers State
4. How does virtual collaboration relate to operational efficiency of Medium enterprises in Rivers State
5. What is the relationship between telecommuting and market responsiveness of Medium enterprises in Rivers State
6. How does telecommuting relate to operational efficiency of Medium enterprises in Rivers State

### Hypotheses

The following hypotheses were used to guide the study.

**H<sub>01</sub>:** There is no significant relationship between flexible work arrangements and market responsiveness of Medium enterprises in Rivers State

**H<sub>02</sub>:** There is no significant relationship between flexible work arrangements and operational efficiency of Medium enterprises in Rivers State

**H<sub>03</sub>:** There is no significant relationship between virtual collaboration and market responsiveness of Medium enterprises in Rivers State

**Ho<sub>4</sub>:** There is no significant relationship between virtual collaboration and operational efficiency of Medium enterprises in Rivers State

**Ho<sub>5</sub>:** There is no significant relationship between telecommuting and market responsiveness of Medium enterprises in Rivers State

**Ho<sub>6</sub>:** There is no significant relationship between telecommuting and operational efficiency of Medium enterprises in Rivers State

### Significance of the Study

The current study has immense significance to medium companies in the Rivers State, Nigeria, because it provides empirically based results on the issue regarding how remote work experience, namely, flexible work schedule, teleworking, and virtual teamwork, affect employee commitment. The rapid changes in the digital transformation phase, the rising cost of operation, and the necessity of adaptability in the workplace means business leaders will be able to develop intelligent strategic interventions by understanding the dynamics of remote working. This kind of knowledge helps to promote employee engagement as well as minimize turnover and improvement of organizational performance. The results can help the enterprise owners and managers build more work divisions where the productivity is maximized but personal and professional needs of the employees are fulfilled, contributing to a more secure and competitive business climate in general. Amongst scholars and researchers, the study provides a rich field to the current state of literature on organizational behavior, human resource management, and digital transformation of a workplace in the developing economies.

## LITERATURE REVIEW

### Conceptual Framework

Telecommuting is also a critical input to organization performance among middle sized firms domiciled within Rivers State. Through promoting empirically based understanding into flexible work arrangements, teleworking, and remote collaboration, the current study can be used to understand how these modes of operation can affect employee involvement.

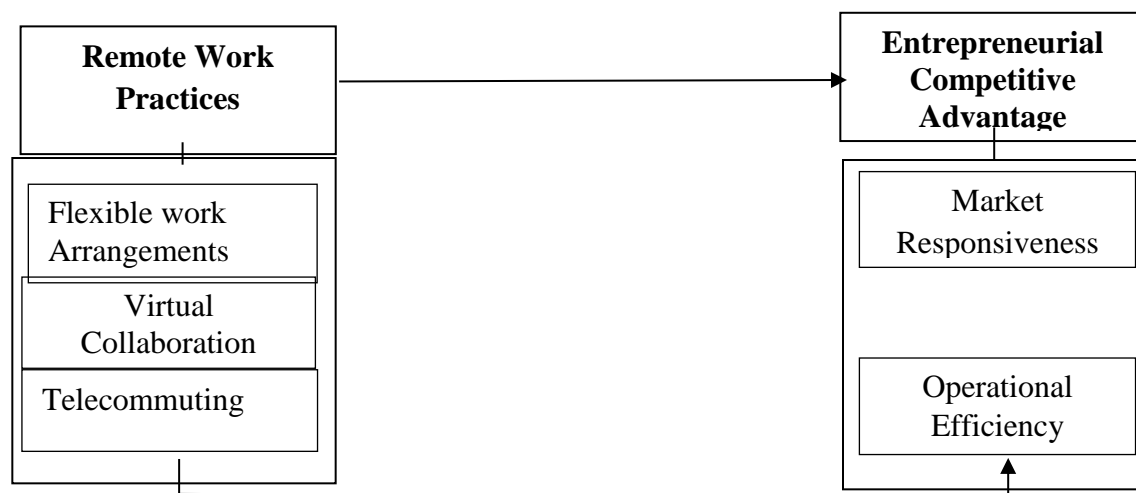


Figure 1: Conceptual Model of Remote Work Practices and Entrepreneurial Competitive Advantage.

Source: Researcher's Conceptualization (2025), based on the dimensions of Remote Work Practices obtained from ===== and the measures of Entrepreneurial Competitive Advantage. Obtained from =====

### Concept Review

#### Remote Work Practices

The remote work is a collection of organisation practices that allow employees to perform their employment duties outside of traditional office places with the aid of some communication technologies. Initially perceived as the model of part-time and home-based work, remote work advanced to full-time remote jobs and this trend is being further boosted by the COVID-19 pandemic. It has been noted that the main factor that has contributed to the pervasiveness of remote work arrangements is the growing demand in the society, with regard to work life balance and flexibility of operations. According to the empirical research work, flexible organisational structure helps to reduce commuting stress and increases job satisfaction to a very great extent (Gajendran & Harrison,

2007). Cascio (2000) continued by stating that the ability to work effectively remotely depends on implementation and application of proper technological infrastructures, and Allen et al. (2015) primarily refer to the essentiality of organisations to acquire secure tools and full-service technical support as a condition of maintaining efficiency. Golden and Gajendran (2019) argued that in remote settings engagement by employees is based on creating a feeling of trust, a clear sense of expectations and managing practices that focus on the result. The historical background of the distant work lies within the pioneering works of Jack Nilles in the 1970s, as his studies reflected the boost in productivity and the positive changes in the environmental behaviour when a worker stays and works at home.

### **Flexible Work Arrangements**

Flexible work arrangements (FWAs) refer to organisation forms where employees have control of when, where, and how certain tasks will be executed and therefore their professional roles and personal needs are compatible. According to Kossek and Michel (2011), FWAs refer to flexibility in terms of scheduling, job location and job performance. Kossek et al. (2006) asserted that these arrangements are critical in reducing work life conflict that enables the provision of work alternatives which include telecommuting and short working weeks. According to Allen et al. (2013), flexible scheduling is a contributing factor towards satisfactory work life balance, job satisfaction, and less likelihood of quitting the organisation. On the same note, Shockley and Allen (2012) claimed that FWAs will enable the employees to fulfill their personal commitments without jeopardizing their job performance. The ability to be flexible is particularly important in the current fast-moving and stressful due to work demands. FWAs also allow employees greater control and therefore improves morale and fosters psychological well-being. Additionally, they promote organisational loyalty because, the employee feels his needs are being considered. Using FWAs can be a strong strategy to both increase productivity and satisfaction when they are carried out in the right way. Nevertheless, in order to be successful, they need to rely on the supportive leadership and properly designed implementation process.

### **Virtual Collaboration**

Virtual collaboration refers to the implementation of an online tool or device that enables geographically dispersed staff to pursue common goals, support interaction and synchronization through video conferencing, synchronous messaging, shared document applications, and so forth (Henttonen & Blomqvist, 2005). Such collaboration depends not only on technological infrastructure, but it requires clearly defined communication procedures and an effective, mutual-working culture (Nardi & Whittaker, 2002). Virtual collaboration has the capacity to drive innovation by encouraging different and diverse ideas to be brought into the table, and sharing knowledge when executed in a mature way (Oleary and Cummings, 2007). The positive side is that it allows them to get access to vast talent pools and has a greater degree of flexibility of operations (Powell et al., 2004). However, a number of issues have not been resolved yet, such as problems with building trust and decreased cohesion due to the lack of spontaneity in the communication (Cramton, 2001). Whether you are successful in virtual collaboration depends, thus on reliable technology (Cascio, 2000), convenient tools (Olson & Olson, 2000) and adaptive leadership that focuses on results, accurate expectations and morale sustenance (Malhotra et al., 2007).

### **Telecommuting**

Telecommuting is a work arrangement in which individuals use technology and the internet to connect while doing their job obligations from a place outside of the conventional office, often from home. One important aspect of remote work practices is telecommuting, which allows workers to carry out their responsibilities from a place other than the conventional office, usually from home or another offsite location. Since workers may now keep in touch regardless of their actual location thanks to developments in communication technology, this arrangement has been more and more prevalent over the past couple decades (Allen et al., 2015). Because of its flexibility, telecommuting enables employees to better manage their schedules and cut down on commute time, which may boost productivity and job satisfaction (Gajendran & Harrison, 2007).

Businesses that encourage telecommuting often discover that it draws in talent from a wider geographic region, including applicants who would not have otherwise been accessible because of geographic limitations (Bailey & Kurland, 2002). Employees' improved work-life balance is one of the main advantages of telecommuting. When workers don't have to travel every day, they often have more time for self-care, family obligations, or personal pursuits, all of which improve work-life balance (Kossek et al., 2006). This equilibrium is crucial because studies show that workers who are able to properly manage their personal and professional commitments are less likely to suffer from stress, burnout, and job discontent (Shockley & Allen, 2012). Thus, telecommuting may be a useful tool for businesses looking to improve employee well-being, which often results in increased levels of commitment and engagement.

### **Entrepreneurial Competitive Advantage**

Entrepreneurial competitive advantages refer to the unique strategic positioning of an organisation which helps it to do better than

the other firms, generally by the effective use of resources, the appropriate designation of the opportunities available in the market and the procedure of instituting innovation. Entrepreneurs achieve and sustain such an advantage by identifying underserved needs in the market and providing solutions that create value faster than the market rivals (Ireland et al., 2003). The ability to recognize and take advantage of opportunities is core seeking in the entrepreneurial process and is one of the main antecedents of the long-term competitiveness (Zahra & Covin, 1995). High entrepreneurship orientation, which is defined by innovativeness, proactiveness, risk-taking and the like is a strong factor of creating and maintaining a competitive advantage (Lumpkin & Dess, 1996). Knowledge management, high level customer relation abilities, and strategic flexibility are some of the capabilities that may also lead to competitive advantage (Barney, 1991). The competence that attributes success to high dynamism in the market is that the entrepreneur will always adapt and innovate to establish a position and stay ahead of other competitors (Teece et al., 1997). It can thus be concluded that the entrepreneurial competitive advantage is the conscious operation of inserting internal capabilities and external opportunities thus creating a configuration that can be considered valuable, rare and inimitable at the same time.

### **Market Responsiveness**

Market responsiveness refers to the ability with which an organization is keen to identify, interpret and respond to the changing customer needs, customer likes and dislikes and external market dynamics. This ability is one of the basic elements of market orientation practice that enables companies to predict the market and adjust the strategy in time (Kohli & Jaworski, 1990). Those organizations that are very responsive to the market can provide timely solutions, improve products and remain competitive in very dynamic markets (Narver & Slater, 1990). Such firms influence decision-making through monitoring of constant feedbacks of customers, behaviour of competitors and the changes in technologies (Day, 1994). The derived agility gives them an advantage in a certain strategic sense particularly in those areas where the customers taste and tastes keep on changing (Jaworski & Kohli, 1993). Business with strong market responsiveness are prone to incorporating cross-functioning activity in monitoring and sharing market intelligence (Slater & Narver, 1995). In this way, they create customer intimacy, formulating offerings according to the existing market demands, and increase satisfaction and loyalty (Deshpand et al., 1993).

### **Operational Efficiency**

Operational efficiency is the ability of an organization to render goods or services using the minimum cost level and, at the same time, protect the quality and productivity. This is aimed at maximising resources, processes and technologies to cut off wastage and operating expenses (Porter, 1985). Additional operation efficiencies enhance the business competitiveness through the enhancement of profit margin, decreased delivery time and the intensification of customer satisfaction (Venkatraman & Ramanujam, 1986). It is known that lean management, automation of processes, integration of the supply-chain, and increased productivity of the workforce are defined as some of the key drivers of efficiency in operations (Womack & Jones, 1996). Businesses which achieve operational effectiveness can re-invest their savings on innovation, selling and other strategic programs (Hammer & Champy, 1993). Moreover, operations effectiveness creates scalability since it introduces standardised processes and gets rid of wasteful actions (Chopra & Meindl, 2007). Performance measurement in terms of throughput, cycle time, and defect rate allow the firms to keep track of their activity and find the axes of performance enhancement (Kaplan & Norton, 1996). The supporting factors are the technological tools such as ERP systems, real-time data analysis, process-optimisation platforms which are the key point to increase the efficiency of the operation (Davenport, 1998). Operation efficiency is a common differentiating factor in the intensely competitive industry to take the cost-leadership course of action (Barney, 1991). As a result, operational efficiency acts both as a strategic and a long-term organisational success driver.

### **Theoretical Review**

#### **Social Exchange Theory**

Social Exchange Theory, explained by Blau (1964), describes the social behaviour as investment whereby people strive to have maximum returns and minimal losses of their relationship. The model holds that in the workplace, the employees feel obliged to reciprocate the trust, fair treatment and support shown towards them by the organisation through commitment, loyalty and an increased level of performance. Since the theory emphasizes reciprocity that states that what an employer does, the employees do likewise, then positive employer behaviors are likely to receive corresponding reactions by the employees. These factors are particularly relevant in the remote working setup since employees being given flexibility and autonomy tend to demonstrate a comparative level of increased dedication and engagement.

**The importance of social Exchange Theory is that it focuses on reciprocity and assumes that people start relationships with the aim to gain something (Ahmad et al., 2022/2023). The results of the exchanges must be rewarding to employees who are more willing to engage in exchanges like fairness or organizational support (Zhang et al., 2023). The relationships formed through these interactions become strong over time, based on trust, shared accountability and shared goals, and in the process strengthen workplace unity (Chen et al., 2024). Good experiences such as remote or flexible work strengthen the perceptions of fairness and trust among the employees, which then improve commitment and performance (Biron et al., 2024). Therefore, SET argues that the key to a sustainable organizational success is the ability to create the setting where**



employees will feel appreciated and encouraged to give back to the organization through loyalty and performance (Adu-Gyamfi et al., 2023).

Overall, SET emphasizes that the successful performance of organizations in the long run is conditional on the creation of the environment, in which the employees feel pretty appreciated, trusted, and motivated to give back. In the proposed study, Remote Work Practice and Entrepreneurial Competitive Advantage of Medium Enterprises in Rivers State, the Social Exchange Theory (Blau, 1964) happens to be of particular relevance because it explains the interpersonal relational aspect of employer and employee. Through the provision of employment opportunities characterized by flexible work patterns, teleworking and computerized cooperation systems, medium businesses can openly demonstrate their faith in, as well as commitment to, the welfare and autonomy of their workers. With this, the employees respond with a greater commitment, increased innovation, and a discretionary effort that are the core competencies of competition as an entrepreneur (Cropanzano & Mitchell, 2005). The two-way nature of this interaction cultivates a work environment that enhances its efficiency in operations and responsiveness in the market hence strengthening the strategic positioning of the firm in a volatile business world. Finally, the Social Exchange Theory provides an irresistible endorsement of the hypothesis that the remote work practices can be formulated in such a manner as to provide sustainable competitive advantage by means of accelerated employee engagement and their respective performance level.

### Empirical Review

In the study conducted by Onuegbu et al. (2022), the researchers assumed the cross-sectional survey research design in the measurement of effects of remote work practices on employee performance and outcome in oil and gas companies in Rivers State. Though actual sample size was not indicated, the study involved staff of various organisations and they used designed questionnaires. The statistical analysis was based on statistics in line with Diffusion of Innovation Theory. The results show that variables like job autonomy, managerial support and monitoring at a distance had positive impacts on the task performance and adaptive performance where the resultant efficiencies directly translate into operational effectiveness and the eventual entrepreneurial competitive advantage of the companies. Having analysed the data, the researchers thus stated that when properly designed, remote employment fosters greater engagement and productivity and their conclusion was that organisations should resort to flexible work opportunities, develop better virtual communication channels and invest in infrastructure that makes employees independent and able to communicate freely.

This recent empirical study is a cross-sectional quantitative survey that was conducted by Emmanuel (2024) and the sample of 346 employees was selected via the logic of simple random sampling on the population of 3,524 employees who worked in a variety of oil and gas enterprises in Rivers State. The subjects responded to structured questionnaires to determine their digital outfitness, the cyber- workplace, and how the team works. Spearman rank correlation formed part of analytical processes. The results of the study provided that there was a strong positive assessment between the remote working arrangement and the success of the cross cultural team dynamics. Enhanced cohesion, communication, and productivity were realized in the virtual teams and it was highlighted that remote work enhances flexibility and adaptability in organizations, two determinants of survival and competitiveness of entrepreneurship. The research thus came up with the conclusion that remote work settings enable increased collaboration and output of the teams across cultural boundaries. Digital training programs, use of virtual collaborative tools, and a wide-inclusive work policy were some of the recommendations that should be followed in order to trigger team synergy and competitive responsiveness in medium-sized enterprises.

At the same time, a descriptive survey research design was adopted by Sokari (2024) to examine the impact that remote work has on organizational effectiveness among medium-sized business establishments in the telecommunication industry in Port Harcourt. The established sample was 86 based on the use of the Krejcie and Morgan sample size table given the 117 managers used in the study of the six telecommunications companies. The collection of data was conducted with the help of a more structured questionnaire, validity, and reliability was achieved with the help of expert reviews and Cronbach alpha respectively. The descriptive statistics and the correlation through Spearman were analytical methods used. As the results indicated, remote working practices have a positive strong relationship to the overall organizational effectiveness and this implies that remote working contributes to decision-making, innovation, and execution of operations. As the conclusion noted, remote working allows managers to operate efficiently and have high abilities to respond to market pressures and make decisions in time-an aspect of particular importance to the entrepreneurship. Therefore, the study proposed remote work strategies, flexible job rotations systems, and organized scheduling as programs to help improve efficiency and well-being of the employees working in medium-sized companies.

Amachree and Nwinyokpugi (2023) conducted a cross-sectional survey of employees in seven registered telecom companies in Rivers State to determine the relationship between remote work and organizational sustainability in their work. Using respondents of 70 people, the researchers sent validated four-point Likert-scale survey and calculated reliability by measuring Cronbach alpha. The analyzed data were then grouped into inferential statistics as a means to test the null hypotheses. The findings showed that there was statistically significant positive correlation between remote work practice and organizational sustainability indicators i.e. profitability, innovation, and adaptability all essential to competitive advantage. This compelled the authors to come up with the conclusion that the companies with remote work were more resilient and in strategic flexibility in highly dynamic markets. They

suggested that the appropriate way of making medium enterprises competitive and able to survive under modern circumstances is to implement virtual office strategies, strengthen ICT infrastructure, as well as formalize remote work policies.

The current literature review shows the growing consideration of remote work-flexible working, virtual teamwork, and teleworking- as a means of enhancing staff loyalty, competitiveness in the market, and efficiency in operations in medium enterprises. Remote working allows employees to balance work and personal life, subsequently, thus being able to boost their levels of satisfaction with the job, their productivity, and their loyalty to the organization. Again, flexible work systems endow autonomy and reduce the work-life conflict, which leads to high working performance and well-being. In its turn, virtual collaboration facilitates teamwork, innovation, and distance sharing of knowledge; the efficiency of such a collaboration, however, largely depends on the organized communication structures and leadership. Telecommuting improves efficiency since commuting stress and associated distractions are avoided and there is no interruption in working hours as long as there are good facilities and a wider system of support. The literature as a whole establishes that with proper implementation, remote work practices can greatly contribute to a sustainable, committed and high performance work, a factor that can make medium enterprises to be competent even in the fast changing world.

### Methodology

This research used a quantitative research design involving a cross-sectional survey design research study to establish the relationship that exists between remote work and entrepreneurial competitive advantage in medium firms in Rivers State Nigeria. This was an appropriate design to capture and analyse data of a mega population at one point in time providing a snapshot of what was being undertaken and perception regarding the same. The sample population entailed the managers, supervisor, team leader and senior personnel working in registered medium-sized companies who participated spread across the sectors (information tech, services, manufacturing, and telecommunications). The Rivers State Ministry of Commerce and Industry (2023) explains that 2,100 such firms make up the total population, and it was decided that 325 respondents would form the size of the sample following the Krejcie and Morgan (1970) sample size determination table. There was a stratified random sampling method that ensured that there were good representation in the sectors as well as departments. A structured, self-administered questionnaire was utilized in collecting primary data using validated scales of previous research studies and it consisted of two parts namely; Section A collected the demographic data whereas Section B evaluated the independent variables (flexible work arrangements, virtual collaboration, and telecommuting) and dependent variables (innovation capability, market responsiveness, and operational efficiency) on a Likert scale of five points. The pretest of the questionnaire was conducted among 30 respondents in like enterprises that were not part of the target sample as a way of making it clear and consistent.

Three scholars who possess knowledge in the field of entrepreneurship and organizational behavior in an attempt to achieve validity and reliability conducted an overall content and face validation of the instrument. A pilot test that was conducted using 55 respondents showed that Cronbach Alpha coefficient lies above 0.82 on all variables, an indication that exceeds the standard of 0.70 with regards to internal consistency, and therefore fulfilling the criterion of acceptable internal consistency of the instrument making it fit to collect data on a big scale. Further analytical operations were performed in SPSS 25.0 through the three phases process. In the first part, the descriptive statistics were determined such as frequencies, the means, and standard deviations to expound demographical profiles and patterns. Second, the Product-Moment Correlation Coefficient (PPMCC) developed by Pearson was used to test the association between remote working practices, and the aspects of entrepreneurial competitive advantage. Third, inferential procedures were used to find the magnitude and kind of associations within the framework of medium businesses in Rivers State.

### Results and Discussion

The retrieval rate was also very high and stood at 91.69 % as 298 of the 325 questionnaires distributed were retrieved. Such active form of participation and followed by the methodology proves the strength of the study design. The retrieval of only 27 questionnaires was possible and that makes 8.31 percent of the total. Even though it is a small percentage, it is marked. The reasons could be unavailability of respondents, the dwindling of interests and logistic limitation. Despite these aspects, retrieval rate of more than 90 % is generally seen as satisfactory in a survey based research and dramatically improves reliability and representativeness of information that is to be gathered. As a result, the high rate of participation increases the validity of any inference or generalizations formulated out of the study.

### Bivariate Data Analyses (Test of Hypotheses)

The six hypotheses were tested in this section using Pearson Product Moment Correlation Coefficients the results in table 1 were obtained .

**Table 1: Correlation Results**

Correlations	

			Flexible Work Arrangem ent	Virtual Collabora tion	Telecom muting	Market Responsi veness	Operation al Efficienc y
Flexible Arrangement	Work	Pearson	1	.767**	.769**	.817**	.817**
		Correlation					
		Sig. (2-tailed)		.000	.000	.000	.000
		N	298	298	298	298	298
Virtual Collaboration		Pearson	.767**	1	.817**	.800**	.815**
		Correlation					
		Sig. (2-tailed)	.000		.000	.000	.000
		N	298	298	298	298	298
Telecommuting		Pearson	.769**	.817**	1	.864**	.814**
		Correlation					
		Sig. (2-tailed)	.000	.000		.000	.000
		N	298	298	298	298	298
Market Responsiveness		Pearson	.817**	.800**	.864**	1	.710**
		Correlation					
		Sig. (2-tailed)	.000	.000	.000		.000
		N	298	298	298	298	298
Operational Efficiency		Pearson	.817**	.815**	.814**	.710**	1
		Correlation					
		Sig. (2-tailed)	.000	.000	.000	.000	
		N	298	298	298	298	298

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

Source: Research Desk (2025)

Satisfactorily, the correlation analysis will establish the existence of a well correlation between all the constructs in the study; Flexible Work Arrangement will show strong correlation with Market Responsiveness ( $r = .817$ ,  $p < .01$ ) and Operational Efficiency ( $r = .817$ ,  $p < .01$ ). There are also very strong correlations between the Virtual Collaboration and Market Responsiveness ( $r = .800$ ,  $p < .01$ ) as well as between the Virtual Collaboration and Operational Efficiency ( $r = .815$ ,  $p < .01$ ). Moreover, the fact that the correlation between Telecommuting and Market Responsiveness is very strong ( $r = .864$ ,  $p < .01$ ) and so is the correlation between Telecommuting and Operational Efficiency,  $r = .814$ ,  $p < .01$  indicates that the relation between the two phenomena is quite strong and supports this hypothesis. All these results imply that as Telecommuting activities increase in enterprises in the middle range, the same is accompanied by an equally drastic increase in efficiency in business operations. Due to the combination of the data, it is possible to infer that the remote work-related division into Flexible Work Arrangement, Virtual Collaboration, and Telecommuting positively affect the two indicators: Market Responsiveness and Operational Efficiency. The implications are tremendous to the managers and policymakers of any medium enterprises, particularly in the Rivers State because the positive and high-frequency correlations between remote working and other performance indicators including market responsiveness and operational efficiency implies that the application of remote work is a strategy that should be deployed strategically to increase the organizational competitiveness and agility.

## Discussion of Findings

### Relationship between Flexible Work Arrangements and Market Responsiveness

In the present scholarly literature, it has revealed that flexible work arrangements (FWAs), especially remote work, flextime and collapsing workweeks are gaining prominence in connection to improved responsiveness by the medium enterprises in the market. Market responsiveness is defined as the ability of a firm to monitor, respond and adjust to the changing customer preferences, market environmental forces fast. Results provided by Beauregard and Henry (2009) including those that were empirical suggest that FWAs promote latitude of decisions made and the independence of employees thereby permitting organisations to address opportunities promptly in turbulent environments. Okache (2020) goes further to note that organizations of medium size in Nigeria that had adopted flexible work practices showed the potential to more rapidly adjust their services and action plans based on client-driven responses, as well as market cues. In Rivers State, where infrastructure and business circumstances are prone to dramatic changes, FWAs support the decentralisation of the activities, the ability to keep the productivity despite disturbances, and to be consistent in responding to the requirements of real-time market conditions. This increased responsiveness, in turn, allows to increase competitiveness and satisfaction among customers, which proves that there is a strong positive correlation between FWAs and market responsiveness.



### **Relationship between Flexible Work Arrangements and Operational Efficiency**

According to empirical studies, the level of market responsiveness of medium sized businesses is greatly contributed by the flexible work arrangements (FWAs), such as flextime, teleworking as well as the compressed workweeks. The ability of a firm to respond rapidly to emerging customer requirements and the forces of competition popularly referred to as market responsiveness has extensively been looked at in literature. Beauregard and Henry (2009) argue that FWAs enhance employee autonomy and advance communication, which eventually quicken the decision-making process and makes employees adapt easily to the market requirements. Okache (2020) also confirms this conclusion since they found that the implementation of FWAs in existence in medium-sized companies in Nigeria enabled them to be relatively prepared to align with customer demands and external shocks, thus being more receptive. In the Rivers State, enterprises need to survive in a changing, uncertain infrastructure and uncertain markets; FWAs help the firms maintain agility and even responsiveness.

### **Relationship between Virtual Collaboration and Market Responsiveness**

Virtual teamwork which can be termed as the use of digital tools and platforms in several areas to encourage collaboration has become an agent of generating responsiveness in terms of responsiveness in medium sized firms. This type of responsiveness is necessary to rapidly adapt to the changing market conditions, changing customer preferences and dynamic shift in the competitive forces. Majchrzak et al. (2004) are in line with this conclusion because they stated that information sharing using virtual collaboration occurred faster, decisions were made faster, and environmental fluctuations could be acted faster with virtual collaboration. Evidence of the superior positioning of those firms that applied virtual collaboration tools to establish co-value creation with customers and the capability to make rapid in-time change to the offerings may be seen in a similar study carried out by Chudoba et al. (2005).

### **Relationship between Virtual Collaboration and Operational Efficiency**

Online collaboration significantly boosts the effectiveness of the processes with the reduction of time delays, promotion of continuous communication, and savings on the resources spent on regular face-to-face meetings or operational hubs. According to Purvanova (2014), virtual teams when well managed tend to surpass other teams, which are organized conventionally most of the times in their productivity and coordination especially when faced by time constraints. In addition, Hertel et al. (2005) confirm the validity of task tracking and reduction of multiplication of efforts witnessed when using virtual collaboration platforms, thus increasing overall efficiency. In Rivers State, where drawing on physical infrastructure often limits on-site operations, medium enterprises take advantage of such tools as Google Workspace and Slack to combine communication and organize work at various remote points. The researched by Nwankwo and Ekwe (2020) also indicates that organizational performance in terms of the fluency of the internal process and effective use of resources may be ascribed to companies that follow virtual collaboration, verifying the fact that virtual collaboration significantly improves operational efficiency as geographically spread teams become organized and effectively performing units.

### **Relationship between Telecommuting and Market Responsiveness**

Telecommuting as a workplace trend (i.e. employees work at distant locations, especially their homes) has been increasingly attracting scholarly interest as a method of strengthening the responsiveness of the market by organizations. The act facilitates the chance of having the employees attached to each other and efficient irrespective of the geographical position, hence, faster response to customer needs and other market dynamics. Gajendran and Harrison (2007) supported this postulation with the fact that in their empirical study, they found out that telecommuting fosters job satisfaction and autonomy, which in its turn increases innovation and the speed of response. Allen et al. (2015) support this further as they validate the claim that telecommuters generally enjoy high engagement and flexibility which are traits that cannot be ignored in the rapid response in the market. As a result, telecommuting brings more than continuity as it provides dynamic interface with real-time interaction with the markets and thus, improves the organizational responsiveness to the changing external environment.

### **Relationship between Telecommuting and Operational Efficiency**

The concept of teleworking has become an essential organizational tool in enhancing efficiency in operations especially in areas where basic infrastructure is a factor that hampers the normal mode of operations which would have been adopted. Operational efficiency involves maximizing on output and at the same time reducing waste, delays and spending. This argument is supported by empirical evidence: Gajendran and Harrison (2007) carried out a meta-analysis which illustrated that telecommuting does enhance concentration levels among the employee; telecommuting reduces the commuting time level and optimizes the overall employee productivity. Also, Bloom et al. (2015) provided the outcomes of field experiment, according to which, the employees who worked at home performed more tasks and experienced increased job satisfaction and reduced turnover rates factors that combined lead to streamlined operations. This is in Rivers State where constant power and transport logistics are a major issue since they often cause delays in daily activities and operations; telecommuting has made it possible to maintain continuous business functioning of medium-sized enterprise. Taken together, the findings support the strong positive correlation between telecommuting and operational efficiency, and establish that the augmented form of remote-work practice (flexible) would be associated with positive impact on

improving organizational performance, especially in difficult settings.

### Conclusion

Based on empirical evidence, it can be said that the work flexibility, online collaboration, teleworking play a significant role in achieving market responsiveness and operative effectiveness of medium enterprises functioning in Rivers State. Through such modern forms of work, companies stand to benefit in terms of getting over the local infrastructure limitations, their responsiveness towards market fluctuation, and their cost utilization. Simultaneous adoption of digital technologies and flexible organizational forms does not only increase the productivity of the personnel and trigger innovation but also enhances organizational resilience and competitiveness. Therefore, medium-sized enterprises that actively adopt and institutionalize such work practices demonstrate the expanded ability of sustained growth and long term achievement in the changing business environment.

### Recommendations

- i. To boost their capacity towards quick responsiveness in the market, the firms in the medium level of enterprises in Rivers State are advised to:
- ii. engage in schemes of flexible scheduling (flextime and remote work). Such arrangements enable organizations to change quickly based on the changing demand patterns.
- iii. Institutionalized mechanisms of flexible work schedules and telecommuting systems, which are institutionally championed by managers, are thus crucial in streamlining of operations and minimize circumvention of resources.
- iv. The business executives are also encouraged to make investments in electronic collaborating technologies to support quick sharing of information and innovation culture directed to customers, which, combined, translate to increased market responsiveness.
- v. Training employees on efficient virtual collaboration platforms is, therefore, essential because it enhances internal communication and coordination of tasks amongst other things with the overall organizational efficiency.
- vi. The telecommuting-based activities can also maintain constant interaction with the market environment, especially when there are infrastructural interruptions. In this regard, digital tools and strict performance measures should be documented in the form of agreements on remote-work conditions at medium-enterprise organizations. The result of such measures is expected to be an increase in productivity and a reduction in overhead costs.