



# TELECOMMUTING AND ORGANIZATIONAL EFFECTIVENESS IN EDUCATIONAL SECTOR: LESSONS FROM COVID 19 LOCKDOWN

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## Abstract

*This study examines the extent to which telecommuting affects the effectiveness of institutions of higher learning. Perceived ease of use and perceived usefulness were adopted as the dimensions of telecommuting which affects organizational effectiveness, the study adopted a cross sectional survey and 50 respondents each were selected from five institutions of higher learning (University of Port Harcourt, Rivers state university, Ignatus Ajuru University, Captain Elechi Amadi Polytechnic and Ken Saro Wiwa Polytechnic). Structural equation modeling was used to determine the effect of the predictor variable on the criterion variable as well as the model fitness for the study. The findings reveal that perceived usefulness had more effect on effectiveness than perceived ease of use. The study further recommends governments conscious action towards the promotion of ICT use within institutions of higher learning and recruitments should also capture the use of telecommuting devices so that more ICT savvy candidates are employed.*

**Keywords:** *Telecommuting, Perceived ease of use, Perceived usefulness, Organizational Effectiveness, ICT*

## Introduction

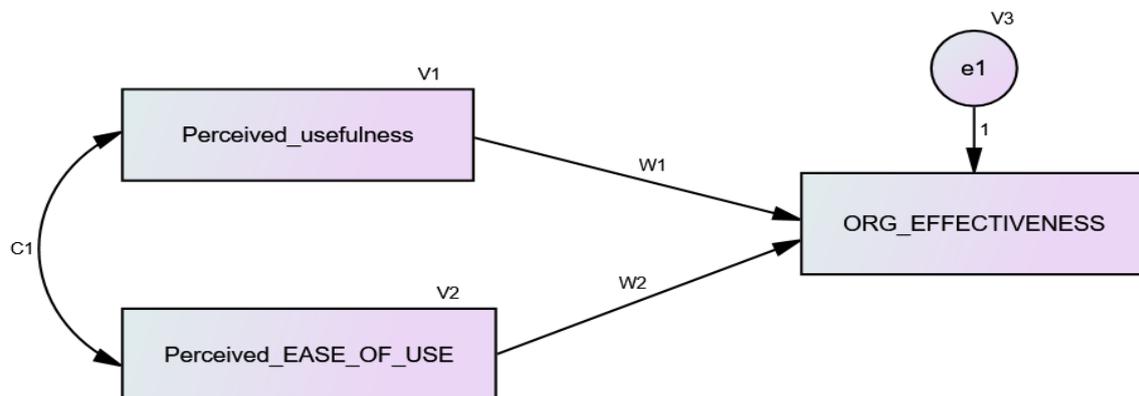
Organizational effectiveness is a broad concept encompassing multiple constructs for measuring organizational performance (Lee & Choi, 2003). It can be described as a long-term ability to consistently achieve firms operational and strategic goals (Fallon & Brinkerhoff, 1996). Though it has been hard to describe what exactly constitutes organizational effectiveness, it has been widely accepted that organizational effectiveness is the extent to which an organization achieves what it aims to achieve within its vision, mission, and objectives (Rahimi & Noruzi, 2011). Due to its complex, paradoxical and multidimensional nature, an organization can be termed effective by one criterion and ineffective by another. Mott (2002) in his opinion described organizational effectiveness as “the ability of an organization to mobilize its resources, for action, production, and adaptation”. In relative development, effective organizations produce better quality outputs and are resilient in the face of adversities such as the covid 19 pandemics. Furthermore, organizational theory has produced a variety of measures relating to organizational effectiveness, such as productivity, adaptability; and efficiency developed (Mott, 2002). These measures are the most frequently and most widely used in various models of perceived organizational effectiveness. One of the critical times when the effectiveness of organizations is put to test is during hardship, pandemic, and situations that could ordinarily make firms less competitive. The educational sector today have passed through such times when they would either become effective in achieving their goals or go out of business. Because of the wave pulled by the pandemic, a lot of schools were shut down except those who were ready to meet the challenges of the time. Authors such as Anantadjaya, (2009), Isoraite (2005) and a host of others have measured effectiveness using variables such as productivity, adaptability, involvement, continuity, responsiveness to external stakeholders, and flexibility. Because of the nature of times in which this study was conducted, the researcher's interest is on how such organization effectiveness would be brought about by telecommuting within the educational sector.

Telecommuting, as a concept has often been substituted with terminologies such as virtual work, telework, remote work, work from home, etc. The form and terminology varies, but in a technologically enabled, global business environment the practice of working away from the office is commonplace. Telecommuting in particular has been defined as a work practice whereby employers enable employees substitute some or all of their regular working hours to work away from the office, often at home, performing work tasks and communicating with others via technological means especially in meetings and classes for those in academics (Allen, Golden, & Shockley, 2020). Telecommuting is both popular and controversial. Telecommuting initially gained popularity and recognition as a way of improving the pattern of traffic, reducing energy consumption, creating ease of monitoring and control, enhancing learning, recruitment of highly specialized workers and killing the barrier of distance. Today the practice is offered to a wide range of workers, often as a means to manage work and non-work roles (Allen et al., 2020). A 2014 study found that 67% of U.S. companies offered the option of occasional telecommuting, up from 50% in 2010 (Matos & Galinsky, 2014). About 20% of the U.S. working adult population reports telecommuting at least once a month, and of these individuals, 84% telecommute at least once per week (Ogboso & Amah, 2016). Over 80% of schools in Europe, America, China, Russia and a host of others still maintained online classes during the Covid 19 pandemic (Allen et al., 2020) while so many schools suffered shutdown in Nigeria (Olajide, 2020). Perhaps due to its pervasiveness and visible contrast to traditional, in-office work, there is debate regarding the implications of telecommuting for human capital outcomes such as employee performance, commitment, and organizational

culture. In some third world countries, some public schools are still in doubt regarding telecommuting via e-learning for semester and term sessions, while a few public schools and very expensive private schools are considering it a new norm that must be adopted and have effectively utilized zoom, googlemeet and a whole lot of video conferencing enabled infrastructure, some have continued to blame the government whom they believe have not done enough to develop learning (Olajide, 2020).

Telecommuting cannot be carried out effectively without the support of Information technology (IT). IT offers the potential for substantially improving white collar performance (Curley, 1984). But performance gains are often obstructed by users' unwillingness to accept and use available systems (Young, 1984). Because of the persistence and importance of this problem, explaining user acceptance has been a long-standing issue in MIS research (Swanson, 1987). Although numerous individual, organizational, and technological variables have been investigated, research have been constrained by the shortage of high-quality measures for key determinants of user acceptance of telecommuting technologies. Past research indicates that many measures do not correlate highly with system use (DeSanctis, 1983; Ginzberg, 1981; Srinivasan, 1985), and the size of the usage correlation varies greatly from one study to the next depending on the particular measures used (Swanson, 1982). In this study, we shall adopt the dimensions proposed by Davis (1989) which are perceived ease of use and perceived usefulness.

### Operational Framework



Amos version 20 output

### Research Hypotheses

H<sub>01</sub>: Perceived usefulness of telecommuting systems does not bring about organizational effectiveness

H<sub>02</sub>: Perceived ease of use of telecommuting systems does not bring about organizational effectiveness

### Theoretical Framework

This work is anchored on Social-technical systems theory (STS).

Socio-technical systems theory evolved through the collaboration of historians and sociologists that focused on the history of science. This led to a new academic specialty, self-

described as “sociologists of technology,” (Bijker, Hughes, & Pinch, 1989). Information System (IS) researchers look at problems starting from the technology perspective; therefore, they can consider themselves “technologists of society.” There are many overlaps between the sociology of technology and IS research. What is mostly considered in this work is the special skill set that IS brings, which is the ability to inform the design and implementation of technology systems in support of environmental sustainability. Socio-technical systems consist of components, which are social structures, and artifacts, which are technical elements that contribute directly or through other components to a common system goal.

Socio-technical system theory explains the interaction and interdependence between technological and social factors. It investigates the correlation between people, technology, and the general work environment, in order to create work in a way that enhances job satisfaction and increases productivity (Torraco, 2005). Researchers such as Trist and Bainforth (1951) are of the opinion that Socio-technical system theory was promoted initially to explain the paradox of improved technology but decreased productivity, the theory was also applied to the design of remote work. One of the principles of STS is minimal critical specification. Telecommuting provides telecommuters with the freedom to decide how and when to do their tasks (Gajendran & Harrison, 2007). Similarly, telecommuters have the responsibility to use their equipment and resources to carry out their responsibilities (Morganson, Major, Oborn, Verive & Heelan, 2010). This theory fits into this study because of the specific role technology has played and is still playing in the process of telecommuting in organizations. There has always been the social impact of every technical system. Thus, the adoption of this theory.

### **Perceived Ease of Use (PEOU)**

Perceived Ease of Use can be described as “the degree to which a person believes that using a technology will be free from effort” (Davis 1989). In the context of this study, Perceived Ease of Use refers to the extent to which users believe that their continued use of e-government is free of effort. If a system is relatively easy to use, individuals will be more willing to learn about its features and finally intend to continue using it. Studies indicate that Perceived Ease of Use is positively associated with continuance intention in the context of Web-based learning (Chiu & Wang, 2008).

Ease of use can also be regarded as User-centric conception. There are many prior kinds of study believing that perceived ease of use has an important impact on IT customer reception and usage behavior (Lin & Wang, 2012). Wang, Ngai, and Wei (2011) specify the perceived ease of use as a self-determining factor to examine the impact on the mobile hotel booking loyalty intentions of users. They revealed that perceived ease of use had a significant impact on the mobile hotel booking technology loyalty intentions of the users. They also discovered that compatibility had a major effect on perceived ease of use and comfort, and perceived ease of use had a major effect on loyalty and comfort. In this case, the users of telecommuting devices must first see it in a simplified form and believe they can make use of it before they would think of using it to impact on the lives of others.

### **Perceived Usefulness (PU)**

Perceived Usefulness refers to “the extent to which a person believes that using a particular technology will enhance her/his job performance,” (Davis, 1989). In technology acceptance model (TAM) framework, PU is hypothesized to be the direct predictor of behavioral intention (BI) to use the technology of interest such as telecommuting systems (Park, et al., 2014). Previous studies indicate that PU is positively associated with continuance intention in

the context of e-text (Baker-Eveleth & Stone, 2015; Stone & Baker-Eveleth, 2013), instant messaging (Wang, et al 2011), mobile service provider (Abbas & Hamdy, 2015) online travel services (Li & Liu, 2014) e-learning (Lin & Wang, 2012) blog learning (Tang, Tang, & Chiang, 2012), knowledge creation (Chou, Min, Chang, & Lin, 2009),

When proposing a technology acceptance model, Davis (1989) examined cognitive usefulness as the extent to which an information system can assist in improving performance for users. Perceived usefulness relates to the degree to which the customer believes the technology will increase their efficiency on the job. Therefore, if someone is impressed when they used a specific system, they found that job performance to some extent has been improved, that means this system has a greater influence of usefulness, and their attitude will change to a better direction. While Tang et al (2012) perceived usefulness is strongly related to user satisfaction and organizational effectiveness which we can also relate in this study. When those at the top of affairs within the academic industry realize how powerful telecommuting tools can be, that is understanding its usefulness and passing it down to the least person within the industry, it could most likely bring about organizational effectiveness.

### **Organizational Effectiveness**

Organizational effectiveness as discussed earlier is the foundation for economic prosperity, a prerequisite for national development and also an important indicator of organizational competitiveness. The process represents the functions or primary activities engaged in by all category of managers. These functions are typically labeled planning, organizing, leading, and controlling. Each organization has certain objectives and most times, the main objective is to earn profits by increasing performance (Shaukat, 2012). Sushil and Agrawal (2013) stated that organizations composed five major components, organizational structure, & corporate culture, management & business processes, organization's strategy, individuals and roles. These components are in stable condition, called equilibrium, as long as no significant changes occur in the environment or in any of the components. However, as soon as a significant change occurs, the systems become unstable and it is necessary to adjust some or all of the internal components since all are inter-related. Effectiveness as stated by Wheelen and Hunger (2000) is an end result of an activity and the accumulated end result of all the organization's work process and activities. Leaders measure and control organization effectiveness because it leads to better asset management, and increased ability to provide customer value. The effectiveness of an organization does have a great impact on its reputation.

### **Telecommuting and Effectiveness of Educational Sector**

Many organizations today are adopting telecommuting to avoid office/class congestion and make use of their flex-time to be productive. The word telecommute means to work from home, communicating with your colleagues, students and others by email, zoom, Google meet, telephone, emails, etc (Hornby et al., 2020). A teleworker could use teleconferencing to hold meetings and classes, i.e., a conference or discussion is held where members from different locations are able to interact using on-line tools like Zoom, Goole Meet, WhatsApp and other communication means, such as video and telephone. Telecommuting thus involves performing work from home or another remote location with the use of computers and telecommunicating equipment (Daft, 2010). The presence of the Third-wave has taken the front stage globally, the western world and global south alike. Electronic learning has surpassed the traditional form of learning adopted the educational sector before the crisis. In the 1990s, organizations usually utilized a particular room for holding video conferences, equipped with television cameras, but today, one can participate in

videoconference without leaving office, due to the modern computers and telephones with integrated camera and microphones (Robbins, Timothy and Seema, 2008).

As a result of the upgrade, telephones and computers with in-built cameras and microphones facilitated the workflow, so learning can now be carried out from home as it would be in a class setting, but with less stress. Nigeria has over 92.3 million internet users, and the number is expected to increase to 187.8 million in 2023. This shows that internet penetration in the Nigerian population was 47.1% in 2018 and is expected to grow to 84.5 per cent in 2023 (Clement, 2019). Nigeria was ranked as the 47th in Saharan Africa and the 21st out of 65 global in terms of internet freedom (Freedom House Index, 2019). Internet usage in Nigeria is of great advantage to telecommuting in learning and teaching. The mobile phone internet is common among Nigerians, with almost 50 million people accessing mobile internet with smartphones (Clement, 2019). The use of internet, telephones and other social media, like zoom, Google class and meet, WhatsApp etc. make remote activities effortless and less stressful. Remote access allows the use of a computer system, telephone, email, etc., from another location by connecting with the electronic link, (Webster, 2003). Remote access makes lecturing from home effortless and enjoyable and enables the lecturer and students to interact as if they were in a regular classroom via Videoconferencing, Skype, Google Meet, WhatsApp video, Zoom app, etc.

These tools have made learning easy and fun. And their application for future learning purpose cannot be underestimated Nigerian educational system can facilitate online learning platforms that can enable it award degrees to students from all over the world. This would increase the financial base of these institutions and create room for uninterrupted learning alongside the reduction of the spread of the corona virus which is almost getting to the 4<sup>th</sup> wave.

## Methodology

In this study, a cross-sectional survey was adopted since the researcher is considering the impact of telecommuting on the performance of educational institutions. A purposive sample of 250 respondents was drawn (50 from each institution). Five institutions were considered namely, University of Port Harcourt, Rivers state university, Ignatius Ajuru University, Captain Elechi Amadi Polytechnic and Ken Saro Wiwa Polytechnic, all in Rivers state. Structural equation model was utilized in testing the hypotheses and examining the model fitness. This was done with the aid of SPSS and AMOS version 21

## Data Analyses and Findings

**Table 1. Respondents' institutions**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	UNIPORT	50	20.0	20.0	20.0
	RSU	50	20.0	20.0	40.0
	IAU	50	20.0	20.0	60.0
	Captain Elechi Amadi Poly	50	20.0	20.0	80.0
	Ken Saro wiwa Poly	50	20.0	20.0	100.0
	Total	250	100.0	100.0	

Here, we see 50 respondents each purposively selected from five institutions of higher learning (University of Port Harcourt, Rivers state university, Ignatius Ajuru University, Captain Elechi Amadi Polytechnic and Ken Saro Wiwa Polytechnic). All in River state.

**Table 2. Respondents' gender**

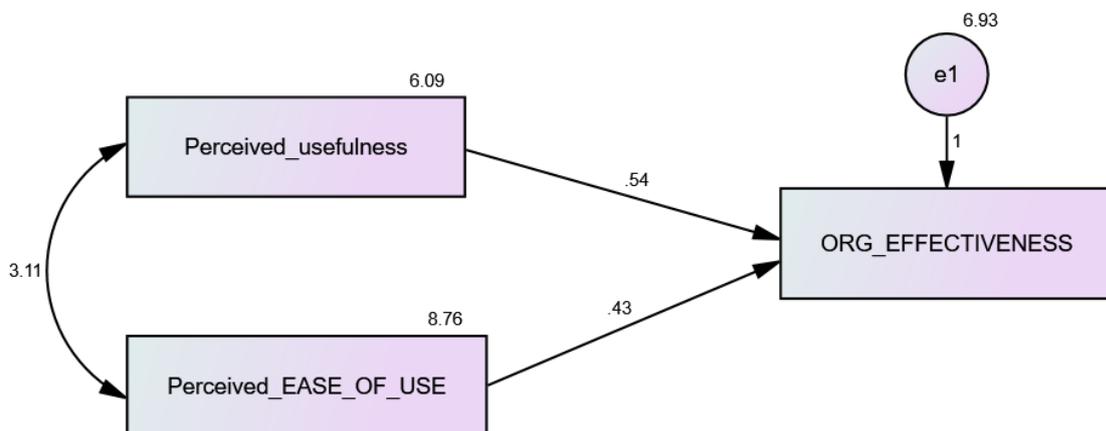
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	137	54.8	54.8	54.8
	FEMALE	113	45.2	45.2	100.0
	Total	250	100.0	100.0	

Here we realize we had more male respondents than female respondents, male respondents were 137 (54.8%) while female respondents were 113 (45.2%) respectively.

**Table 3. Respondents' Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30	67	26.8	26.8	26.8
	31-40	77	30.8	30.8	57.6
	41-50	63	25.2	25.2	82.8
	51 and above	43	17.2	17.2	100.0
	Total	250	100.0	100.0	

Here, we realize that 67 respondents are within the age of 21-30 years making 26.8% of total respondents, 77 respondents were within the age of 31-40 years which makes up 30.8% of total respondents, 63 respondents were within the age of 41-50 while 43 respondents were 50 years and above representing 25.2% and 17.2% respectively. From this output, we realize the highest respondents are within the age of 31-40 years



**Table 4. Regression Weights: (Group number 1 - Default model)**

		Estimate	S.E.	C.R.	P	Label
ORG_EFFECTIVENESS <---	Perceived_usefulness	.538	.075	7.198	***	W1
ORG_EFFECTIVENESS <---	Perceived_EASE_OF_USE	.434	.062	6.963	***	W2

When Perceived\_usefulness goes up by 1, ORG\_EFFECTIVENESS goes up by 0.538.

The regression weight estimate, .538, has a standard error of about .075.

Dividing the regression weight estimate by the estimate of its standard error gives  $z = .538/.075 = 7.198$ .

In other words, the regression weight estimate is 7.198 standard errors above zero.

The probability of getting a critical ratio as large as 7.198 in absolute value is less than 0.001. In other words, the regression weight for Perceived\_usefulness in the prediction of ORG\_EFFECTIVENESS is significantly different from zero at the 0.001 level (two-tailed).

When Perceived\_Ease\_of\_Use goes up by 1, ORG\_EFFECTIVENESS goes up by 0.434.

The regression weight estimate, .434, has a standard error of about .062.

Dividing the regression weight estimate by the estimate of its standard error gives  $z = .434/.062 = 6.963$ .

In other words, the regression weight estimate is 6.963 standard errors above zero.

The probability of getting a critical ratio as large as 6.963 in absolute value is less than 0.001. In other words, the regression weight for Perceived\_EASE\_OF\_USE in the prediction of ORG\_EFFECTIVENESS is significantly different from zero at the 0.001 level (two-tailed).

**Table 5. Standardized Regression Weights: (Group number 1 - Default model)**

			Estimate
ORG_EFFECTIVENESS	<---	Perceived_usefulness	.387
ORG_EFFECTIVENESS	<---	Perceived_EASE_OF_USE	.374

When Perceived\_usefulness goes up by 1 standard deviation, ORG\_EFFECTIVENESS goes up by 0.387 standard deviations.

Estimate of standardized regression weight

When Perceived\_EASE\_OF\_USE goes up by 1 standard deviation, ORG\_EFFECTIVENESS goes up by 0.374 standard deviations.

**Table 6. Variances: (Group number 1 - Default model)**

	Estimate	S.E.	C.R.	P	Label
Perceived_usefulness	6.085	.545	11.158	***	V1
Perceived_EASE_OF_USE	8.756	.785	11.158	***	V2
e1	6.929	.621	11.158	***	V3

The variance of Perceived\_usefulness is estimated to be 6.085.

Standard error of variance

The variance estimate, 6.085, has a standard error of about .545.

Dividing the variance estimate by the estimate of its standard error gives  $z = 6.085/.545 = 11.158$ .

In other words, the variance estimate is 11.158 standard errors above zero.

The probability of getting a critical ratio as large as 11.158 in absolute value is less than 0.001. In other words, the variance estimate for Perceived\_usefulness is significantly different from zero at the 0.001 level (two-tailed). With this, we reject the first hypothesis and accept the alternate.

### Estimate of variance

The variance of Perceived\_EASE\_OF\_USE is estimated to be 8.756.

The variance estimate, 8.756, has a standard error of about .785.

Dividing the variance estimate by the estimate of its standard error gives  $z = 8.756/.785 = 11.158$ .

In other words, the variance estimate is 11.158 standard errors above zero.

### Level of significance for variance

The probability of getting a critical ratio as large as 11.158 in absolute value is less than 0.001. In other words, the variance estimate for Perceived\_EASE\_OF\_USE is significantly different from zero at the 0.001 level (two-tailed). Following this, the second hypothesis is rejected and the alternate accepted.

**Table 7. CMIN**

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	6	.000	0		
Saturated model	6	.000	0		
Independence model	3	182.383	3	.000	60.794

The Default model has a discrepancy of .000.

The Saturated model has a discrepancy of .000.

### CMIN value

The Independence model has a discrepancy of 182.383

Assuming that the Independence model. is correct, the probability of getting a discrepancy as large as 182.383 is .000.

### CMIN/DF value

For the Independence model., the discrepancy divided by degrees of freedom is  $182.383 / 3 = 60.794$

**Table 8. RMSEA**

Model	RMSEA	LO 90	HI 90	PCLOSE
Independence model	.490	.431	.552	.000

RMSEA = .490 for the Independence model.

With approximately 90 percent confidence, the population RMSEA for the Independence model. is between .431 and .552.

PCLOSE = .000 for the Independence model. Under the hypothesis of "close fit" (i.e., that RMSEA is no greater than .05 in the population), the probability of getting a sample RMSEA as large as .490 is .000.

### **Conclusion**

The findings from this study reveal that telecommuting has a significant effect on the performance of the educational sector. The dimensions of perceived ease of use and perceived usefulness also had significant effect. Perceived usefulness had more effect on organizational performance compared to perceived ease of use. This implies that people would ordinarily want to use equipments that are of benefit to their objectives and they would work hard to understand how they work even if they are unaware of how they are being used. These days, employees carry out a lot of self developments on themselves by enrolling into computer based programs so that they would be familiar with whatever the future brings to them. The importance of telecommuting devices can never be over emphasized as the recent outbreak of the corona virus has exposed the gaps where they fill. Today learning can take place without the barrier of distance and time, students who were locked down at home could communicate with their respective schools and learning could still take place. Today, many universities offer online degree programs to students all over the world and this is a clear sign that telecommuting has come to stay in the educational sector.

### **Recommendations**

- i. Schools should employ lecturers who have good knowledge in ICT and ensure that infrastructures are kept in place to enhance e-learning
- ii. Recruitments of both academic and administrative staff should be done online so that the best candidates can be considered and absorbed. This would also give them the insight that ICT has come to stay and is a requirement for effective learning.
- iii. The best lecturers in each area should be considered and less politics should be played in academic institutions.
- iv. Staff of higher institutions should be trained and retrained regularly so that they would keep up to date with technological development
- v. Policies should be enacted by government and university management, making e-learning compulsory in all educational institutions.
- vi. Government should also ensure that adequate facilities are provided to enable telecommunication in institutions of learning.

## References

- Allen, T. D., Golden, T. D., & Shockley, K. M. (2020). How effective is telecommuting? assessing the status of our scientific findings. *Psychological Science in the Public Interest*, 16(2), 40-68. doi:10.1177/1529100615593273
- Anantadjaya, S.P.D (2009), "Measuring Human Resources: A Case Study in Small and Medium Enterprises", proceeding, Seminar Nasional Industrial Services 2009, Jurusan Teknik Industri, Universitas Sultan Ageng Tirtayasa, Cilegon, April 29-30, 2009, Banten: Indonesia, p. III-101-114, ISBN # 978-979-19280-0- 7. Available online at [www.ssrn.com](http://www.ssrn.com)
- Baker-Eveleth, L.& Stone, R. W. (2015). Usability, expectation, confirmation, and continuance intentions to use electronic textbooks. *Behaviour & Information Technology*, 1-13
- Bijker, W., Hughes, T., & Pinch, T. (Eds.). (1989). *The Social Construction of Technological Systems*. Cambridge, MA: The MIT Press.
- Chiu, C.-M.& Wang, E. T. G. (2008). Understanding Web-based learning continuance intention: The role of subjective task value. *Information & Management*, 45(3), 194-201
- Chou, S.-W., Min, H.-T., Chang, Y.-C., Lin, C.-T. 2009. Understanding continuance intention of knowledge creation using extended expectation– confirmation theory: an empirical study of Taiwan and China online communities. *Behaviour & Information Technology*, 29(6), 557-570.
- Clement, J. (2019). Several Internet Users in Nigeria;2017-2023. Abuja: Google Search: <https://www.Statista.com/statistics/484918/Internet-user-reach-nigeria>
- Curley, K.F.(1984). "Are There any Real Benefits from Office Automation?" *Business Horizons* 6(4), 37-42.
- Daft, R. L. (2012). *Management*. Ohio: Mason Publisher.
- Davis F. D (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology *MIS Quarterly*, 13(3), 319-340
- DeSanctis, G.(1983). "Expectancy Theory as an Explanation of Voluntary Use of a Decision Support System," *Psychological Reports* (52), 247-260.
- Fallon T and Brinkerhoff R O (1996), "Framework for Organizational Effectiveness", paper presented at the American Society for Training and Development International Conference
- Freedom House Index,(FHI). (2019). Degree of Internet Freedom in Sub-Sahara Africa by Country. Washington, DC: Google Search;<http://www.freedomhouse.org/report/methodology-freedom-worid-2019>
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, 92(6), 1524-1541. <https://doi.org/10.1037/0021-9010.92.6.1524>
- Ginzberg, J. (1981)" Early Diagnosis of MISImplementation Failure: Promising Results and Unanswered Questions," *Management Science* 2(4) 459-478.
- Hornby, A. (2020). *Oxford Advanced Learner's Dictionary*,8th edition. UK: Oxford University Press.
- Isoraite, Margarita (2005), "Evaluating Efficiency and Effectiveness in Transport Organizations", Transport, International Conference on Computer Science and Convergence Information Technology, 539-542, Seoul: South Korea. Available online at [www.ssrn.com](http://www.ssrn.com) [www.transport.vgtu.lt/upload/tif\\_zur/2005-6-isoraite.pdf](http://www.transport.vgtu.lt/upload/tif_zur/2005-6-isoraite.pdf).

- Lee H and Choi B (2003), "Knowledge Management Enablers, Processes, and Organizational Performance: An Integrative View and Empirical Examination". *Journal of Management Information System*, 2(1), 179-228.
- Li, H., Liu, Y. (2014). Understanding post-adoption behaviors of e-service users in the context of online travel services. *Information & Management*, 51(8), 1043-1052.
- Lin, W.-S., Wang, C.-H. (2012). Antecedences to continued intentions of adopting e-learning system in blended learning instruction: A contingency framework based on models of information system success and task-technology fit. *Computers & Education*, 58(1), 88-99
- Matos, K., & Galinsky, E. (2014). 2014 national study of employers. Families and Work Institute.
- Morganson, V. J., Major, D. A., Oborn, K. L., Verive, J. M., & Heelan, M. P. (2010). Comparing telework locations and traditional work arrangements: differences in work-life balance support, job satisfaction and inclusion. *Journal of Managerial Psychology*, 25(6), 578-595. <https://doi.org/10.1108/02683941011056941>
- Mott P E (2002), *The Characteristics of Effective Organizations*, Harper and Row: New York
- Ogboso, O. C., & Amah, E. (2016). Exemplary leadership and employee engagement in commercial banks in Nigeria. *International Journal of Managerial Studies & Research*, 4(2), 16-26.
- Olajide, A. (2020). Getting the best out of employees in a developing economy. Ibadan: University of Ibadan, Nigeria
- Rahimi G R and Noruzi M R (2011), "Can Intelligence Improve Organizational Effectiveness?", *Interdisciplinary Journal of Contemporary Research in Business*, 2(10), 11-21
- Robbins, S. P., & Seema, S. (2007). *Organizational Behavior*. India: Dorling Kindersley.
- Shaukat, A. (2012). Factors affecting e-commerce adoption in Danish and Australian SMEs. *The Social Studies of Information Systems Journal*, 1(1): 7-20.
- Srinivasan, A (1985). "Alternative Measures of System Effectiveness: Associations and Implications," *MIS Quarterly* 9 (3), 243- 253.
- Stone, R. W., Baker-Eveleth, L. (2013). Students' expectation, confirmation, and continuance intention to use electronic textbooks. *Computers in Human Behavior*, 29(3), 984-990
- Sushil, L. and Agrawal, A. (2013). Empower employees and current organizations. *Journal of Tadbir*, 3(8): 65-67
- Swanson, E.B. (1987) *Information system Implementation: Bridging the Gap Between Design and Utilization*, Irwin, Homewood, IL, .
- Swanson, E.B. (1982). "Measuring User Attitudes in MIS Research: A Review," *OMEGA* 10(2), 157-165.
- Tang, J.-t. E., Tang, T.-I., Chiang, C.-H. (2012). Blog learning: effects of users' usefulness and efficiency towards continuance intention. *Behaviour & Information Technology*, 33(1), 36-50
- Torraco, R. J. (2005). Work design theory: A review and critique with implications for human resource development. *Human Resource Development Quarterly*, 16(1), 85-109. <https://doi.org/10.1002/hrdq.1125>
- Trist, E. L., & Bamforth, K. W. (1951). Some social and psychological consequences of the Longwall Method. *Human Relations*, 4, 3-38. <https://doi.org/10.1177/001872675100400101>
- Wang, W., Ngai, E. W. T., Wei, H. (2011). Explaining Instant Messaging Continuance Intention: The Role of Personality. *International Journal of Human-Computer Interaction*, 28(8), 500-510

- Webster. (2003). The New International Webster's Comprehensive Dictionary of English Language. Florida: Typhoon International Corp.
- Wheelen, T. L. and Hunger, J. D. (2000). Strategic Management and Business Policy—Entering 21st Century Global Society, 7-th edition.
- Young, T.R. (1984). "The Lonely Micro," Journal of ICT 3(4), 100-114.