Virtual Media Application and Workplace Communication in Telecommunication Employees of IHS Towers and ZTE Nigeria Limited in Lagos State, Nigeria

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Abstract

This study examined virtual media application and workplace communication in telecommunication employees of IHS Tower and ZTE Nigeria Limited in Lagos State, Nigeria. The objectives of the study were to find out the ways telecommunication employees of IHS *Tower and ZTE Nigeria Limited engage in job performance using virtual media among others.* The theoretical framework of the study was the technological determinism theory and adaptive structural theory. The research design adopted for this study was the descriptive survey design. The population of this study consisted of the IHS Tower and ZTE Nigeria Limited workers (staff) in Lagos state. According to the telecommunication companies Administrative Officers in 2023, the total population of IHS Tower is 600 and ZTE Nigeria Limited is 185. The total population is 785 (Seven hundred and eighty-five). To obtain the required sample size, Krejcie and Morgan Table was used to obtain the sample size of 254. While the sample size for interview schedule is four (4) key managers of the two telecommunication firms. Two sampling methods were used by the researcher namely: purposive sampling and multi-stage sampling. Data for This study obtained using copies of questionnaire and interview guide. Data were analysed using the descriptive and inferential statistical analysis. Finding revealed that the ways the telecommunication employees of IHS Tower and ZTE Nigeria Limited engage in job using virtual media were through replacing work plans and related procedures to fit the new reality, clarified priorities, agreed on common system to signal availability for work, break up larger team into smaller cross-functional ones with clear mission and reporting line, provided data to ensure timely, regular and descriptive feedback, and did a skill-mapping among the workers to potentially under stretched workers. The study concluded that the proactive strategies adopted by telecommunication employees, emphasising the need for organisational flexibility, efficient collaboration and strategic utilisation of virtual media to enhance job performance in the evolving landscape of remote work. Based on the finding, the study recommended that organisations should invest in training programmes that focus on effective collaboration within cross-functional teams, leveraging virtual media to maximise productivity.

Keywords: Virtual Media, Workplace Communication, Telecommunication, Employees

Introduction

In today's fast-paced and interconnected world, virtual media have become an indispensable tool for business to enhance communication, collaboration and productivity. Technology was used for task such as email communication, document processing and basic data management, but the reliance on advanced digital tools for remote work was limited. The advantages of virtual media are being harnessed by some organisations. Moller (2013) believes that social media entail the use of web-based mobile technologies that transform the process of communication into an interactive dialogue. This has the power to change extensively the way organisations and people communicate. Moller postulates further that social media, which can take various forms such as magazines, weblogs, micro-blogs, podcasts, photographs, videos, and social networking, among others have a way of transforming communication patterns from official to non-official and vis-à-vis. However, with the heat of the coronavirus pandemic and the implementation of drastic measures such as the shutdown of businesses and organizations, the interstate lockdown, and the restriction of movement, finding a new way to telework became necessary. With the IHS, organisations embarked on the need to use communicative platforms that are not limited by time or space such as virtual media for their daily activities.

According to Pacheco (2020), the world witnessed an upsurge in the use of virtual media. In the U.S. and the U.K., there was a 55% increase in the use of virtual media in 2020 as against its 30% usage in the past year. In Africa and Asia, countries including Kenya, Nigeria, South Africa, and the United Arab Emirates have been recorded to have the biggest increase among 18 markets. As consumers become more concerned about well-being for themselves and others, their worry over digital well-being has dropped. People do not monitor screen time as they did a year ago, especially among those who stay most online. As coronavirus increases, the web is perceived as less of an interruption of our everyday life and more of an avenue to everyday life. In a global environment with multiple teams and a dispersed workplace, organisational silos can negatively impact your business success, especially easily for the department in the absence of digital tools and technologies. It is inaccessible to the rest of the company when they do not have a place to share it. A virtual workplace can change all of that.

Virtual media are great in enabling employees to interact and share ideas that can build a sense of community and trust, encourage innovation, solve problems in real-time, and perform jobs credibly. Virtual media are a great way to break down communication barriers to transfer the employee's job performance, experience and promote all innovation and growth. It would be in the best interest of organisations to focus on virtual media within the organisations, which may bestow the organisation with many benefits. Virtual media are vital for both the organisation and for its day-to-day existence. Virtual media have the power to engage employees within the organisation and allow the organisation to ensure enhanced productivity. However, the question remains, how is management responsible for ensuring that communication occurs within the organisation and how is the effectiveness of the communication evaluated appropriately? The more transparent an organisation is, the more widely its internal information is shared. Virtual media are vital aspects of how the job performance and relationships between the organisation and its employees are evaluated, which means that open communication indicates a stronger relationship and better job performance.

Telework is mainly employed in education and health, information and communication, and in large firms, especially telecommunication. With the new technologies employees can work from any location and not be required to physically be present in the traditional office. Terms like virtual work, remote working, teleworking, telecommuting, etc. are used for work outside the traditional office using information performed by employees and telecommunication technologies. Such work is becoming more and more popular. However, many managers believe that virtual media are not as productive as when the workers are in traditional offices. On the other hand, several researchers such as Pigini and Staffolani (2019), and Nakrosiene et al. (2019) suggest that virtual media can be more productive because employees can work during their most productive time and be less distracted by co-workers. A better measure of human capital is task performance, which encompasses realised human capital within an organisation. Inadequate measuring of work performance and lack of information imposes additional stress on workers.

IHS Tower Nigeria Limited was founded in 2001, IHS Towers is one of the largest independent owners, operators, and developers of shared telecommunications infrastructure in the world. IHS is the largest independent tower operator in six of the nine markets in which it operates, and the only independent tower operator in five of these markets, with over 30,500 towers in its portfolio. IHS provides mission-critical telecommunications infrastructure to their customers, most of whom are leading multinational organisations, who in turn provide wireless voice and data services to their end users. In doing so, they help facilitate mobile communications coverage for approximately 600 million people (World Bank Data, 2021) across their footprint, supporting economies to implement nationwide digital agendas and IHS Towers has operations across Africa, Latin America, and the Middle East. IHS Towers provides a wide range of services across emerging markets (IHS Nigeria Limited, 2022).

ZTE Corporation is a global leader in telecommunications and information technology. Founded in 1985 and listed on both the Hong Kong and Shenzhen Stock Exchanges, the company has been committed to providing innovative technologies and integrated solutions for global operators, government and enterprises, and consumers from over 160 countries across the globe. Serving over 1/4 of the global population, the company is dedicated to enabling connectivity and trust everywhere for a better future. ZTE has complete end-to-end product lines and integrated solutions in the telecommunications industry. Bolstered with its all series of wireless, services, devices, and professional telecommunications services, the company has great capability of flexibly satisfying the diversified requirements and pursuit for rapid innovations of global operators and government and enterprise network customers.

The telecommunication industry in Nigeria has experienced rapid growth and transformation in recent years, primarily driven by advancement in technology. With the increasing demand for seamless communication, telecommunication companies have heavily relied on virtual media platforms to connect their teams, particularly in geographically dispersed locations. Hence, this study is set to explore the correlation between the utilisation

of virtual media and job performance among telecommunication employees at IHS Tower and ZTE Nigeria Limited in Lagos State.

Statement of the problem

The IHS Tower Nigeria Limited and ZTE Nigeria Limited adopted working remotely, away from the traditional facilities to maintain a link to the office and employees. This involves telecommuting, working from home, teleworking, mobile work, flexi place, satellite office, detached units, distance meetings, or virtual organizations. For telecommunication employee relations, it helps productivity, profitability and flexibility, and improvement in remote collaboration. Virtual media tools such as WhatsApp, Twitter, Facebook, and Instagram help to enhance communication and access to information through networks such as intranet, internal and external platforms. Virtual media positively affect knowledge sharing which contributes to improving workers' skills and employee relations within teams and helps reduce social isolation that can enhance employee performance, job satisfaction, and productivity.

Nevertheless, lack of cooperation and team spirit can decrease timeliness of work completion. There are challenges or hindrances related to the integration of virtual media in the work environment of IHS Tower and ZTE Nigeria Limited such as inadequate or out-dated technological infrastructure, security concerns, employee training and skill gaps, cultural resistance to change (resistance from employees accustomed to traditional modes of communication), network connectivity issues, over-reliance on virtual platforms and cost implications which hinder the seamless integration of virtual media, impacting communication and collaboration among telecommunication employees. These challenges are crucial for successfully integrating virtual media in the work environment of telecommunication companies and optimising job performance.

The way virtual media are diffused on job performance by telecommunication companies' employees needs to be known to harness more from employees in creating a working environment to satisfy the needs of employees as well as their performance. Employees are the major valuable assets of an organisation in which without them, it is hard to realise its basic objectives. By investigating how telecommunication employees use virtual media and their job performance will provide valuable insights into the dynamics of modern workplace communication. The understanding of the specific challenges and hindrances associated with the integration of virtual media will enhance efficiency and effectiveness in these companies. Therefore, this study sets out to examine how the telecommunication employees of IHS Tower and ZTE Nigeria Limited in Lagos State need the virtual media in job performance.

Aim and Objectives of the Study

The aim of this study was to assess the virtual media and job performance by telecommunication employees of IHS Tower and ZTE Nigeria Limited in Lagos State, Nigeria. The objectives of the study were to:

- 1. find out the ways telecommunication employees of IHS Tower and ZTE Nigeria Limited engage in job performance using virtual media;
- 2. identify the virtual media tools that help telecommunication employees of IHS Tower and ZTE Nigeria Limited in their in job performance;
- 3. examine the constraints in applying virtual media in job performance by telecommunication employees of IHS Tower and ZTE Nigeria Limited.

Literature Review

Virtual Communication

Havey (2014) defines communication as the exchange of information between a person to a person or a company to a company. According to Kirkman, et al., (2016), communication differs according to the level of information richness. The Media Richness Theory (MRT), proposed by Hoopes et al., (2014), is used to define the ability of different communication media to transfer information (Zaccaro & Bader, 2014). The communications medium with the highest level of richness is face-to-face communication, followed by video conferencing, phone, and chat respectively. The lowest richness level is represented by e-mail, text messaging, and written documents (Cascio, 2014). The basic infrastructure that any organization conducting global projects must be equipped with consists of computer-mediated communication systems (Majchrzak et al., 2012).

Virtual Management

Virtual Management is a current topic in the literature of global organization defined as "the supervision, leadership, and maintenance of virtual teams and employees which was brought about by the rise of the internet, globalization, outsourcing, and telecommuting (Powell et al., 2014). It has been recognized as the management of frequently widely dispersed groups and individuals with rarely, if ever, meeting them face to face (Bell & Kozlowski, 2012).

It is also the ability to organize and coordinate with effect a group whose members are not in the same location or time zone and may not even work for the firm (Olivier, 2019). It requires a deeper understanding of people, processes, and technology and recognition that trust is a more limiting factor compared with face-to-face interactions (Duarte & Snyder, 2016). Peters and Manz (2017) argued that Virtual management is managing work across boundaries of time and space by utilizing modern computer-driven technologies.

Virtual Collaboration

Virtual collaboration is commonly used by globally distributed business and scientific employees. Ideally, virtual collaboration is most effective when it can simulate face-to-face collaboration between employees through the transfer of contextual information, but technological limits in sharing certain types of information prevent virtual collaboration from being as effective as face-to-face interaction. Virtual collaboration is the method of collaboration among employees that is carried out via technology-mediated communication. Virtual collaboration follows the same process as collaboration, but the parties involved in virtual collaboration do not physically interact and communicate exclusively through the technological channel (Peters & Manz, 2017). Distributed employees use virtual collaboration to simulate the information transfer present in face-to-face meetings, communicating virtually through verbal, visual, written, and digital means. Virtual employees can collaborate through the following medium; video-conferencing, audio-conferencing, instant messaging, text messaging, phone calls, conference calls, conference calls, e-mail, wikis, discussion boards, application-specific groupware, or shared databases, etc.

Theoretical framework

Adaptive Structuration Theory (AST)

The theoretical background is to better capture under what conditions the digitally transformed home office can improve Telecommunication employees' job well-being and job productivity. Adaptive Structuration Theory (AST) was developed by DeSanctis and Poole in 1994. This theory looks at how the technology is designed and how the technology is used and interpreted by the end user. Despite it being originally a group-level analysis theory, we argue it is also relevant for an individual level of analysis.

It goes beyond the technocentric view of technology use (Rioe & Leonardi, 2013) in which the technology has a determining role in predicting changes inside companies and the human-centric perspective in which individuals' interpretations and agency are only considered (Zammuto, et al., 2013). From the AST perspective, individuals, and organisations using technology for their work dynamically create perceptions about the role and utility of the technology, and how it can be applied to their activities. These perceptions can vary widely across individuals and organisations. They influence how digital tools are used and appraised and consequently mediate their impact on individuals and organisations outcomes.

The theory is relevant to this study because it explains the use and effects of digital communication for the use in organisation. It also focuses on the dynamic relationship between the structure provided by virtual media that is document, information sharing, and how those structures are used by the telecommunication employees. The outcomes of virtual media use in employee performance are ultimately contingent upon how structures are appropriated. This shows that in complex systems, technology and organisational structures co-evolve, and users adapt technology to their needs, creating shared meaning about the role and utility of technology in various settings. The theory can be employed in telecommunication companies to explore how the companies produce, reproduce and transform their services and operations through social interaction across time and space.

The theory emphasises the flexibility of organisational structures in response to dynamic environments. In the context of virtual media, which often introduces new communication dynamics and challenges, understanding how the organisational structure adapts is crucial. As telecommunication employees increasingly rely on virtual platforms, adaptive structural theory can help analyse how these companies adjust their hierarchical, communication and decision-making structures. This is essential for enhancing job performance in the evolving landscape of remote work. Exploring the application of adaptive structural theory allows researchers to investigate how these companies respond to the demands of virtual media, shaping policies and practices that impact job performance. It provides a framework to assess the alignment between organisational structures and the requirements of effective communication and collaboration in virtual environment.

Empirical Review

Madueke, et al., (2017) surveyed the challenges and prospects of implementing E-Administration in Nigeria: An explanatory discourse. The paper was an explanatory discourse on the prospects of implementing the Electronics Administration in Nigeria and some of the drawbacks to it. Alarming ICT illiteracy rate, epileptic power supply, high cost of purchasing computer gadgets, cyber-crime, and lack of adequate manpower were among others identified as the major challenges to e-administration in Nigeria. This paper suggested mass ICT education, the establishment of e-administration implementation committees in both federal and state ministries and parastatals, the establishment of a ministry for ICT Affairs, provision of necessary ICT infrastructures and cyber security as the panacea to the challenges confronting e-administration in Nigeria.

Itigihse and Akpaetor (2014) carried out research on digital media and information dissemination in tertiary institutions in Akwa Ibom State, Nigeria. This study sought to determine the extent to which electronic media (e-mail, voice-mail, picture message. and live calls) influence organizational communication in tertiary institutions in the study area. The study adopted the descriptive survey design. Four specific objectives and a research question were raised and translated into a research hypothesis for testing at a .05 level of significance.

A researcher-made instrument called the Digital Media Interaction Scale (DMIS) with a reliability coefficient of .87 using Cronbach Alpha was 752 respondents representing 10% of the study population was used. They were selected using stratified and random sampling techniques where the five government-owned tertiary educational institutions in the study area formed strata. Data collected were analysed using percentages and Analysis of Variance (ANOVA). The results show that digital communication media have significant influence, and ensure more effective and transactional organizational communication at diverse degrees of intensity and reach depending on authority structure and line staff within the institutions examined.

Hult and Brystrom (2021) researched challenges to learning and leading the digital workplace. Digitalization does not only transform material constructions of workplaces and work but also social constructions for employees' interaction and learning at work. The study explored emerging challenges related to the digitalisation of workplaces aiming for an understanding of the changing prerequisites for working and competence. The findings from a small qualitative exploratory study illustrate the complexity of the development of workplaces, characterised by strong but diffuse relationships between people, technology, and work practices. The study argued that in the development of digital workplaces, a sole focus on information systems as new technology, along with training and education on their functionality is insufficient. First, the demand for new competencies in the workplace calls for understanding learning practices in everyday digital work. Second, leading the transition toward a digital workplace requires learning new leadership practices.

Shamsi, et al. (2021) did a study on employees' work-related well-being has become one of the most significant interests of researchers and organizations due to the COVID-19 pandemic. This study examines how job characteristics such as mental load and team support, and technology-related factors such as perceived ease of use, perceived usefulness, and technology acceptance, impact employees' work engagement as a dimension of work wellbeing. Data were collected through a sample of 610 academic employees from three Norwegian universities after COVID-19 restrictions were implemented. The structural model estimation showed that mental load, perceived team support, and technology acceptance were significantly related to work engagement. It also showed that perceived usefulness, perceived ease of use, and mental load were significantly related to technology acceptance. Other findings showed that technology acceptance partially mediates the relationship between job characteristics and work engagement, and fully mediates the relationship between technology-related perceptions and work engagement.

Methodology

The research design adopted for this study was the descriptive survey design. The population of this study consisted of the IHS Tower and ZTE Nigeria Limited workers (staff) in Lagos state. According to the telecommunication companies Administrative Officers in 2023, the total population of IHS Tower is 600 and ZTE Nigeria Limited is 185. The total population of IHS Tower and ZTE Nigeria Limited staff is 785 (Seven hundred and eighty-five). To obtain the required sample size of 785 using Krejcie and Morgan Table, the sample was 254. While the sample size for interview schedule is four (4) key managers of the two telecommunication firms. Two sampling methods were used by the researcher namely: purposive sampling and multi-stage sampling. Data for This study obtained using copies of questionnaire and interview guide. Data were analysed using the descriptive and inferential statistical analysis. In other

words, contingency tables were used to present data obtained from the questionnaire using a weighted mean score (WMS). In scoring data from the four-point Likert scale questions in the instrument, responses to the items were weighted. The criterion weighted mean score (CWMS) was established at 2.50, (i.e., 4 + 3 + 2 + 1 = 10) $\div 4 = 2.5$.

The 2.5 points was used as the criterion for a decision on the responses to each item for those items that used the four-point Likert scale format. Hence, any mean response which is equal to or more than 2.50 was seen as positive while any mean response less than 2.50 was considered negative. Also, data collected were analysed using qualitative methods which were presented and analysed entirely in verbal terms, and conclusions were drawn from there. This method of analysis was to ensure easy comprehensibility. While the interviews were analysed strictly in a qualitative manner which adopted the explanation-building technique in summarizing the responses obtained from the interviewees. A brief analytical discussion was made for each of the research questions based on the result obtained from the response as indicated in the questionnaire administered. However, the interview responses were analysed descriptively with Explanation Building Technique (EBT). The Pearson Product Moment Correlation Coefficient was used to test the hypotheses.

Results and Discussions

Table 4.5 Affirmation of Teleworking in the Company by of Respondents

Option	Frequency	Percentage (%)
Yes	253	100
No	0	0
Total	253	100

Data in Table 1 show that all the respondents concurred that their companies telework.

Table 2: Ways Telecommunication Employees of IHS Tower and ZTE Nigeria Limited
engage Job Performance using Virtual Media

Items	SA	А	D	SD	Total	Weighted	Decision
						Total (fx)	
My company employees	192	48	11	2			
engaged in job performance by	(768)	(144)	(22)	(2)	936	3.70	Agreed
replacing work plans and							
related procedures to fit the							
new reality using virtual media							
In my company, employees	159	83	6	5			
clarified priorities and	(636)	(249)	(12)	(5)	902	3.57	Agreed
deprioritise work that is not							
essential or realistic under							
current circumstances using							
virtual media							
My company breaks up larger	70	165	18	0			
teams into smaller cross-	(280)	(495)	(36)	(0)	811	3.21	Agreed
functional ones, each with a							
clear mission and reporting							

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E1101		1	•		1	CHIC T	1.70
Grand Mean					827	3.27	Agreed
overstretched team							
stretched workers to							
potentially re-deploy under-	(516)	(336)	(18)	(3)	873	3.45	Agreed
mapping among the workers to	129		9	3			
My company does a skill-							
colleagues respect it							
ensures that managers and							
availability for work and	(356)	(474)	(8)	(9)	847	3.35	Agreed
common system to signal	89	158	4	9	0.15		
My company agrees on a	0.0	1 50		0			
workers							
descriptive feedback to							
ensures timely, regular and	(580)	(279)	(14)	(8)	881	3.48	Agreed
My company provided data,			7	8	001	2 40	
conversations.	145	02	7	0			
sensitive performance							
and video-enabled calls for							
getting substantive work done							
offline time is needed for	(768)	(156)	(18)	(0)	942	3.72	Agreed
My company recognised that			9	0	0.40		
are easy to implement	100		0	0			
line, where directions and tasks							
1. 1. 1							

Table 2 shows that the ways the telecommunication employees of IHS Tower and ZTE Nigeria Limited engage in job performance using virtual media were through replacing work plans and related procedures to fit the new reality, clarified priorities, agreed on common system to signal availability for work, break up larger team into smaller cross-functional ones with clear mission and reporting line, provided data to ensure timely, regular and descriptive feedback, and did a skill-mapping among the workers to potentially under stretched workers.

Table 3 Potentials of Virtual Media in Job Performance of Telecommunication
Employees of IHS Tower and ZTE Nigeria Limited

1 2	6	,					
Items	SA	А	D	SD	Total	Weighted	Decision
						Total (fx)	
Connecting employees to end-	148	92	11	2			
consumers directly	(592)	(276)	(22)	(2)	892	3.53	Agreed
Facilitating various areas of	184	58	5	6			
marketing and public relations	(736)	(174)	(10)	(6)	926	3.66	Agreed
Establishing a professional	165	70	18	0			
identity and repetition in	(660)	(210)	(36)	(0)	906	3.58	Agreed
relevant communities							
Supports creativity, innovation,	152	99	2	0			
safety or service in the job	(608)	(297)	(4)	(0)	942	3.72	Agreed
performance							
Links to job performance by	193	45	7	8			
building and maintaining social	(772)	(135)	(14)	(8)	929	3.67	Agreed

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Table 2 reveals that t	les mot	antiala	of sim				0
Grand Mean					915	3.62	Agreed
employees							
communication process among							
and smoothen the	(476)	(366)	(24)	(0)	000	3.42	Agreed
•			(24)		866	3.42	Agroad
Enhances internal consistency	119	122	12	0			
increases job performance							
knowledge that conclusively							
to create, share and obtain	(756)	(174)	(8)	(9)	947	3.74	Agreed
Strengthens employees' skills	189	58	4	9			
over virtual media platforms	100	50	4	0			
-							
ties with colleagues and friends							

Table 3 reveals that the potentials of virtual media in job performance of telecommunication employees of IHS Tower and ZTE Nigeria Limited were connection of employees to end-consumers directly, facilitation of various areas of marketing and public relations, establishment of a professional identity and repetition in relevant communities, support of creativity, innovation, safety or service in the job performance, building and maintaining social ties with colleagues and friends, create, share and obtain knowledge that conclusively increase job performance, enhance internal consistency and smoothen communication process among employees.

of IHS Tower and ZTE Nigeria Limited Job Performance									
S/N	Items	SA	А	D	SD	Total	Weighted Total (fx)	Decision	
14.	Opens door to hacks,	158	89	6	0				
	viruses and privacy breaches	(632)	(267)	(12)	(0)	911	3.60	Agreed	
15.	More susceptible to	136	101	12	4				
	charges of discrimination, privacy violations and interference with	(544)	(303)	(24)	(4)	875	3.46	Agreed	
16.	employees' right Employees may spend an	180	65	2	6				
10.	inordinate amount of time on virtual media for personal reasons while at work	(720)		(4)	(6)	925	3.66	Agreed	
17.	Software, machines and	156	97	0	0				
	Internet can malfunction at any time	(624)	(291)	(0)	(0)	915	3.62	Agreed	
18.	Bad network can frustrate	203	45	5	0				
	virtual media	(812)	(135)	(10)	(0)	957	3.78	Agreed	
19.	Sarcastic comment is	184	59	8	9				
	easily mistaken for genuine one thus, causing miscommunication	(736)	(177)	(16)	(9)	938	3.71	Agreed	

Table 4: Virtual Media Constraints in Engagements of Telecommunication Employees
of IHS Tower and ZTE Nigeria Limited Job Performance

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	Grand Mean					907	3.58	Agreed
	deliberately							
	scrupulous elements	(556)	(306)	(18)	(3)	883	3.49	Agreed
21.	Prone to abuse by	139	102	9	3			
	communication needs, for instance during crisis							
20.	Interacting virtually does not solve all	93 (372)	158 (474)	0 (0)	9 (9)	855	3.38	Agreed

Table 4 reveals that the constraints of virtual media in engaging telecommunication employees of IHS Tower and ZTE Nigeria Limited in job performance were open door to hacks, viruses, privacy breaches, inordinate amount of time for personal reasons, software, machines and Internet malfunction, bad network, miscommunication and prone to scrupulous elements deliberately.

Interview Report

On how company ensures smooth employees job performance by using virtual media in IHS Tower and ZTE Nigeria Limited

This segment started with the knowledge of how IHS Tower and ZTE Nigeria Limited ensure smooth employees job performance by using virtual media. When asked, all the respondents stated that in today's digital world, companies are increasingly leveraging virtual media to ensure smooth employee job performance. Virtual media refers to communication and collaboration tools that allow individuals to work together remotely, despite being physically separated. By utilising virtual media, companies are able to keep their employees connected and engaged, regardless of their location. This not only enhances satisfaction and job performance. One of the respondents said that virtual media provides employees with real-time access to information and resources necessary for their job. Whether it is files, documents or training materials, employees can easily retrieve the information they need without any delays or hindrances. This ensures that employees are well-equipped and able to perform their tasks effectively.

Account in support of the above assertion, is the recognition of the respondent "B" who argued that virtual media facilitates seamless collaboration among team members, irrespective of their physical proximity. Through tools like video conferencing and instant messaging, employees can communicate and share ideas in real-time. This enhances teamwork, fosters innovation and ultimately improves job performance. Respondent "C" added that virtual media allow for efficient project management. Companies can use virtual project management tools to assign tasks, track progress and ensure timely completion of projects. This ensures that employees stay organised, focused and on track with their responsibilities, thus improving job performance.

Also, respondent "A" said that virtual media enable remote training and continuous learning opportunities. Companies can provide online training courses, webinars, and workshops, giving employees the chance to acquire new skills and knowledge. This not only enhances job performance but also boosts employee engagement and satisfaction. Respondents "C" stated that virtual media offer personalised feedback and coaching opportunities. Managers can provide timely feedback and guidance to employees through video calls, virtual meetings and instant messaging. This allows employees to address any performance issues or concerns promptly, leading to improved job performance. Respondents "A" added again that virtual

media foster a sense of connection and camaraderie among employees. Companies can utilise virtual team building activities, online forums and social media platforms to ensure that employees feel motivated and engaged. This sense of belonging positively impacts job performance and overall employee satisfaction.

Respondent "D" posited that virtual media enable companies to track and monitor employee performance effectively. Through virtual performance management tools, companies can set goals, track progress and provide performance assessments. This helps employees stay focused and aligned with company objectives, leading to improved job performance. Corroborating with This, respondent "D" agreed that virtual media allow for flexible working arrangements, such as remote work and flexible hours. By offering employees the option to work from home or choose their working hours, companies can promote worklife balance and increase employee productivity and job performance. Also, that virtual media enhance employee recognition and rewards. Through virtual recognition platforms, companies can acknowledge and appreciate employees' efforts and accomplishments. This boosts employee morale and motivation, driving improved job performance.

In response to the above line of reasoning, respondent "C" pinpointed that virtual media support employee wellbeing and reduces stress levels. With virtual wellness programmes and resources, companies can help employees maintain a healthy work-life balance and manage stress effectively. This ultimately improves job performance and reduces burnout. Respondent "A" said that virtual media enable efficient and transparent communication between employees and management. With virtual town halls, company-wide webinars and online suggestion boxes, employees can voice their opinions and concerns, leading to improved job performance and a more inclusive work culture. The virtual media allow for better recruitment and onboarding processes. Companies can conduct virtual interviews, provide online training modules and utilise virtual on-boarding platforms to ensure new hires are integrated smoothly into the company. This sets a strong foundation for job performance from the beginning. All the respondents added that virtual media plays a vital role in ensuring smooth employee job performance. By leveraging the power of virtual communication and collaboration tools, companies can enhance productivity, foster engagement and create a positive work environment. As technology continues to advance, so too will the possibilities for utilising virtual media to improve job performance, making it an essential component of modern companies.

On the impacts of virtual media in job performance in IHS Tower and ZTE Nigeria Limited

The section started with the understanding on the impact of virtual media in job performance in HS Tower and ZTE Nigeria Limited. When asked, all the respondents agreed that virtual media have had significant impacts on job performance within the telecommunication companies. In This digital age, virtual media have provided telecommunication professionals with enhanced tools and platforms to perform their duties efficiently and effectively. Virtual media have improved communication and collaboration among team members. With virtual platforms such as video conferencing, instant messaging and project management tools, telecommunication professionals can easily connect and share information in real-time, regardless of their physical locations. This has led to enhanced teamwork and increased productivity within telecommunication companies.

The respondent "A" affirmed the above assertion by stating that virtual media have ensured access to a wealth of information and resources. IHS Tower professionals can now

access online databases, research materials and company-specific websites to gather the necessary data for their job. This has resulted in more informed decision-making and better analysis of market trends, leading to improved performance in the IHS Tower. More so, virtual media have facilitated training and development. IHS Tower provides virtual training sessions and webinars to their employees, ensuring continuous learning and skill enhancement. This has contributed to boosting job performance, as employees can acquire new knowledge and stay updated with the latest technological advancement in their field.

Respondent "C" noted that virtual media also played a crucial role in enhancing customer service within ZTE Nigeria Limited. Through virtual platforms, professional can address customer queries and provide support efficiently, leading to increased customer satisfaction. These employees can effectively meet customer expectations and build strong relationships with clients. Additionally, respondent "D" stated that virtual media allowed for remote work opportunities. ZTE Nigeria Limited no longer needs to be physically present in the office to perform their tasks. This flexible work arrangement has improved work-life balance, reduced commuting time and expenses and boosted employee morale. Consequently, ZTE Nigeria Limited has witnessed increased job satisfaction and productivity among their workforce.

Furthermore, respondent "A" posited that virtual media have facilitated data analysis and reporting. Employees can collect and analyse vast amounts of data through virtual tools, enabling them to identify patterns and trends. This data-driven approach enhances decisionmaking and strategic planning in IHS Tower, leading to improved job performance and increased competitiveness within the industry. Also, in terms of efficiency, virtual media have streamlined processes and reduced administrative tasks. IHS Tower employees can utilise virtual tools for project management, document sharing and task tracking, eliminating the need for manual paperwork and minimising errors. This has resulted in increased efficiency, allowing employees to focus on high-priority tasks and perform their roles more effectively.

Respondent "D" averred that virtual media have expanded market reach and customer base for IHS Tower. Through online marketing, social media and virtual advertising platforms, businesses can promote their products and services to a global audience. This increased visibility has led to greater business opportunities and growth, ultimately impacting job performance positively. Virtual media have had a profound impact on job performance within telecommunication companies. From improve communication and collaboration to enhanced customer service and market reach, virtual media have revolutionised the way employees in this industry operate. As technology continues to advance, telecommunication employees adapt to these changes, leveraging virtual media to enhance their skills and drive success in their respective roles.

On the challenges faced by employees in using virtual media for job performance in IHS Tower and ZTE Nigeria Limited

The segment hinges on the challenges faced by employees in using virtual media for job performance in IHS Tower and ZTE Nigeria Limited. When asked, majority of the respondents agreed that while virtual media offer numerous benefits for job performance in telecommunication companies, it also presents some challenges for employees. These challenges stem from various factors, including technological difficulties, communication barriers and the need for adaptability in an ever-evolving digital landscape. Respondent "A" opined that technological difficulties pose a significant challenge for employees using virtual media. Issues such as poor Internet connectivity, software glitches, and hardware limitations

can hinder job performance. For example, unstable Internet connections can disrupt video conferences or slow down file transfers, resulting in delays and decreased productivity. Moreover, there may be a learning curve associated with using virtual media tools and platforms. Employees need to familiarise themselves with the features and functionalities of virtual communication tolls, which can require time and effort. This learning process may pose a challenge for less tech-savvy individuals who may struggle to adapt to new technologies.

Respondent "B" stated that lies are another potential for communication barriers when using virtual media. Non-verbal cues and body language are not as easily perceived in virtual interactions, making it challenging to gauge understanding or attractiveness. Miscommunication or misinterpretation of message can lead to misunderstandings and impact collaboration among team members. Also, the lack of face-to-face interaction can result in a sense of isolation among employees. Without the opportunity for casual conversations or inperson team-building activities, employees may miss out on building strong relationships and fostering a sense of camaraderie. This can negatively impact motivation, engagement and overall job satisfaction.

Additionally, respondent "C" streamlined that virtual media can blur the boundaries between work and personal life. With remote work becoming more common, employees may struggle to separate work tasks from personal responsibilities, leading to burnout and decreased job performance. The constant availability and expectation to be connected can create a worklife imbalance. The need for adaptability is another crucial challenge for employees using virtual media. As technology advances and new tools and platforms are introduced, employees must continuously update their skills and knowledge. Keeping up with these changes can be overwhelming, especially for employees who may be resistant to change or have limited access to resources for employees' development.

Respondent "D" added that security concerns also arise when using virtual media for job performance, companies deal with sensitive data and customer information and virtual media platforms may be susceptible to cyber-attacks or data breaches. Employees must be vigilant and knowledgeable about security protocols to protect themselves and the company from potential threats. Furthermore, virtual media can sometimes hinder collaboration and teamwork in-person meetings often provide a more dynamic environment for brainstorming, problem-solving and fostering creativity. Virtual interactions may not always replicate this level of engagement, making it challenging for employees to collectively contribute to projects or initiatives. Another challenge is the potential foe distractions when using virtual media. Employees working remotely may face interruptions from household members, pets, or other external factors. This can disrupt concentration and hinder productivity. Employers must establish clear guidelines regarding work environment expectations to minimise distractions and ensure effective job performance.

Respondent "A" narrated that cultural and language barriers can pose challenges in virtual communication. Telecommunication companies often have a diverse workforce and differences in language proficiency, accents or cultural norms may impact understanding and effective communication. Employers should provide resources to bridge these gaps and ensure effective collaboration. The reliance on virtual media according to respondent "B" can make employees accessible around the clock, leading to an expectation of constant availability. This

can cause high levels of stress and may affect job performance and work-life balance. Employers must set clear boundaries and establish policies to prevent employee burnout. While virtual media brings numerous advantages, it also presents challenges for employees in telecommunication companies. These challenges range from technological difficulties and communication barriers to the need for adaptability and potential security concerns. Employers must address these challenges by providing training and support, fostering effective communication strategies, and promoting work-life balance to ensure optimal job performance in the rapidly evolving virtual landscape.

Discussion of Findings

The data presented in tables 2 to 4 and interview reports provided the platform for this discussion which was purely done in relation to the research questions.

Research Question 1: What are the ways telecommunication employees of IHS Tower and ZTE Nigeria Limited engage in job performance using virtual media?

The data revealed that the ways the telecommunication employees of IHS Tower and ZTE Nigeria Limited engage in job performance using virtual media were through replacing work plans and related procedures to fit the new reality, clarified priorities, agreed on common system to signal availability for work, break up larger team into smaller cross-functional ones with clear mission and reporting line, provided data to ensure timely, regular and descriptive feedback, and did a skill-mapping among the workers to potentially under stretched workers. Data from the interview extract revealed that virtual media facilitates seamless collaboration among team members, irrespective of their physical proximity. Through tools like video conferencing and instant messaging, employees can communicate and share ideas in real-time. This enhances teamwork, fosters innovation and ultimately improves job performance.

This finding upholds the study of Shamsi, et al., (2021) on employees' work-related well-being has become one of the most significant interests of researchers and organizations due to the COVID-19 pandemic. The study found out that mental load, perceived team support, and technology acceptance were significantly related to work engagement. It also showed that perceived usefulness, perceived ease of use, and mental load were significantly related to technology acceptance. Also, that technology acceptance partially mediates the relationship between job characteristics and work engagement, and fully mediates the relationship between technology-related perceptions and work engagement.

Research Question 2: What are the potentials of virtual media in the job performance of telecommunication employees of IHS Tower and ZTE Nigeria Limited?

The result showed that the potentials of virtual media in job performance of telecommunication employees of IHS Tower and ZTE Nigeria Limited were connection of employees to endconsumers directly, facilitation of various areas of marketing and public relations, establishment of a professional identity and repetition in relevant communities, support of creativity, innovation, safety or service in the job performance, building and maintaining social ties with colleagues and friends, create, share and obtain knowledge that conclusively increase job performance, enhance internal consistency and smoothen communication process among employees. From the interview extract, the result revealed that virtual media have had significant impacts on job performance within the telecommunication companies. In This digital age, virtual media have provided telecommunication professionals with enhanced tools and platforms to perform their duties efficiently and effectively. This finding corroborates with the study of ItigIHSe and Akpaetor (2014) on digital media and information dissemination in tertiary institutions in Akwa Ibom State, Nigeria. The study showed that digital communication media have significant influence, and ensure more effective and transactional organizational communication at diverse degrees of intensity and reach depending on authority structure and line staff within the institutions examined. This finding aligns with Shamsi, et al., (2021) study on employees' work-related well-being has become one of the most significant interests of researchers and organizations due to the COVID-19 pandemic. The study revealed that perceived usefulness, perceived ease of use, and mental load were significantly related to technology acceptance. The technology acceptance partially mediates the relationship between job characteristics and work engagement, and fully mediates the relationship between technology-related perceptions and work engagement.

Also the adaptive structural theory that this study anchored on give validation to the finding. The adaptive structural theory emphasises the importance of flexible organisational structures. In the dynamic virtual media landscape, this flexibility enables telecommunication employees to adapt swiftly to evolving tasks and challenges. The theory recognises the need for organisations to build a capacity for change, which is essential for telecommunication companies leveraging virtual media to stay competitive and responsive to market demands.

Research Question 3: How have virtual media constrained the engagements of telecommunication employees of IHS Tower and ZTE Nigeria Limited' job performance?

The data revealed that the constraints of virtual media in engaging telecommunication employees of IHS Tower and ZTE Nigeria Limited in job performance were open door to hacks, viruses, privacy breaches, inordinate amount of time for personal reasons, software, machines and Internet malfunction, bad network, miscommunication and prone to scrupulous elements deliberately. Data from the interview extraction showed that while virtual media offer numerous benefits for job performance in telecommunication companies, it also presents some challenges for employees. These challenges stem from various factors, including technological difficulties, communication barriers and the need for adaptability in an ever-evolving digital landscape.

Findings from interview data revealed that to improve ICT management it is important to develop university guidance material, detangle the notion of responsibility, establish boundaries around expectations of responsibility, provide more education, and develop positive working practices. Thematic analysis and subsequent quantification of 654 policy documents revealed gaps in the university policy context on the topic of digital communication.

The largest proportion of policies focused on privacy and security, followed by media representation of the university (e.g., throughout branding), then bullying, harassment, and discrimination. We make recommendations for policy and practice improvement. It would be beneficial for future research to assess the impact of enacted digital communication management strategies (e.g., policy interventions) on worker well-being and work practice outcomes.

The reviewed study and the current study are related as both focus on managing digital communication and ICT use in an organisation. But whereas the reviewed study focused on the practice and policy strategies for managing digital communication and ICT use in Australian universities, the current study focuses on virtual media and job performance by telecommunication employees of IHS Tower and ZTE Nigeria Limited in Lagos State, Nigeria.

The dissimilarity is in the objectives, scope, and methods because the present adopt objectives, scope, and methodological approaches different from the reviewed study.

This finding is in tandem with Madueke, et al., (2017) study on "challenges and prospects of implementing E-Administration in Nigeria: An explanatory discourse" which found out that implementing the Electronics Administration in Nigeria and some of the drawbacks to it. Alarming ICT illiteracy rate, epileptic power supply, high cost of purchasing computer gadgets, cyber-crime, and lack of adequate manpower were among others identified as the major challenges to e-administration in Nigeria. This paper suggested mass ICT education, the establishment of e-administration implementation committees in both federal and state ministries and parastatals, the establishment of a ministry for ICT Affairs, provision of necessary ICT infrastructures and cyber security as the panacea to the challenges confronting e-administration in Nigeria.

The study of Hult and Brystrom (2021) on "Challenges to learning and leading the digital workplace" aligns with This study finding as their study found out that a small qualitative exploratory study illustrate the complexity of the development of workplaces, characterised by strong but diffuse relationships between people, technology, and work practices. Also, that in the development of digital workplaces, a sole focus on information systems as new technology, along with training and education on their functionality is insufficient. First, the demand for new competencies in the workplace calls for understanding learning practices in everyday digital work. Second, leading the transition toward a digital workplace requires learning new leadership practices.

Adaptive structural theory examines how organisations adapt their structures and processes to cope with technological changes. In the context of virtual media constraints, the theory suggests that organisations need to adapt their structures and processes to address the identified risks and challenges. For example, organisations can invest in robust cyber-security measures to mitigate the risk of hacks and privacy breaches. They can also provide training and support to employees to improve their digital literacy and mitigate the challenges arising from software, machines and internet malfunctions. By adapting their structures and processes, organisations can create an environment that enables telecommunication employees to effectively use virtual media for job performance, despite the constraints.

Conclusion

The study illuminates the proactive strategies adopted by telecommunication employees, emphasising the need for organisational flexibility, efficient collaboration and strategic utilisation of virtual media to enhance job performance in the evolving landscape of remote work. The virtual media facilitate seamless collaboration among team members, irrespective of their physical proximity, underscores the transformative impact of technology on fostering connectivity. The positive influence of virtual media in breaking down geographical barriers, thereby enabling teams to collaborate efficiently and leverage diverse skill sets.

This study highlights the significant potential of virtual media in enhancing job performance among telecommunication employees, offering avenues for direct connections with end-consumers, facilitating marketing and public relations activities and fostering creativity and innovation. Recognising and actively harnessing these potentials can contribute to a more effective and dynamic telecommunication workforce, ultimately benefiting both employees and the organisation. The study underscores the challenges posed by virtual media in the telecommunication sector, ranging from cyber-security threats and privacy breaches to the potential misuse of work hours for personal reasons. Addressing these constraints requires a multifaceted approach, emphasising stringent cyber-security measures, clear usage guidelines, and robust support systems to navigate technological difficulties and communication barriers, ultimately optimising the effectiveness of telecommunication employees in their job performance.

Recommendations

Based on the result of the study, the following recommendations were made:

- 1. Organisations should invest in training programmes that focus on effective collaboration within cross-functional teams, leveraging virtual media to maximise productivity.
- 2. Telecommunication companies should leverage on the potential of virtual media to strengthen direct connections with end-consumers, expanding its role in marketing and public relations efforts, fostering a culture that supports creativity and innovation, and exploring ways to enhance safety and service aspects in job performance.
- 3. Organisation should implement robust cyber-security measures to mitigate the risk of hacks and viruses, ensuring strict privacy protocols, providing clear guidelines on appropriate use of virtual media during works hours, addressing technological difficulties through comprehensive support systems, and fostering open communication channels to overcome barriers and enhance job performance among telecommunication employees.

References

- Bell, B. S., & Kozlowski, S. W. (2002). A typology of virtual teams: Implications for effective leadership. *Group & Organisation m Management*, 27(1), 14 49.
- Cascio, W. F. (2014). Managing a virtual workplace. Academy of Management Executive, 14(3), 81–90.
- Duarte, D. L., & Snyder, N. T. (2016). *Mastering virtual teams: Strategies, tools, and techniques that succeed* (3rd ed.). Wiley.
- Havey, C. S. (Eds.). (2014). Virtual teams that work: creating conditions for virtual team effectiveness. San Francisco Jossey-Bass.
- Hoopes, D., G., Madsen, T., L., & Walker, G., (2014). Guest editors' introduction to the special Issue: Why is there a resource-based view? Toward a theory of competitive heterogeneity. *Strategic Management Journal*, 24, 889 – 902.
- Hult, H. V., & Bystrom, K. (20210). *Challenges of learning and leading the digital workplace*. Routledge.
- Itighise, A. E., & Akpaetor, F. B. (2014). Digitam media and information dissemination in tertiary institutions in Awka-Ibom state, Nigeria. *Journal of Information Engineering and Application*, 4(11), 101 106.
- Kirkman, B. L., Rosen, B., Tesluk, P. E., & Gibson, C. B. (2016). The impact of team empowerment on virtual team performance: The moderating role of face-to-face interaction. *The Academy of Management Journal*, 47(2), 175-192.

- Madueke, O., Nwosu, C., & Uduma, D. (2017). Challenges and prospects of implementing eadministration in Nigeria: An explanatory discourse. *International Journal of Social Science and Humanities Research*, 5(2), 424 – 429.
- Majchrzak, A. Malhotra, A. Stamps, J. & Lipnack, J. (2012). Can absence make a team grow stronger? *Harvard Business Review, May*, 137-144.
- Olivier, S. (2019). Managing virtual teams. Asian Development Bank (ADB), Knowledge Solution Article Manila, 1-6.
- Peters, L. M. & Manz, C. C. (2017). Identifying antescedents of virtual team collaboration. *Team Performance/Management*, 13, 117-129.
- Shamsi, M., Iakovieva, T., Olsen, E., & Bagozzi, R. P (2021). Employees' work-related wellbeing during COVID-19 pandemic: An integrated perspective of technology acceptance model and JD-R theory. *International Journal of Environmental Research and Public Health*, 18, 2 22.
- Zaccaro, S. & Bader, P. (2014). E-Leadership and the challenges of leading ETeams: Minimizing the bad and maximizing the Good. *Organizational Dynamics*, *31*, 377–387.