

TECHNOLOGY-OVERLOAD AND WORK QUALITY OF OFFICE MANAGER IN PAINT MANUFACTURING FIRMS IN PORT HARCOURT

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ABSTRACT

The study examined the relationship between technology-overload and work quality of office manager in paint manufacturing firms in Port Harcourt. The objective of the study was to examine how techno-overload relate with work quality in paint manufacturing firms in Port Harcourt. The explanatory cross section survey research was adopted for the study. The population of this study consisted of one hundred and ten (110) office managers of nineteen (19) registered paint manufacturing firms in Port Harcourt. A sample of one hundred and ten (110) respondents was obtained using census sampling technique. Structured questionnaire was used as instrument for data collection after face-validation. Cronbach alpha was used to test the internal consistency of the instrument. Out of 110 copies of the questionnaire administered, a total of 90 copies were retrieved. Mean and standard deviation was used for the univariate analysis while the bivariate analysis was done using Spearman rank order correlation. The study concluded that technology-overload has negative effect on office managers' work quality in paint manufacturing firms in Port Harcourt. The study recommended that management of paint manufacturing firms could provide regular hands-on ICT training for administrative heads and their assistants to enable them upgrade and update their digital skills and experiences to close the digital skills gap in the system.

Keywords: Technology-Overload, Office Manager Performance, Work Quality,

INTRODUCTION

Work quality depicts a unit of production of goods and service in an excellent or improved manner. Quality is critical to satisfying Customers: failure to meet customers' expectation, will make them quickly look for alternatives. Quality is critical to satisfying customers and retaining their loyalty so they continue to patronize the organization in the future. Quality products make an important contribution to long-term revenue and profitability (Clement, 2017; Elshaer, 2016). Timely information dissemination as the second measure of office managers' performance refers to how prompt the office managers ensures that files and data/information reach the right person(s) at the right time. It also deals with the ability of an office manager to complete administrative tasks like typesetting, appointments, purchases of office resources, etc. on time. For the information manager to effectively act as an important link and interface between the top management and the operating core, he must be conscious of timely circulation of information to its users within the periscope of jurisdiction (Roth, 2016). The last measure of this study is task accomplishment. Conceptually, timely task completion is defined as the ability of employees at all levels to effectively carry out assigned targets/tasks within record time or before deadline. Employees at all levels including information managers are primarily employed to provide administrative assistance and carry out other office tasks assigned to him/her. Employers and bosses look out for office managers that can accomplish any assignment, task or target given to them promptly or early enough before deadline. In fact, an information manager that is fond of completing tasks at the last minute or deadline can be said to be underperforming. The information manager and other employees are expected to be up and doing in preparation of documents, information dissemination, and carrying out their day to day official duties (Nayyar, 2015).

Over the years, technology-induced stress on employee performance have been researched from different angles: "Stress correlates to the administrative effectiveness of secondary school principals in Rivers State" (Otamiri, 1998); "Technostress and job effectiveness of office and information managers in Tertiary institutions Rivers State" (Odu, 2018); "Technostress and employee performance of manufacturing firms in Port Harcourt (Fafaa, 2020); "Technological stress: Psychophysical symptoms in modern offices" (Tu, B. & Wang, C. (2011); "The impact of technostress on role and productivity" (Tarfdar, et al., 2010); "The level of technostress experienced among Nigerian auditors in four auditing firms in Nigeria" (Olasanmi, 2016). None of these studies specifically examined the relationship between technology-induced stress and performance of office managers in paint manufacturing firms in Port Harcourt. There is need to empirically investigate how technology-induced stress in terms of techno-complexity (digital skill gap and digital infrastructure upgrade), techno-uncertainty (network problem and computer hanging) and techno-overload (excessive SMS/call and digital work-life imbalance) relates with office managers' performance in terms of work quality (production of mailable document and meeting target specification), timely information dissemination (timely reporting and timely notification) and task accomplishment (timely completion of document and timely completion of arrangement) in paint manufacturing firms in Port Harcourt.

Nevertheless, the manifestation of the variables, dimensions and measures aforementioned in this study is determined by environmental factors of the organization. This implies that the environmental factors in terms of ventilation/temperature and condition of office equipment moderates the perceived relationship between technology-induced stress and office managers' performance within the confide of paint manufacturing firms in Port Harcourt, Rivers State, Nigeria.

Hypothesis

Ho₁: There is no significant relationship between techno-overload and office managers' work quality in paint manufacturing firms in Port Harcourt.

Techno-Overload

Information and communication technology (ICT) users are recurring overwhelmed with information from laptops, smartphones and PDAs, resulting in work overload. In an organizational context, employees are inundated with too much information which they fail to resourcefully utilize (Fisher & Wesolkowski in Ragu-Nathan et al., 2008). This, in combination with the increasing levels of complexity in the ever changing ICTs, generates feelings of the inability to cope, leading to stress (Clark & Kalin in Tarafdar et al., 2010) as well as "information fatigue" as described by Weil and Rosen in Mlotshwa (2013). Additionally, when new systems are implemented, old functions are eliminated as processes are reengineered and new structures of power, authority, and decision making are created in the process, which changes the role of the ICT end user and that of the manager and/or supervisor (Tarafdar et al., 2010).

As used in this work, techno-overload denotes stress arising from excessive multiple tasks expected to be completed by an individual with the assumption that they can accomplish them very fast as a result of ICT. It could be describe as when job demands get too great the person feels he or she has too much to do and too little time. For example, new equipment, new software, and new information sources (the Internet) place increased work demands on the office manager and time constraints might not allow for proper implementation. The pervasive connectedness to workplace afforded by the mobility of ICT, however, allows work to invade times and spaces that were traditionally protected from workplace's intrusion. ICT can lead to stress as they allow work to spill into space reserved for family and self (Murray & Rostis, 2017). The more people rely on communication technologies, the more they work from home and locations other than their office. Furthermore, the more they use these technologies, the more likely they are to report feeling burned out. Olson-Buchanan (2007) argued that e-mail and other communication technologies produce stress by enabling work to spill into other domains of life, particularly, encroaching upon the time

reserved for self and family, thereby making it more difficult to disengage from work and fulfill family obligations.

Techno-overload is a serious stressor for workers in the manufacturing industry. Workers are sometimes given unrealistic production targets and deadlines by their supervisors with the assumption that they can achieve so much within a limited time frame with the speed of machines (Odu, 2018). While we know that technologies make production easier and faster, the fact is that these machines cannot work on their own without humans operating it. Thus, the worker has to over-work himself exerting his full mental and physical energy to get the work done. Sometimes, the machine might even disappoint. All these circumstances put the average worker in the manufacturing industry into a form of stress known as techno-overload. Within the context of paint manufacturing firms in Port Harcourt as used in this study, excessive SMS/call and digital work-life imbalance are seen as manifestation of techno-overload.

Work Quality

Quality on the other hand depicts meeting desired standards. Although the term quality is quite widely used by practitioners and academics, there is no generally agreed definition of it, since different definitions of quality are appropriate under different circumstances (Elshaer, 2016). According to him, quality by some persons can be referred to as excellence in value, to some conformance to specifications, some persons sees it as conformance to requirements, others take it to be fit for use, to some product desirable attributes, to some loss avoidance while some referred to it as meeting customer expectations. Quality is generally the outcome of a well calculated effort or action taken which meets customers' needs and thereby provides customer's satisfaction.

Work quality is therefore the capability of an office manager in achieving results that meets set standards (Clement, 2017). The result of a good functioning productive system is regarded as quality output. As an employee in any organization, the level of quality output generated determine the relevance of that employee in the organization. Quality output helps to maintain customer satisfaction and loyalty and reduce the risk and cost of replacing substandard result and build a reputation for quality by gaining accreditation with a recognized quality standard. Some of the indicators of employee effectiveness in terms of quality output are discussed below:

As used here, work quality depicts a unit of production of goods and service in an excellent or improved manner. Quality is critical to satisfied Customers: failure to meet customers' expectation, will make them quickly look for alternatives. Quality is critical to satisfying customers and retaining their loyalty so they continue to patronize the organization in the future. Quality products make an important contribution to long-term revenue and profitability. Quality is a key differentiator in a crowded market. It's the reason that Apple can price its iPhone higher than any other mobile phone in the industry because the company has established a long history of delivering superior quality products.

An office manager is said to perform well when he/she excellently meets up the demands of set standards in the organization. This implies that in an organization like paint manufacturing firms that produce goods and render services emphasizes more on quality. Work quality as a measure is necessary for office managers' performance due to its outstanding role and relevance in the attainment of organizational objectives. In paint manufacturing firms, work quality will manifest in terms of production of mailable document and meeting target specification.

Production of Mailable Document: Within the administrative circle, one of the ways of determining the quality of office managers' work is to examine the quality of document prepared and produced by a staff. It is expected that documents prepared and produced are according to house style in such a manner that typographical errors are eliminated (Olali, 2017). For instance, an administrative staff that produces letters and other correspondences fraught with errors cannot

be seen as being effective in terms of output quality. One of the most noticeable indicator of an administrative staff's work quality is the quality of documents he or she prepares and produces.

Meeting Target Specification: As pointed out earlier in this work, a well performing office manager in paint manufacturing firms is one whose work or output meets organizational standard. Across administrative offices, it is expected that any task performed must be the quality specification of the firm. It is in a quest to ensure that tasks or target specifications are met, that administrative heads often supervise tasks before delivery. For instance, in the preparation of reports, it is expected that the right format and necessary details as well as procedures must be sufficiently followed and met in order to promote quality output.

Theoretical Framework

This work was based on Lewin and Edwards' Person-Environment Fit Theory popularized in 1962 (Osita, 2018). Person-Environment Fit Theory of psychological stress describes the interaction between the person and environment ($P \times E$) as the key to comprehending people's cognitive, emotional and behavioural reactions such as stress. The theory assumes:

- i. A mismatch between a person and his work environment will lead to tension and uneasiness capable of hampering his level of productivity.
- ii. The second tenet of this theory is that worker's capabilities (skill sets) will determine the level of work pressure and how environmental pressure affects their output. The theorist explained that "the level of match between job demands and workers' capabilities (knowledge and skill) to meet those demands is referred to as demands-ability fit (Cummings & Worley, 2008).

This relates to the technology-induced stress as the independent variable of this study in that when there is a mismatch between the technological experience and skills of an office/office manager and the nature of technological resources in use in his work environment, he experiences some level of psychological strain. Technical failure, techno-insecurity (risk of hackers and virus attacks), and the inability of the office manager to cope with the skills upgrade required to operate and manipulate computer systems, projector, internet network, electronic media and other electronic resources are capable of subjecting him to pressure which in turn could affect his effectiveness in terms of document management, information dissemination, and supervision.

The proponent of person-environment fit theory also argued that when there is a match or equilibrium between an employee's personality, skills/competencies and the working environment (organizational culture, technology and tools), it leads to job satisfaction and optimal performance. This aspect of the theory amplifies the fact that the individual digital literacy level of an average office managers in the paint manufacturing firms can moderate the relationship between technology-induced stress and his effectiveness in the discharge of his administrative duties.

The adoption of person-environment fit theory as a major theoretical framework for this study is predicated on the fact that the theory describes how the interactions and relationship between a worker and his working environment affects the level of strain he/she experiences on the job. It also recognizes environmental factor which can moderate the relationship between technology-induced stress and office managers' performance.

METHODOLOGY

The cross-sectional explanatory survey research design was adopted for this study. The population of the study consists of one hundred and ten (110) office managers (heads of departments) of nineteen (19) registered paint manufacturing firms in Port Harcourt. The above information was obtained from Paint Manufacturers Association of Nigeria (PMAN), Rivers State Branch. The census method was adopted since the population is not large. Structured questionnaire was used as instrument for data collection. The work adopted the face and content validity Cronbach alpha was used in determining the internal consistency of the instrument. Thus, a Cronbach alpha level of

0.70. Mean and standard deviation was used for the univariate analysis while the bivariate analysis was done using Spearman rank order correlation. Multivariate analysis was done using Partial Correlation. The entire process of analysis done via SPSS. Spearman rank order correlation coefficient was computed with the formula below:

$$R = \frac{1}{n} \frac{6 \sum d^2}{(n^2 - 1)}$$

Where;

n = number of pairs of data

d = difference between the ranking in each set of data.

Σ = Summation

If our statistical analysis shows that the significance level is below the cut-off value we have set (which is 0.05), we reject the null hypothesis and accept the alternate hypothesis. Alternatively, if the significance level is above the cut-off value, the null hypothesis was accepted.

Results

Techno-Overload and Work Quality

Ho₁: There is no significant relationship between techno-overload and office managers' work quality in paint manufacturing firms in Port Harcourt.

Correlations between Techno-Overload and Work Quality

| | | Techno-Overload | Work Quality | | |
|-------------------------|-------------------------|-----------------|--------------|---------|---------|
| Correlation Coefficient | | 1.000 | .213** | -.411** | -.280** |
| Techno-Overload | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 90 | 90 | 90 | 90 |
| Correlation Coefficient | | .213** | 1.000 | .850** | .509** |
| Work Quality | Sig. (2-tailed) | .000 | . | .000 | .000 |
| | N | 90 | 90 | 90 | 90 |
| Spearman's rho | Correlation Coefficient | -.111** | . | 1.000 | .730** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 90 | 90 | 90 | 90 |
| | Correlation Coefficient | -.280** | .509** | .730** | 1.000 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 90 | 90 | 90 | 90 |

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

Source: SPSS Output

Table above shows r value of -0.213 at a significant value of 0.00 which is less than the chosen alpha level of 0.05 for the hypothesis relating to techno-overload and work quality. Since the significant level is less than the alpha level of 0.05, the null hypothesis (Ho₁) which states that there

is no significant relationship between techno-overload and office managers' work quality in paint manufacturing firms in Port Harcourt was rejected and the alternate hypothesis (H_{a1}) was accepted. This implies that there is a weak negative relationship between techno-overload and office managers' work quality in paint manufacturing firms in Port Harcourt.

CONCLUSIONS

The study also concluded that techno-overload if well managed enhances the performance of office managers in paint manufacturing firms in Port Harcourt. It was equally concluded that the extent to which job performance of office managers' is affected (positively or negatively) by technology-induced stress is a function of their environmental factors.

RECOMMENDATIONS

Based on the findings and conclusions, the following recommendations were made:

1. Management of paint manufacturing firms in Port Harcourt could provide regular hands-on ICT training for administrative heads and their assistants to enable them upgrade and update their digital skills and experiences to close the digital skills gap in the system.
2. Managers of paint manufacturing firms in Port Harcourt in Port Harcourt could also be committed to learning basic troubleshooting skills to reduce the amount of time often wasted in waiting for technicians.
3. Management of paint manufacturing firms in Port Harcourt in Port Harcourt could ensure subscription of single user modem to overcome network problem.

REFERENCES

- Clement, U. (2017). Learning with weblogs: An empirical investigation. *Journal Hawaii International Conference on System Science*,3(17), 21-34.
- Cummings, W. & Worley, L. (2008). Workplace environment and its impact on organisational performance in public sector organisations, Alagappa University, Karaikudi, India. *International Journal of Enterprise Computing and Business Systems*, 7(1), 1-20.
- Echezona, I. C. (2007). Overview of strategic aspects of information management. *Journal of Technology and People*, 1 (1), 71-89.
- Fafaa, D. I. (2020). Technostress and employee job performance of manufacturing firms in Rivers State. Unpublished Undergraduate Project, Department of Management Ignatius Ajuru University of Education.
- Murray, W. & Rostis, A. (2017). Who's running the machine theoretical exploration of work stress and burnout of technologically tethered workers. *Journal of Individual Employment Rights*, 12(3), 21-27.
- Nayyar, H. (2015). *Performance management: the new realities*. Institute of Personnel and Development.
- Odu, S. (2018). Technostress and job effectiveness of office and information managers in Tertiary Institutions in Rivers State. *Unpublished Master Degree Dissertation*, Ignatius Ajuru University of Education.

- Olali, F. (2017). E-mail at work: A cause for concern? The implications of the new communication technologies for health, wellbeing and productivity at work. *Journal of Organizational Transformation and Social Change*, 5(1), 159-173.
- Olasanmi (2016). The level of technostress experienced among Nigerian auditors in four auditing firms in Nigeria. *Journal of Vocational Behavior*, 63 (7),438–456.
- Olson-Buchanan, P. (2007). Who’s running the machine? A theoretical exploration of work, stress and burnout of technologically tethered workers. *Journal of Individual Employment Rights*, 12(3), 249–263.
- Otamiri, S. A. (2019). Digital citizenship and administrative effectiveness of administrative heads in tertiary institutions in South-South, Nigeria. Unpublished Ph.D Thesis, IAUE.
- Roth, W. (2016). Information systems competencies. <http://.drive.app.update.ends.support.for.ics.adds.in-app.storage.upgrades.and.more>
- Tarafdar, M., Tu, Q., Ragu-Nathan, B.S., & Ragu-Nathan, T.S. (2010). The impact of technostress on role stress and productivity. *Journal of Management Information Systems*, 24 (1), 301-328.
- Tu, B. & Wang, C. (2011). Technological stress: Psychophysical symptoms in modern offices. *Journal of Psychosomatic Research*, 43, 35-42.