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Impact of Telecommuting on Employees' Performance: A Focus on Telecommunication Out-Fits in Owerri, Imo State

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Abstract

This work examined the impact of telecommuting on employees' performance. The dynamic nature of the environment in which our organizations operate and customers need made this investigation very necessary. The objectives of the study were; to find out if arrangement that enables employee to work at home has a positive relationship with better quality of work and to ascertain whether an arrangement that allows employee to work at agreed location has significant relationship with speedy service delivery. To achieve the objectives, a survey research design was adopted. The techniques employed in analyzing the data were descriptive statistics and spearman rank correlation coefficient. The results indicated that the arrangement that enables employee to work at home has a weak and positive relationship with better quality of work. It was also found that arrangement that allows employee to work at agreed location has a significant relationship with speedy service delivery. Based on the findings, the researcher concluded that telecommuting has impact on employee performance. It was recommended that managers of telecommunication out-fits should continue with the arrangement that allows employees to work at agreed location since it was found to have significant relationship with speedy service delivery but also ensure that, there is a strong mechanism on ground to monitor the activities of the telecommuters.

Keywords: telecommuting, employee performance

1. Introduction

Telecommuting is a work practice that allows employees to substitute some or all of their regular working hours to work away from the office, often at home, client site, on the road, performing work tasks and communicating with others via technological means (Allen, Golden, & Shockley, 2015). It is also seen as a type of alternative (or flexible) work arrangement where work is conducted at an off-site location and employees use telecommunication technology to connect to the workplace (kossek, 2003).

Elizabeth (2002) posits that various factors influence telecommuting arrangements in any environment or organization, and it is important to note that telecommuting programs can be full-or part-time, formal or informal, and employee- or company-initiated. Employees who telecommute full-time conduct all their work off-site in a location other than their employers' office with little to no face-to-face interaction with managers and co-workers while employees who telecommute part-time conduct some, but not all of their work from a location other than their employer's office and interact with managers and co-workers on a limited but scheduled basis. The rate at which telecommuting is supported or utilized varies from one organization to another and the exploration of Center for Work & Family study indicated that the optimal telecommuting arrangement occurs when employees telecommute not more than two to three days per week. This is desirable to limit the number of consecutive days that an employee is out of the office as it reduces possible feelings of social isolation and allows for the scheduling of meetings and interactions with clients, co-workers, and managers on the days when the telecommuter is in the office.

Anecdotal evidence suggests that many roles can be done more productively with a telecommuting arrangement. This is especially true for positions that involve a high percentage of reading, writing, or other work activities requiring extended periods of focused concentration. organization- initiated telecommuting arrangements are often aimed at reducing costs (for example facilities costs or costs associated with lost productive employee time due to difficult commutes) or to retain highly talented personnel who would not be able to work for organization in a

traditional work arrangement (Elizabeth, 2002). Telecommuting is becoming a significant aspect of the work schedule of some organizations in Nigeria, including telecom firms. How this has impacted the performance of employees deserve research attention.

2. Statement of the Problem

The impact of telecommuting has been the focus of intensive research efforts in recent times, due to the rapid changes in business environment and this change is characterized by such phenomena as globalization and changing customer demand. Telecommuting is a schedule in which employees conduct their work off-site for some portion of their core working hours or it has also been defined as a work practice whereby 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. This arrangement is meant to save customers the stress of going to the traditional office space, bring services to door steps of clients and improve the quality of their work. But most managers do not take the exercise serious as a result of that, they do not consider employee personal motivation as all employees are not fit to telecommute.

When the wrong set of workers (people who are not self starters and need external disciple) embark on telecommuting, its purpose is defeated because they will see it as an opportunity to pursuit their personal goals while forfeiting that of the organization.

2.1 Objectives of the Study

The broad objective of this study is to examine the impact of telecommuting on employee performance. Specific objectives are as follows:

1. To determine if arrangement that enables employee to work at home has a positive relationship with better quality of work.
2. To ascertain whether an arrangement that allows employee to work at agreed location has significant relationship with speedy service delivery.

2.2 Hypotheses

$H_{01:}$ Arrangement that enables employee to work at home has no positive relationship with better quality of work.

$H_{O2:}$ Arrangement that allows employee to work at agreed location has no significant relationship with speedy service delivery.

2.3 Review of Related Literature

Telecommuting has been defined as a work practice whereby employees substitute some or all of their regular working hours to work away from the office, often at home, client site, agreed location, performing work tasks and communicating with others via technological means (Allen, Golden, & Shockley, 2015; Nilles, 1998).Amstad, Meier, Fasel, Elfering, & Semmer (2011) see telecommuting as work arrangement that enables employee to work at home or at another agreed place using information and communication technologies (ICT) for communication with employer. In the view of Clark (2008) telecommuting, also known as telework, is the use of telecommunication technology in allowing employees' to perform their job or duties remotely, in accordance with work agreements. Telecommuting as a business practice has grown significantly due to the increasing pressure on organizations to cut costs and to increase employee productivity (Potter, 2013).

Organizations are now challenged to initiate more flexible thinking for the new "corporate office." In addition, the expansion of broadband Internet services to employee's homes and the convergence of voice, data and video over a common IP framework have made telecommuting a viable option and sometimes a requirement for medium to large-sized businesses in today's marketplace (Derven, 2017). Furthermore, Fisher (2011) posits that majority of organizations struggle in today's dynamic and competitive environment and competition requires besides the ability to be flexible, quick and innovative also knowledge on how to make effective use of working hours. In recent time telecommuting seems to be an option on how to fulfill the requirements on effective management of working hours. However, the new approach in organizing working hours effective not only enables employers to organize labour resources more in line with the varying needs of customers but also enhances the performance of employees'.

2.4 Features of Telecommuting

Telecommuting according to the amended Labour Code (2007) is employment relationship between employee and employer declared by the employment contract. Cascio (2010), posits that the main feature of telecommuting is the use of ICT during working hours. It distinguishes telecommuting from other kinds of home-work. Telecommuting

can be applied only on activities, which are independent from location. This means that the activity must not be carried out at the employer's main office. Telecommuters manage the organization of their working hours within the framework of applicable legislation, collective agreements and organizational rules. Telecommuting enables employee to strike a balance between work and family life (Golden, Veiga, & Dino, 2008).

2.5 Factors Required for Effective Telecommuting in Nigeria

A substantial amount of planning must take place to accommodate specific policies and procedures, technology selection, training, technical support, cost and budget management, and telecommuters satisfaction for this task to be effective in Nigeria. Nigerian organizations must begin by carefully planning and documenting the key phases of the implementation. These factors in the view of Turetken, Jain, Quesenberry & Ngwenyama (2011) include: eligibility, personal factors, professionalism, dependability, communication and resourcefulness. On eligibility, it should not be assumed that an employee with a history of excellent performance in the office would be able to replicate his/her results at home (Turetken, Jain, Quesenberry, & Ngwenyama, 2011). Telecommuters should possess certain personality traits, to be effective when telecommuting. They should be team players, good communicators, and should have a reasonable amount of knowledge of the technologies used for telecommuting. Again, the candidate must demonstrate that she or he can be depended upon. Dependability can be assessed by evaluating the punctuality of the employee and how promptly e-mails or calls are replied. Most importantly, such employee must have demonstrated that she/he can be relied upon by successful completion of prior assignments (Schieman & Young, 2013). A good telecommuter should be able to handle any challenges that come up in the course of discharging assigned duties because managers/ supervisors may not always be available all the time to answer questions, and the telecommuter is expected to resolve these challenges independently. Resourcefulness could be evaluated by how the telecommuter has handled project-related issues in the past and the ability to find feasible solutions to prior challenges demonstrates problem-solving skills required while working alone (Turetken, Jain, Quesenberry, & Ngwenyama, 2011).

2.6 Benefits of Telecommuting

Telecommuting allows greater organizational flexibility and a better capacity to quickly respond to unexpected events. It allows for a more efficient usage of the organization's information system, particularly during non-office hours e.g. at night and on weekends (Gordon & Kelly, 1996; Hamilton, 2016). Furthermore, telecommuting reduces the constraints imposed by traditional work environments, increases the cohesion between work and family life, and makes the employees feel that their organizations cared about them. Improved productivity and quality of work are associated with telecommuting (Huws, 2013). Others are lower levels of interference and interruptions, better work environment, the possibility of choosing more convenient working hours, more time spent working, and a stronger focus on achieving the required results rather than simply being physically present at work (Guimaraes & Dallow, 1999).

3. Theoretical Framework

This section provides an overview of two theoretical perspectives suggested by the literature in relation to telecommuting, which could provide explanation to the study. The two theoretical perspectives are drawn from socio-technical system theory and adaptive structural theory to support the theoretical framework for this study and will be discussed in turn.

3.1 Socio-technical System Theory

Socio-technical system (STS) theory explains the interaction between social and technological factors. It examines the relationships between people, technology, and the work environment, in order to design work in a way that enhances job satisfaction and increases productivity (Torraco, 2005). Trist and Bainforth (1951) express that STS was originally developed 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).

3.2 Adaptive Structural Theory

Adaptive structural theory proposes that structures (general rules and resources offered by the technology) can differ from structuration (how people actually use these rules and resources) (Torraco, 2005). There is interplay between the intended use of technology and the way that people use the technology. Telecommuting provides a social structure that enables and constrains certain interactions (Bartol, Tesluk & Langa, 2009. AST suggests that when technologies are used over time, the rules and resources for social interactions will change (Desanctis &

Poole, 1994). Torraco (2005) posits that telecommuting may alter traditional work practices, such as switching from primarily face-to-face communication to electronic communication.

3.3 Empirical Review

Angel, Manuela, Maria & Pilar (2008) carried out a study on telecommuting adoption, change management, and firm performance. The objective of their study was to analyze the contribution of human resource (HR) commitment practice to firm performance through the adoption of telecommuting practices. The study adopted a survey of 156 firms in Spain using structural equation modeling. The research finding indicated that the extent of employees' access to HR commitment practices and HR social benefits is positively related to the intensity of telecommuting adoption and firm performance is positively associated to the intensity of telecommuting adoption, functional flexibility. The study recommended that HR commitment practices are indirectly related to telecommuting.

Mahmoud & Paul (2003) conducted a study on telecommuting and organizational changes: a middle-managers perspective in organization. The study seeks to address middle managers views concerning the introduction of telecommuting programs in the organization. The study examined some selected telecommunication companies in USA. The population of the study was 25 respondents drawn from some selected organization. The study used the multiple regression analysis using the E-view statistical package. The findings indicated that the majority of the managers perceived cultural change as the most difficult issue to resolve when introducing a telecommuting program.

Hartman, Stoner & Arora (1991) researched on selected variables affecting telecommuting productivity and satisfaction. The researchers' objective was to determine the effect of selected variables on telecommuting productivity and satisfaction. The study population was ninety-seven (97) respondents drawn from eleven different public and private organizations. Among the findings are; telecommuter satisfaction with the performance evaluation system was significantly correlated with both telecommuting productivity and satisfaction. Technical and emotional support received from the telecommuting supervisor was significantly correlated with telecommuting satisfaction and the negative correlation between family disruptions and telecommuting satisfaction was also statistically significant. A significant negative correlation between the ratio of telecommuting hours to total work hours and telecommuting productivity was revealed. Interestingly, child care issues and most demographic and occupational characteristics were not significantly correlated with either telecommuting productivity or satisfaction.

Brittany & Rhiannon (2012) carried out a study in US patent and trademark office (USPTO) USA to find out if telecommuting is effective for organizations?: A meta-analysis of empirical research on perceptions of telecommuting and organizational outcomes". The objective of the study was to integrate multidisciplinary literature that reports effects of telecommuting on organizational outcomes with the aim of providing a clearer answer to the question: is telecommuting effective for organizations. Meta-analytical research designed was used, beginning with an interdisciplinary search for effect sizes in eight databases. The independent variable for the study was telecommuting, measured as a dichotomous variable. Dependent variables are outcomes of interest to organizations: productivity, retention, turnover intention, commitment, and performance. The population of the study was 22. The research finding showed that there is a small but positive relationship between telecommuting and organizational outcomes. Telecommuting is perceived to increase productivity, secure retention, strengthen organizational commitment, and to improve performance within the organization. In other words, it is indeed beneficial for organizations.

3.4 Summary of Literature

Telecommuting is work practice that allows employees substitute some or all of their regular workinghours to work away from the office, often at home, performing work tasks and communicating with others via technological means. This arrangement reduces the constraints imposed by traditional work environments, increases the cohesion between work and family life, and makes the employees feel that managers cared about them. Furthermore, from the empirical review, it was found that:

1. All the works reviewed focused on other sectors expect one that focused on telecommunication companies in USA.
2. The studies reviewed were carried out in the western world and other parts of Nigeria but this very work was carried out in Owerri, Imo State using telecommunication out-fits along Wetheral Road.
3. Some of the studies reviewed seek to address middle managers views concerning the introduction of telecommuting programs in the organization, variables affecting telecommuting productivity and

satisfaction, assessment of the effectiveness of telecommuting in organization but the present study focused on impact of telecommuting on employee performance; using better quality of work and speedy service delivery as a proxies for employee performance.

4. Methodology

A structured questionnaire was used to elicited information from employees' of selected telecommunication outfit along Wetheral road in Owerri, Imo State (9mobile, MTN, Glo, Airtel). The population of the study was one hundred and thirty three (133) and Taro Yamane formula was used to derive the sample size, which is one hundred (100).Bowley's formula was used to determine the number of questionnaire to administer to each strata. The instrument, made up of fourteen (14) items was subjected to reliability test using the cronbach's alpha and the result is as shown below:

Reliability Statistics	
Cronbach's Alpha	N of Items
.811	14

Again, Spearman rank correlation coefficient in SPSS (statistical package for social sciences) was used in testing of the hypotheses.

5. Results

A total of one hundred copies of the questionnaire were administered but only ninety four were returned. This represents ninety six percent response rate. The mean weighting of responses gathered from the questionnaire were computed and interpreted from the data and are presented in tables.

Table 1. Responses on whether arrangement that enable employee to work at home positively relate with better quality of work

Options	Frequency	Percentage	Mean
Strongly disagree	8	8.5	4.27
Disagree	7	7.4	
Agree	16	17.0	
Strongly agree	63	67.0	
Total	94	100.0	

Source: Researchers survey, 2018

From the table 1 the total which captures number of respondents was 94. This means that 94 out of the 100 sample size were validly enumerated with 6 respondents responses rejected because of invalid nature of their questionnaire. Focusing on the research question herein, 8.5% and 7.4% of the valid respondents strongly disagreed and disagreed respectively that arrangement that enables employees to work at home positively relate with better quality of work. On the other hand, 17.0% and 67.0% of the respondents agreed and strongly agreed that arrangement that enables employees to work at home positively relate with better quality of work. This indicates that more than half of the respondents strongly agreed that arrangement that enables employees to work at home positively relate with better quality of work. In the same way, the mean of 4.27 was higher than the 3.00 cut-off mean for acceptance of a mean in a five point likert scale method of analysis. The study therefore accepted the mean and submits that arrangement that enables employees to work at home is positively related with better quality of work.

Table 2. Responses on whether arrangement that allows employee to work at agreed location significantly relate with speedy service delivery

Options	Frequency	Percentage	Mean
Strongly disagree	13	13.8	3.67
Disagree	15	16.0	
Agree	28	29.8	
Strongly agree	38	40.4	
Total	94	100.0	

Source: Researchers survey, 2018

From the table 2, 13.8% and 16.0% of the validly sampled 94 respondent strongly disagreed and disagreed respectively that arrangement that allows employee to work at agreed location significantly relate with speedy service delivery. Alternatively, 29.8% and 40.4% of the respondents agreed and strongly agreed respectively that arrangement that allows employee to work at agreed location significantly relate with speedy service delivery. This shows that most of the respondents accepted that arrangement that allows employee to work at agreed location significantly relate with speedy service delivery. Then again, the mean of 3.67 was higher than the cut-off mean for acceptance of 3.00 for a five point likert scale, this suggests that the mean should be accepted. Therefore, since the mean was higher than the cut-off mean, the study submits that the arrangement that allows employees to work at agreed location significantly relate with speedy service delivery.

6. Test of Hypotheses

In order to test inferentially the impact of telecommuting on employee performance, the study conducted hypotheses test and the result is presented below:

6.1 Hypothesis One

Table 3. Spearman's rho correlation result for the relationship between arrangement that enable employees to work at home and better quality of work

Spearman's rho correlation coefficient	Probability value	N
0.09	0.40	94

Source: Researchers survey, 2018

Table 3 highlighted the Spearman's rho correlation result for the arrangement that enable employees to work at home has no positive relationship with better quality of work. From table 3 the study used question number 15 in the questionnaire as the dependent variable and question number 11 in the questionnaire as the independent variable. In specific term, the Spearman's rho correlation coefficient was 0.09. This depicts a weak relationship and implies that the relationship between arrangement that enable employees to work at home and better quality of work was weak but positive. In the same way, the probability value (P value) of 0.40 was higher than the 0.05 maximum significance value for significance. This depicts that the relationship was not significant. Therefore, the study accepts the null hypothesis and concludes that arrangement that enable employees to work at home has no significant relationship with better quality of work.

6.2 Hypothesis Two

Table 4. Spearman's rho correlation result for the relationship between the arrangements that allows employee to work at agreed location and speedy service delivery

Pearson correlation coefficient	Probability value	N
0.79	0.01*	94

Source: Researchers survey, 2018. / * = Significant at 5% and 10%

Table 4 depicts the relationship between the arrangements that allows employees to work at agreed location and speedy service delivery. Question number 9 in the questionnaire was used as the dependent variable while question number 7 was used as the independent variable. The Spearman's rho correlation coefficient for the relationship between the arrangements that allows employee to work at agreed location and speedy service delivery was 0.79. This shows that the relationship between arrangements that allows employee to work at agreed location and speedy service delivery was strong and positive. On the other hand, the probability value (P value) of 0.01 was less than the 0.05 maximum significance value for significance. This depicts that the relationship between arrangements that allows employee to work at agreed location and speedy service delivery was significant. Based on these, the study rejected the null hypothesis, accepted the alternative and concludes that arrangement that allows employee to work at agreed location has a significant relationship with speedy service delivery.

7. Discussion of Findings

From the testing of the first hypothesis, it was established that, the arrangement that enables employee to work at home has a weak but positive relationship with better quality of work. This supports the finding of the study carried

out by Brittany & Rhiannon (2012) which revealed that there is a small but positive relationship between telecommuting and organizational outcomes.

The test of second hypothesis revealed that arrangement that allows employee to work at agreed location has a significant relationship with speedy service delivery. This is also in line with one of the findings of Brittany & Rhiannon (2012) study which revealed that telecommuting improves performance within the organization.

8. Conclusion

This study on impact of telecommuting on employee: a focus on selected telecommunication out-fit in Owerri has revealed that arrangement that enables employee to work at home has a weak but positive relationship with better quality of work. This means that there are other variables capable of improving the quality of work of employees than telecommuting. Furthermore, it was also revealed that arrangement that allows employee to work at agreed location has a significant relationship with speedy service delivery. This means that telecommuting helps to bring services to the door step of clients.

9. Recommendations

1. Managers / management of organization that practice telecommuting should always consider the personal motivation and environment of the telecommuters as it has the capacity to affect the quality of their work.
2. Managers of telecommunication out-fits should continue with the arrangement that allows employees to work at agreed location since it has be found to have significant relationship with speedy service delivery but also ensure that, there is a strong mechanism on ground to monitor the activities of the telecommuters.

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