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KEY FEATURES THAT CONSTITUTE A FUNCTIONAL WORKSPACE AND THE EFFECT OF FUNCTIONAL WORKSPACE ON PRODUCTIVITY OF REMOTE WORKERS IN UYO, AKWA IBOM STATE

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ABSTRACT

This study examines the key features that constitute a functional workspace *and effect of a functional workspace on the productivity of remote workers in Uyo, Nigeria. A descriptive survey research design was adopted for this study. The study was carried out in Uyo metropolis, Akwa Ibom State, Nigeria, and the population comprised all remote workers in the area, including full-time remote employees, freelancers, and hybrid workers. A simple random sampling technique was used to select a sample size of 80 respondents from the population, ensuring that all individuals had an equal chance of participation. The instrument used for data collection was a structured questionnaire titled "Effect of a Functional Workspace on Productivity of Remote Workers in Uyo" (EFWPRWU), developed by the researcher. The questionnaire consisted of three sections covering demographic information, workspace features, and productivity levels. Face and content validity of the instrument were established by two experts from the University of Uyo, who reviewed the items for clarity, relevance, and adequacy. The reliability of the instrument was determined through a pilot study involving 20 respondents who were not part of the main sample. The instrument was administered twice at an interval, and the results indicated that the instrument was reliable for the study. Data collected were analyzed using the Statistical Package for Social Sciences (SPSS) version 20. Descriptive statistics, particularly simple percentages, were used to analyze the data and answer the research questions. In conclusion, this study underscores the vital role of a functional workspace in enhancing the productivity*

of remote workers in Uyo. By highlighting the link between workspace design and work outcomes, it shows that thoughtful organization, reliable infrastructure, and supportive environments are key to sustaining performance in remote settings. Creating and maintaining such workspaces can help remote workers stay focused, motivated, and efficient.

KEYWORDS: Key Features, Functional Workspace, Productivity, Remote Workers, Uyo, Akwa Ibom State

INTRODUCTION

A functional workspace is defined as a physical environment equipped with tools, infrastructure, and ambiance that support effective work output. This includes elements such as reliable electricity, high-speed internet, ergonomic furniture, adequate lighting, ventilation, noise control, and access to work-related resources (Gensler, 2021). While the benefits of remote work include flexibility, reduced commute time, and improved work-life balance, the quality of the home or off-site workspace remains a decisive factor in determining whether these benefits translate into higher productivity.

The landscape of work has undergone a significant transformation in recent years. With the advent of digital technologies and the global shift necessitated by the COVID-19 pandemic, remote work—also known as telecommuting or virtual work—has become a mainstream alternative to traditional in-office employment (Choudhury, Foroughi, & Larson, 2021). This change has presented both opportunities and challenges for workers, employers, and policymakers worldwide. In developing regions such as Uyo, a growing urban center in Akwa Ibom State, Nigeria, the transition to remote work has brought to the forefront the critical role of a functional workspace in influencing employee productivity.

This study, therefore, investigates the effect of a functional workspace on the productivity of remote workers in Uyo. By exploring the nature and components of functional workspaces and their relationship with performance, the study aims to contribute to the broader discourse on optimizing remote work environments in emerging economies. Remote work, often referred to as telecommuting, involves performing professional tasks outside the traditional office environment, typically from home or any location with reliable internet access (Messenger & Gschwind, 2016). While the concept is global, its adoption in Nigeria has been shaped by socio-economic realities, infrastructural limitations, and cultural attitudes towards work. In Uyo, the capital of Akwa Ibom State, an increasing number of organizations—particularly in technology, media, and service sectors—are gradually integrating remote work into their operations. This shift raises critical questions about the role of workspace functionality in sustaining productivity.

A functional workspace is more than just a desk and chair; it encompasses the arrangement, design, tools, and resources that support efficient and comfortable work. For remote workers, their workspace may include ergonomic furniture, adequate lighting, noise control, and access to reliable power and internet connectivity (Schieman & Glavin, 2021).

The assumption is that a well-designed home workspace can enhance focus, reduce fatigue, and ultimately improve output. However, the interplay between workspace functionality and productivity is complex, influenced by personal discipline, work culture, and external distractions.

Statement of the Problem

The choice to work remotely in Uyo is often influenced by a blend of economic, infrastructural, and lifestyle considerations. For many, it offers the freedom to avoid the stress of commuting through traffic-prone routes, such as Ikot Ekpene Road or Oron Road, and to save time and costs associated with transportation. This flexibility is particularly attractive in a city like Uyo, where the pace of life is relatively slower compared to metropolitan hubs like Lagos or Abuja and where the close-knit nature of communities often places high value on being present for personal and family commitments. However, despite these advantages, the effectiveness of remote work in Uyo is heavily dependent on the availability of functional workspace environments that are comfortable, well-equipped, and conducive to focus. Unfortunately, many remote workers in Uyo do not enjoy access to such environments. Homes often lack the infrastructure necessary for optimal productivity: steady electricity supply remains a persistent challenge; internet connectivity, though improving with the spread of fiber-optic networks, can still be unstable in certain neighborhoods; and many domestic spaces are not designed to separate work from household distractions.

Objectives of the Study

The objective of this study is to explore the effect of a functional workspace on the productivity of remote workers in Uyo. The specific objectives are to:

I. Identify the key features that constitute a functional workspace for remote work in Uyo.

ii. Assess the productivity levels of remote workers with and without functional workspaces.

Research Questions

The study will address the following research questions:

I. What are the features of functional workspace among remote workers in Uyo?

ii. What is the effect of a functional workspace on the productivity of remote workers in Uyo?

LITERATURE REVIEW

Conceptual Framework

Concept of a Functional Workspace

The term "functional workspace" refers to the physical and socio-technological environment that enables optimal task performance. In traditional offices, functionality includes layout design, equipment provision, ambient conditions, and organizational support. In remote settings, functionality shifts to the worker's home or satellite location, introducing variables such as household distractions, space constraints, and uneven access to infrastructure.

Ergonomics & physical layout

A functional workspace must support correct posture and reduce musculoskeletal strain. Ergonomic standards (ISO 9241) recommend adjustable seating, proper desk height, and monitor alignment. In Uyo, many remote workers operate on sofas, dining tables, or beds, lacking ergonomic furniture. A 2022 survey by the Nigeria Institute of Ergonomics found that over 60% of remote workers in Akwa Ibom lacked dedicated desks; as a result, 45% reported discomfort after 2–3 hours of work. These conditions impede concentration, elevate fatigue, and potentially lower productivity.

Lighting and visual comfort

Appropriate lighting—both natural and artificial—is vital for visual tasks. Poor lighting can cause eye strain, headaches, and decreased performance. Uyo experiences high daylight, but power outages often necessitate artificial lighting, which may be inadequate. Studies in similar Nigerian cities found that workers relying on kerosene lamps or low-quality bulbs reported a 30% drop in typing speed and increased errors under dim light conditions (Ojo & Okoro, 2021).

Noise control and acoustics

Household noise (children, generators, traffic) disrupts remote work significantly. In Uyo, over 70% of homes rely on portable generators due to erratic power; these machines contribute high decibel levels, fragmenting attention. Research in Southeast Nigeria indicates that generator noise can increase error rates in data-entry tasks by up to 25% (Nwokeji et al., 2020).

Thermal comfort

Comfort in a workspace includes temperature and humidity. Uyo's tropical climate means heat and humidity levels are often high. Without consistent power for air conditioning or fans, thermal discomfort can impair cognitive performance and decision-making speed.

Technological and infrastructural factors

Internet connectivity

Stable, high-speed internet is a lifeline for remote work. According to NCC (2024), Uyo's broadband penetration lags slightly behind national average, estimated at around 40%. Frequent mobile-network fluctuations ranging between 5–15 Mbps and occasional data outages (% subscribers reporting daily outages) pose challenges for video conferencing and cloud-based work.

Power reliability

Even when the internet is available, irregular electricity supply undermines remote work. Uyo studies show an average of 6–8 hours of blackout per day, and many rely on personal generators. This raises costs, interrupts workflow, and increases stress.

Digital tools and support systems

Access to collaborative tools (Zoom, Slack, cloud storage) matters. While such tools are globally accessible, consistent access depends on both internet speed and familiarity with platforms. In Uyo organizations, fewer small and medium enterprises provide formal tool training or licenses; many workers must source their own solutions and self-manage updates and troubleshooting, adding cognitive overhead.

Concept of Productivity in Remote Work

Defining productivity

Productivity in remote work is multidimensional—incorporating **quantitative** (e.g., number of outputs, compliance with deadlines) and "qualitative" (e.g., quality of work, creativity, problem-solving, client satisfaction). Remote work also adds dimensions such as "self-regulation," "proactive communication," and "technological adeptness."

Measurement approaches

- **Objective metrics:** number of tasks completed, words typed, sales generated, error rates.
- **Subjective measures:** self-reported efficiency and perceived productivity through validated scales such as the Individual Work Performance Questionnaire (IWPQ).
- **Organizational evaluation:** supervisor assessments and client ratings.

Unique aspects of remote productivity

- **Autonomy demands:** remote workers must self-initiate, prioritize, and schedule work.

- **Boundary management:** separating work from domestic life especially in homes with limited dedicated space.
- **Digital proficiency:** productivity hinges on mastery of collaborative tools and Internet navigation.

Remote Work in the Nigerian and Uyo Context Remote work adoption in Nigeria

Nigeria's remote work has expanded sharply since 2020. The ILO reports that up to 20% of urban workers had remote arrangements by 2022, with the figure notably higher in knowledge sectors like ICT, finance, and consulting. However, adoption varies widely by region. Lagos and Abuja are leaders, while cities like Uyo and Port Harcourt are emerging hubs.

Internet and infrastructure in Uyo

- Broadband coverage: \~40–45% in early 2024 (NCC, 2024)
- Mobile internet speeds: Typically 5–15 Mbps, with occasional 4G-LTE capacity
- Power reliability: Daily outage averages of 6–8 hours; over 60% of households rely on generators or UPS units (Akwa Ibom Bureau of Statistics, 2023)

Local ICT initiatives

The Akwa Ibom State Government, through its ICT Agency, has launched fiber-optic backbone projects, public Wi-Fi zones, and digital skills training. These have improved connectivity in some parts of Uyo, particularly business districts. Still, disparities remain—residential neighborhoods often lack stable public internet.

Cultural and socioeconomic considerations

Remote work in Uyo may be influenced by cultural expectations—familial presence at home can intrude on work time; extended family support may mitigate childcare, but also increase interruptions. Socioeconomic status affects the ability to invest in ergonomic furniture, backup power, or high-speed data plans.

Relationship between Functional Workspace and Productivity

The interplay between workspace functionality and productivity is mediated by several mechanisms:

1. **Cognitive load reduction:** Ergonomic setups and noise control reduce mental fatigue, freeing capacity for complex tasks.

2. S**tress mitigation:** Consistent power and stable internet reduce anxiety over disruptions.

3. **Enhanced focus and flow:** Comfortable, dedicated spaces support deep work, enabling longer focus durations.

4. **Well-being and motivation**: A workspace that supports comfort and autonomy contributes to positive affect and intrinsic drive.

Moderators in this relationship include:

- **Electricity reliability**: Frequent blackouts weaken the strength of all other workspace inputs.
- **Household environment:** Crowded homes or frequent foot traffic act as environmental disruptors.
- **Socioeconomic status**: Those with more resources can invest in better cross-domain workspace functionality, thereby amplifying productivity benefits.

Empirical Reviews

Global evidence on remote work and productivity

A large stream of post-2020 research finds mixed but interpretable results productivity effects of working from home (WFH). The most comprehensive program of work (Bloom and co-authors) shows that hybrid arrangements tend to maintain productivity while improving retention, whereas fully remote can average \∼10% lower output if communication and mentoring are not redesigned. These results are based on harmonized large-scale surveys and firm studies and remain influential in policy and managerial practice. Across countries, the extent of WFH has stabilized rather than collapsing back to 2019 norms; as of 2023–2025, around a quarter to a third of workdays are remote in advanced economies. This persistence suggests organizations are learning to capture benefits while mitigating coordination costs, which is relevant for Nigerian firms integrating remote teams.

Environmental conditions: noise, heat, and attention

Environmental psychology findings translate strongly to home offices: studies show that lower noise and better daylight/visual comfort predict higher concentration and self-rated output among WFH employees. In developing-country urban settings, environmental stressors (generator hum, traffic, open-market noise) are salient; observational and field-measurement work in West Africa consistently records daytime equivalent noise levels well above recommended limits for learning/office tasks (often >60–70 dB), which are associated with annoyance, impaired concentration, and fatigue. Generator-specific studies in Nigeria measure sound pressure levels from common petrol generators across capacities/distances and report values that easily exceed residential comfort thresholds, implying material risk to cognitive performance in homes relying on gensets for power. For

remote workers in Uyo who routinely run small generators during outages, these data substantiate a productivity-relevant exposure.

Home vs. office vs. co-working: attribute trade-offs

Newer discrete-choice and field studies compare home and office attributes (privacy, noise, HVAC, and tech support) and home attributes (room separation, daylight, and furniture). Workers' location choices map closely to these attributes, implying that investments in home-workspace features meaningfully shift behavior and, by extension, productivity. For Uyo, this suggests that co-working hubs with reliable power/quiet zones can serve as high-function alternatives when home environments are constrained.

Measurement strategies in empirical studies

Studies operationalize "productivity" in several ways:

1. Objective metrics: task throughput, code commits, call handling times, error rates—common in operations/IT support studies of remote teams. WFH often shows no loss or small losses under hybrid but drops under fully remote without process changes.

2. Self-reported productivity and engagement: survey scales consistently show that workspace quality (ergonomic adequacy, quiet, light) correlates with higher perceived productivity and lower fatigue.

3. Physiological/health proxies: the prevalence of musculoskeletal symptoms and stress markers acts as a negative productivity correlate in home-office studies.

For Nigeria, mixed-method designs combining objective connectivity/power logs, noise/temperature readings, and self-reports are increasingly recommended, reflecting the multi-constraint environment.

METHODOLOGY

A descriptive survey research design was adopted for this study. The study was carried out in the Uyo metropolis, Akwa Ibom State, Nigeria, and the population comprised all remote workers in the area, including full-time remote employees, freelancers, and hybrid workers. A simple random sampling technique was used to select a sample size of 80 respondents from the population, ensuring that all individuals had an equal chance of participation. The instrument used for data collection was a structured questionnaire titled "Effect of a Functional Workspace on Productivity of Remote Workers in Uyo" (EFWPRWU), developed by the researcher. The questionnaire consisted of three sections covering demographic information, workspace features, and productivity levels. Face and content validity of the instrument were established by two experts from the University of Uyo, who reviewed the items for clarity, relevance, and adequacy. The reliability of the instrument was determined through a pilot study involving 20 respondents who were not part of the main

sample. The instrument was administered twice at an interval, and the results indicated that the instrument was reliable for the study. Data collected were analyzed using the Statistical Package for Social Sciences (SPSS) version 20. Descriptive statistics, particularly simple percentages, were used to analyze the data and answer the research questions.

Result and discussion

Research question one:

What are the features of functional workspace among remote workers in Uyo?

This section presents findings on the characteristics of functional workspaces.

Functional Workspace Features among Remote Workers in Uyo

Workspace Availability and Setup

Response	Frequency	Percentage
I have a dedicated workspace at home	52	65.0
I use a flexible space at home	18	22.5
I work from multiple locations	10	12.5
Total	80	100

The majority of respondents (65%) reported having a dedicated workspace at home, which is a critical factor in enhancing productivity. A fixed and well-organized workspace helps to reduce distractions and encourages the development of a consistent work routine.

Workspace Comfort and Ergonomics

Respondents rated comfort based on seating, desk height, ventilation, and general set upon a 5-point Likert scale.

Rating	Frequency	Percentage
Very comfortable	21	26.3
Comfortable	34	42.5
Neutral	15	18.7
Uncomfortable	7	8.8
Very uncomfortable	3	3.7
Total	**80**	**100**

A significant 68.8% of the respondents found their workspace either *comfortable* or* very comfortable, indicating that the physical setup is mostly functional.

Lighting Condition of the Workspace

Lighting condition	**Frequency**	**Percentage**
Well lit(natural/artificial)	49	61.3
Moderate lightning	22	27.5
Poor lightning	9	11.2
Total	80	100

Good lighting plays an essential role in reducing eye strain and enhancing mood. With over 60% of respondents reporting well-lit conditions, it supports the idea that remote workers in Uyo are generally working in favorable lighting environments.

Noise Levels in Workspace

Noise level	Frequency	Percentage
Very quiet	15	18.8
Mostly quiet	30	37.5
Moderate	20	25.0
Noisy	10	12.5
Very noisy	5	6.2
Total	80	100

About 56.3% of respondents rated their work environment as "quiet or mostly quiet", suggesting fewer auditory distractions. However, 18.7% experienced frequent noise, which could be a hindrance to concentration and productivity.

Electricity Supply and Internet Access

Utility access	Adequate	Inadequate	Total respondents	Adequacy rate
Electricity supply	58	22	80	72.5
Internet connectivity	62	18	80	77.5

Electricity (72.5%) and internet (77.5%) access were considered mostly adequate. Since power and connectivity are foundational to remote work, these statistics highlight relatively good infrastructure among respondents.

Workspace Furniture and Tools

Feature	Access
Office chair	68.7
Functional desk	71.2
Headphones/noise cancelling	55.0
Webcam/microphone	60.0

Over 70% of respondents reported having both a functional desk and chair. These ergonomic tools are essential in preventing fatigue and enhancing long working hours. However only 55% had access to sound control tools, suggesting room for improvement in audio-related works pace optimization

Research question 2:

What is the effect of functional workspace on productivity of remote workers in Uyo?

This section presents findings on productivity indicators among remote workers'

Productivity and Work Performance

Time Management Efficiency

Time management rating	Frequency	Percentage
Very effective	22	27.5
Effective	35	43.8
Neutral	12	15.0
Ineffective	8	10.0
Very ineffective	3	3.7
Total	80	100

A combined 71.3% rated their time management as *effective* or* very effective*, suggesting that most respondents can organize their work day efficiently within their home environment.

Task Completion and Meeting Deadlines

Task performance	Frequency	Percentage
Always on schedule	29	36.2
Mostly on schedule	31	38.8
Occasionally delayed	14	17.5
Frequently delayed	6	7.5
Total	80	100

About 75% of respondents consistently meet their deadlines, appositive indicator that their work space does not hinder but rather supports timely completion of work.

Ability to Focus During Working Hours

Focus level	Frequency	Percentage
Very high	20	25.0
High	28	35.0
Moderate	17	21.3
Low	10	12.5
Very low	5	6.2
Total	80	100

60% of respondents experience a high to very high ability to focus, which underscores the productivity-enhancing role of a functional workspace.

Motivation and Drive to Work Remotely

Motivation level	Frequency	Percentage
Very motivated	24	30.0
Motivated	30	37.5
Neutral	15	18.8
Unmotivated	7	8.7
Very unmotivated	4	5.0
Total	80	100

With 67.5% of respondents reporting being motivated to work remotely, it is evident that the home environment is conducive to building professional morale, especially when work spaces are well-equipped.

Virtual Collaboration and Communication with Teams

Collaboration experience	Frequency	Percentage
Excellent	18	22.5
Good	33	41.3
Fair	19	23.7
Poor	7	8.8
Very poor	3	3.7
Total	80	100

Most remote workers rated their ability to collaborate virtually as *good to excellent* (63.8%), indicating that their workspace setup allows for effective interaction with colleagues, especially when supported by reliable internet and communication tools.

CONCLUSION

This study set out to examine the effect of a functional workspace on the productivity of remote workers in Uyo. The findings revealed that workspace quality, such as having ergonomic furniture, good lighting, stable internet, and freedom from noise or distractions, directly influences workers' ability to focus, meet deadlines, and maintain job satisfaction. Respondents who worked from well-equipped and organized spaces consistently reported better productivity levels than those working from cluttered or noisy environments. It can be concluded that a functional workspace is not merely a matter of convenience but a critical resource for sustaining high performance in remote work. As remote work becomes increasingly common, both individuals and organizations must recognize the central role of workspace conditions in driving productivity and overall well-being. This study set out to examine the effect of a functional workspace on the productivity of remote workers in Uyo. The findings revealed that workspace quality, such as having ergonomic furniture, good lighting, stable internet, and freedom from noise or distractions, directly influences workers' ability to focus, meet deadlines, and maintain job satisfaction. Respondents who worked from well-equipped and organized spaces consistently reported better productivity levels than those working from cluttered or noisy environments. It can be concluded that a functional workspace is not merely a matter of convenience but a critical resource for sustaining high performance in remote work. As remote work becomes increasingly common, both individuals and organizations must recognize the central role of workspace conditions in driving productivity and overall well-being.

RECOMMENDATIONS

Based on the findings and conclusions of this study, the following recommendations are made:

1. Organizations should provide financial or material support to help remote workers set up functional home workstations, including ergonomic furniture and reliable internet access.
2. Government and relevant agencies should formulate policies that encourage and regulate remote work arrangements, with emphasis on power supply, broadband access, and occupational health.
3. Employers should conduct periodic training on workspace organization, ergonomics, and time management for remote workers to improve productivity and reduce fatigue.

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