

Full-Time Teleworking and Organizational Robustness of GSM Telecommunication Firms in South-South, Nigeria

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Abstract

The goal of this study was to ascertain the relationship between Full-Time Tele-Working and Organizational Robustness. Based on the conceptual framework, four (4) research questions were formulated as well as ten (10) hypotheses. Reciprocal determinism theory, socio-technical system theory and institutional theory were adopted as the theoretical foundation for the study. The researcher aligned with the positivism tradition as the philosophical foundation for the study. A correlational research design was adopted. A total of one hundred and thirty-one (131) was drawn from a population of one hundred and sixty-two (162) manager and supervisors across the regional/ corporate offices of four (4) GSM telecommunication firms in South-South, Nigeria. The researcher adopted primary method of data collection. The questionnaire went through content and construct validity test, while Cronbach Alpha was used to test for reliability of the research instrument. The data collected were analyzed at different levels, for primary level data, descriptive statistical tools were used in describing the demographic and univariate, inferential statistical tools were used in analyzing the bivariate. The result of the findings revealed that full time tele-working, part-time tele-working and situational tele-working relates positively with functional robustness, operational robustness and administrative robustness respectively. Following this outcome, the study concludes that full-time-working is a viable and highly applicable approach towards sustaining and enhancing the administrative processes of the organization, ensuring its continued operations and also ensuring its functionality, in line with the changes and dynamic nature of the environment; thus, it serves to advance the robustness of organizations within the disposition of today's business context. Thus, the researcher recommends that organizations should focus on bridging their work forms with the environment through tele-working, which facilitates goal pursuit and attainment-thus enhancing the robustness of the organization.

Keywords: *Full-Time Working, Organizational Robustness*

Introduction

In highly volatile and uncertain times, organizations are frequently confronted with unexpected events such as natural disasters, pandemic or crisis. To sustain in an uncertain environment and to foster future success, organizations must be able to handle all these manifestations of the unexpected. Firms need to develop a robust capacity which enables them to adequately react to unexpected events and to capitalize on events that could potentially threaten an organization's survival (Lengnicks-Hall, Cynthia, Tammy & Mark, 2011). The changing features and emerging contextual factors shaping the environment of businesses today are such that cannot be addressed effectively using traditional business practices. Apart from the increase in competition and the merging of economic borders necessitated by globalization, the recent COVID-19 pandemic has shown that the approach towards business and work today need to be more flexible and cognizant of the gaps in the environment (Atkeson, 2020; Hinchcliffe, 2020). In this time and season, organizational robustness is thus an essential goal as it demonstrates the organization's capacity for sustained administrative, operational and functional effectiveness despite the changes and upturns reflected in the environments of the organization. Beno (2018) observed that thriving in today's business world bothers primarily on how well organizational structures, human resource content and systems are aligned to enable and drive its robustness goals. This is as Tamunomiebi and Zeb-Obipi (2009) posited that human resource management is the process of managing the human resource functions of an organization to achieve set goal. Organizational robustness describes an organization's capacity for consistency and stability in its operations despite uncertainty or changes in the environment of the organization (Kurschus, Sarapovas & Cyilikas, 2015; Herbane, 2019). It reflects the organization's administrative, functional and operational reliability even within highly volatile contexts – presenting the organization's features and systems as unperturbed and undisturbed. This conceptualization differs substantially from that of organizational resilience which according to Patriarca, Costantino and Gravio (2019) is more concerned with recovery, or a rebound of the organization from change related events. Organizational robustness focuses more on the integration and content of human resource. It explicates how roles, skills as well as knowledge are applied in the organizational framework and how these roles enable the organization to match its leadership, structure and service value with the context or environment of the organization (Monostori, 2016). This act simultaneously mirrors and consistently reviews the changes and development within the context of the organization, which in turn facilitates robustness outcomes. Some scholars

(Herbane, 2019; Razig & Aulabakhish, 2015) consider organizational robustness as being similar to adaptability. This applies in the sense that organizational robustness is change oriented and only able to attain and maintain its level of consistency despite changes in the environment due to its proactiveness and capacity to predict and thus make the necessary adjustments in preparation or anticipation of change. Robust organizations are therefore organizations that are able to understand the trends of their markets and adopt functional models that align effectively with such trends. Monostori (2016) argued that robust organizations, given their adaptive features, tend to sail the tides of change based on their ability to plan and predict possible shifts in the environment. However, as Beno (2018) pointed out, there is yet further need for studies to approach the concept of robustness from a perspective that emphasizes on its proactive and adaptive properties and nature.

According to Kurland and Bailey (1999), there are variety types of telework. The commonly used are: home-based, satellite offices, neighbourhood work centers, and mobile workers (Tamunomiebi, Adim & Adubasin, 2018). Home-base teleworking is a method of teleworking in which employees particularly work from their homes. Employees may opt to work for several days in a week. In order for this arrangement to succeed, employers provide employees with various office equipment and machines for instance, computers and fax machines (Wahab, 2007). On the other hand, Satellite offices are other ways of teleworking whereby employees are stationed at locality convenient to them or to their customers. The offices are properly furnished and have various office equipment (Blair-Loy & Wharton, 2002). The other form of teleworking is neighbourhood work centre. It is more or less like satellite office. The disparity arises in that neighbourhood work centre accommodates employees from more than one company. The organizations or companies may share the lease on buildings but maintain separate offices within the same building. Offices may be furnished by owner of the building or the renting firm (Pyoria, 2009). Mobile working is different from telecommuters because they work from one fixed location. Mobile workers are mostly commuting on the road. They may work from various locations for instance, hotel, planes or vehicle. This arrangement is common for salespersons, reporters or investment bankers (Sahay, Nicholson & Krishna, 2003). The purpose of this study is to examine the relationship between full-time tele-working and organizational robustness of GSM telecommunication firms in the South-South of Nigeria.

The research questions was guided by the following research questions:

- i. What is the relationship between full-time tele-working and functional robustness of GSM telecommunication firms in the South-South of Nigeria?
- ii. What is the relationship between full-time tele-working and operational robustness of GSM telecommunication firms in the South-South of Nigeria?
- iii. What is the relationship between full-time and administrative robustness of GSM telecommunication firms in the South-South of Nigeria?

Conceptual Framework

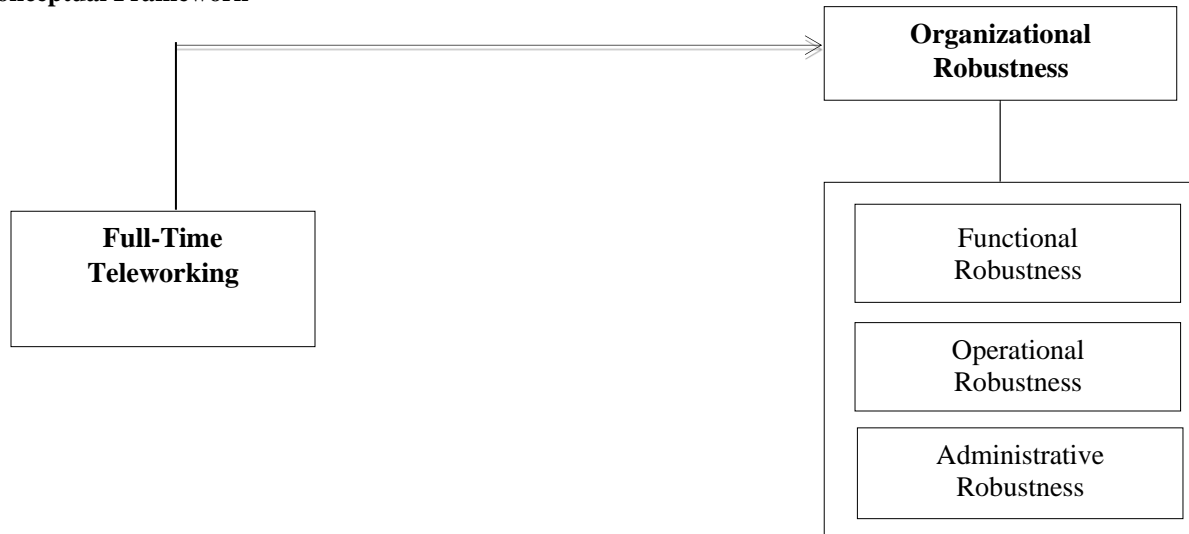


Figure 1: Conceptual framework for full-time teleworking and organizational robustness
Source: Desk Research (2021)

Theoretical Foundation

The Reciprocal Determinism Theory

As propounded by Bandura (Strauss & Parker, 2018; Hoffman, Lutz & Meckel, 2015), the reciprocal determinism theory states that the behaviour of the individual or organization (in this case) is influenced and also influences its personality and social environment. That is to say, the organization adopts practices that are shaped and guided by the nature or content of its environment, which in turn impact on the overall features of its identity and also facilitate its impact on its environment as well (e.g. through sustained or improved service offerings). The theory provides a basis for the adoption of tele-working practices (full-time, part-time and situational tele-working) in line with the growing dynamics of the business environment. Its tenets of reciprocal influence and determinism extend to the solidification or crystallization of such practices as a culture and behaviour of the organization which enables it survive whilst advancing its goals and objectives within its context or environment (Yap & Gaur, 2016). Thus, the theory provides a clear and more consistent explanation for the role of tele-working in advancing the interests and wellbeing of the organization. Raziq and Maulabakhsh (2015) argued that the restructuring of the human resource management policies and practices should emerge from the context of the organization and focus on providing the necessary support and system alignment for its wellbeing and success.

The Concept of Full-time Teleworking

This describes the action in which the human resource of the organization is allowed to work from the convenience of any location on a full-time basis. Full-time teleworking often describes knowledge work and is considered most particular to technology-based organizations. It is furthermore highly competitive but as Beno (2018) argued, it serves the organizations interest to a high degree as work is fluid and not defined by any physical infrastructure, time or distance – but workers are

able to function with little to no constraints. The author noted that this kind of work had low supervision and as such enabled the worker to be more creative with their time and even with their responsibilities – supporting an effective balance of work and family.

The full-time teleworking defines a system of work approach that is completely structured outside the physical structures or infrastructure of a particular building. Beno (2018) argued that full-time work is in most cases knowledge work, and their structure of the relationships between these kinds of workers is that of a network with centralized or focal reporting point. The full-time telework emphasizes more on the knowledge and competence of workers as against their physical presence. It is as Baert, Lippen, Moens, Sterkens and Weytjens (2020) also noted that a highly efficient and mobile kind of framework that is not directly affected by factors such as crowding within the office, or conflict with host communities. This is because the full-time worker can easily make adjustments in terms of location and time, and has a higher capacity for meeting up with specified organizational deadlines.

The Concept of Organizational Robustness

Broadly understood, robustness refers to the ability to withstand or survive external shocks, to be stable in spite of uncertainty (Ivanov, Dolgui, Sokolov & Ivanova, 2016; Kennon *et al.*, 2015). More specifically, robustness has been described as the ability of a system to withstand perturbations in structure without change in function (Monostori, 2016). In all instances, robustness is associated with a complex system's ability to remain functional in the face of shocks or disturbances (Ivanov *et al.*, 2016). This focus on withstanding shocks and systemic functioning is prevalent in most applications of robustness across the various different disciplines. In engineering, the robustness of systems refers to functional reliability in the presence of eventual failure; in biology, robustness is the ability of developmental processes to remain on course, notwithstanding the impact of environmental perturbations; in ecosystems, robustness is defined in terms of ecological resilience, which is the ability to maintain functions and control in the presence of external disturbance and the maintenance of some desired system characteristics despite fluctuations in the behaviour of its component parts or its environment (Wicket, Scherer & Spencer, 2016). The robustness concept, outside biology, has been adopted in systems studies, control theory, engineering, computer science, statistics, supply chain management, and many other scientific disciplines (Young, 2010; Rasch & Tsebelis, 2011). Robustness examines how systems can remain stable in the face of uncertainties. In the management literature, robustness is predominantly examined in the fields of risk management and business continuity management (Serletis, 2014; Pelling, 2012). Given the nature of volatility, uncertainty, and speed, organizations are constantly challenged to maintain and bolster their robustness. It is thus critical to understand how organizations can maintain core functions against the uncertainties to achieve organizational robustness.

Patriaca, *et al.*, (2019) have defined robustness in such constitutions as its capacity to safeguard from external shocks and internal crisis, while Bedner (2016) has adopted robustness as a criterion to assess the capacity of governments such as that of the US 'to preserve itself endogenously while also maintaining the exogenous status quo. More importantly for the purposes of this paper, robustness has also found room in various foundational works on policy, resilience and organizational design. For instance, Bishop (2019) has called for the abandonment of optimization as a criterion or guiding principle for the design of policies and argued instead for a stronger focus on robustness because 'a robust organizational policy alternative is one expected to perform tolerably well across the whole range of scenarios given any one of the pertinent theoretical perspectives. Its main virtue is its invulnerability to the weaknesses in our understanding and to unexpected changes in the environment of policy. Kurschus *et al.* (2015), in his fundamental guidelines for organizational design, suggested 'to design around the risk of accidents, seeking robust organizations that can withstand the various shocks that will inevitably befall them.

Functional Robustness

This measure describes the capacity of the organization to sustain and main its functions despite the pressure and changes of the external environment. It is important to note that functional robustness primarily relates more to the capacity of continuity through flexible behaviour, and not rigid actions that fail or refuse to recognize change – thus functionality adapts and is able to remain consistent as a result of its altering of relevant features and aspects of roles and responsibilities within the organization. Doem (2016) opined that organizations that are capable to easily switching their functions and structure to match change requirements are more effective when it comes to context-specific behaviour and success.

Functional robustness according to Kennon *et al.*, (2015) is a trait of the organization which is traceable to the capacity and reliability of its human resource. The author opined those organizations competencies and capacities are drawn from the content of its human resource and the extent to which its skills and knowledge can be described as useful and supportive of the organization's goals. Functional robust demonstrates the organizations relevance and ability to offer required services and products in a form that follows its established standards, despite the changes or disturbances in its environment. Kurschus *et al.*, (2015) noted that it is imperative that in strengthening and developing functional robustness, organizations focus on matching their human resource content with the underlying factors that shape their environment, that way providing a basis for their relevance.

Operational Robustness

This describes the organizations capacity for sustained operations during crisis periods or change events. Operational robustness details the continued servicing of clients and markets despite possible impediments or challenges (Kurschus *et al.*, 2015). Herbane (2019) noted that operational robustness equates to the strength and features of the organization's relationship with its suppliers, customers, distributors; while on the other hand, functional robustness details the consistency of role performance and the interconnect between the staff of the organization. Operational robustness is primarily concerned with the extent of system efficiency. This details how well processes and actions are integrated towards the achievement of organizational targets (Patricia *et al.*, 2019). Organizational operations are wider and a more elaborate aspect or behaviour of the organization than its functions; this is because while functions attribute to particular units or roles within the organization, operations often entail a combination of functions linked through various stages and processes of organizational action. Operational robustness thus involves the organizations capacity for reliable processes that are relatively stable due to their incorporation of flexible formats and alternative approaches focused on the same goal or set of organizational objectives (Patricia *et al.*, 2019).

Administrative Robustness

This refers to the organization's capacity for control and coordination, despite the prevailing challenges within its context. Administrative robustness is primarily a reflection of the leaderships unwavering command and control of affairs during turbulence and change events. According to Doem *et al.*, (2019) it details the organizations level of cohesion and control of its workers, processes and systems despite the pressure and impact from external factors. This builds mostly on the understanding and ability of the leadership to stir and effectively channel the organizations resources in a most efficient and controlled way. Patricia *et al.*, (2019) asserted that robustness at the administrative level is concerned with the level of control and organizing that is evident during possible crisis or change situations – thus demonstrating the competence and skills of the organization's leadership. Bishop (2019) argued that administrative control and coordination is imperative to the organizations ability to scale through tough times. The author attributes administrative robustness of factors such as emotional intelligence, charisma, strong policies, strict regulations, and also substantial levels of autonomy and delegation of authority. From Patricia *et al.*, (2019) view, it is important that the leaders are attuned to not only their external environment and the surrounding threats, but also aware and cognizant of the potentials and capacities that lie within their organization, as concerns their human resources. This is as the authors emphasized on the development of the human resource as a means of curtailing and effectively matching the expectations of the environment or context of the organization.

Full-Time Tele-Working and Organizational Robustness of GSM Telecommunication Firms in South-South, Nigeria

The full-time teleworking accords workers a higher proportion of time at their disposal and also a more evident level of flexibility to their work. Monteiro *et al.*, (2019) in their study observed that full-time telework was one of the most consistent in terms of productivity and functionality, especially since the workers had the capacity to work from any location and without any disruptions resulting from their constrain or delimitation to a particular office or workspace. In another study Alghaithi (2020) demonstrated that full-time teleworking accords the organization a high level of flexibility and capacity for time related goals. This position is shared by other scholars who also identified full-time tele-working as efficient and reliable in terms of target accomplishment. One finds that while previous studies appear to support full-time teleworking as a possible antecedent of improved organizational outcomes – there is however scant empirical focus on its relationship with organizational robustness, hence the following hypotheses are stated:

H₀₁: There is no significant relationship between full-time tele-working and functional robustness of GSM telecommunication firms in South-South Nigeria

H₀₂: There is no significant relationship between full-time tele-working and operational robustness of GSM telecommunication firms in South-South Nigeria

H₀₃: There is no significant relationship between full-time tele-working and administrative robustness of GSM telecommunication firms in South-South Nigeria

Methodology

A correlational research design was adopted. A total of one hundred and thirty-one (131) was drawn from a population of one hundred and sixty-two (162) manager and supervisors across the regional/ corporate offices of four (4) GSM telecommunication firms in South-South, Nigeria. The researcher adopted primary method of data collection. The questionnaire went through content and construct validity test, while Cronbach Alpha was used to test for reliability of the research instrument. The data collected were analyzed at different levels, for primary level data, descriptive statistical tools were used in describing the demographic and univariate, inferential statistical tools were used in analyzing the bivariate. The tests were carried out at a 95% confidence interval and a 0.05 level of significance.

Data Analysis and Results

Bivariate Analysis

The level of significance 0.05 was adopted as a criterion for the probability of accepting the null hypothesis in (p> 0.05) or rejecting the null hypothesis in (p <0.05).

Table 1 Full-Time Teleworking and Measures of Organizational Robustness

| | | Fullwork | Function | Operation | Admin | |
|----------------|-----------|-------------------------|----------|-----------|--------|--------|
| Spearman's rho | Fullwork | Correlation Coefficient | 1.000 | .531** | .620** | .455** |
| | | Sig. (2-tailed) | . | .000 | .000 | .000 |
| | | N | 131 | 131 | 131 | 131 |
| | Function | Correlation Coefficient | .531** | 1.000 | .686** | .751** |
| | | Sig. (2-tailed) | .000 | . | .000 | .000 |
| | | N | 131 | 131 | 131 | 131 |
| | Operation | Correlation Coefficient | .620** | .686** | 1.000 | .592** |
| | | Sig. (2-tailed) | .000 | .000 | . | .000 |
| | | N | 131 | 131 | 131 | 131 |
| | Admin | Correlation Coefficient | .455** | .751** | .592** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | . |
| | | N | 131 | 131 | 131 | 131 |

Source: SPSS Data output, 2021

Research Question 1: What is the relationship between full-time tele-working and functional robustness measures of GSM telecommunication firms in the South-South of Nigeria?

The correlation coefficient (rho) result in table 1 was used to answer the research question 1. Table 1 shows a Spearman Rank Order Correlation Coefficient (rho) of 0.531 on the relationship between full-time tele-working and ofunctional robustness. This value implies that a moderate relationship exists between the variables. The direction of the relationship indicates that the correlation is positive; implying that an increase in full-time tele-working was as a result of the adoption of functional robustness in of GSM telecommunication firms in the South-South of Nigeria. Therefore, there is a moderate positive correlation between full-time tele-working and functional robustness of GSM telecommunication firms in the South-South of Nigeria.

Ho₁ There is no significant relationship between full-time tele-working and functional robustness measures of GSM telecommunication firms in the South-South of Nigeria.

Similarly displayed in the table 1 is the statistical test of significance (p-value) which makes possible the generalization of our findings to the study population. From the result obtained from table 1, the sig- calculated is less than significant level ($p = 0.000 < 0.05$). Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between full-time tele-working and functional robustness measures of GSM telecommunication firms in the South-South of Nigeria.

Research Question 2: What is the relationship between full-time tele-working and operational robustness measures of GSM telecommunication firms in the South-South of Nigeria?

Similarly, Table 1 shows a Spearman Rank Order Correlation Coefficient (ρ) of 0.620 on the relationship between full-time tele-working and f operational robustness. This value implies that a strong relationship exists between the variables. The direction of the relationship indicates that the correlation is positive; implying that an increase in full-time tele-working was as a result of the adoption of functional robustness in of GSM telecommunication firms in the South-South of Nigeria. Therefore, there is a strong positive correlation between full-time tele-working and functional robustness of GSM telecommunication firms in the South-South of Nigeria.

Ho₂ There is no significant relationship between full-time tele-working and organizational robustness of GSM telecommunication firms in the South-South of Nigeria.

Similarly displayed in the table 1 is the statistical test of significance (p-value) which makes possible the generalization of our findings to the study population. From the result obtained from table 1, the sig- calculated is less than significant level ($p = 0.000 < 0.05$). Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between full-time tele-working and operational robustness of GSM telecommunication firms in the South-South of Nigeria.

Research Question 3: What is the relationship between full-time tele-working and operational robustness measures of GSM telecommunication firms in the South-South of Nigeria?

Furthermore, Table 1 shows a Spearman Rank Order Correlation Coefficient (ρ) of 0.455 on the relationship between full-time tele-working and administrative robustness. This value implies that a moderate relationship exists between the variables. The direction of the relationship indicates that the correlation is positive; implying that an increase in part-time tele-working was as a result of the adoption of administrative robustness in of GSM telecommunication firms in the South-South of Nigeria. Therefore, there is a moderate positive correlation between full-time tele-working and administrative robustness of GSM telecommunication firms in the South-South of Nigeria.

Ho₃: There is no significant relationship between full-time tele-working and organizational robustness measures of GSM telecommunication firms in the South-South of Nigeria.

Similarly displayed in the table 1 is the statistical test of significance (p-value) which makes possible the generalization of our findings to the study population. From the result obtained from table 1, the sig- calculated is less than significant level ($p = 0.000 < 0.05$). Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between full-time tele-working and administrative robustness measures of GSM telecommunication firms in the South-South of Nigeria.

Discussion of Findings

The evidence advanced in this study supports the role of full-time teleworking as contributing significantly towards outcomes of organizational robustness. This agrees with the position of earlier studies (Ivanov *et al.*, 2016; Dewi & Adiarsi, 2020; Dockery & Bawa, 2014) which have emphasized on the imperatives of work revolution especially in the area of human resource management – stressing the need of change in work systems from the traditional use of organizational office spaces to a more flexible approach that allows for work consistency and robustness – such as occasioned by teleworking. Das *et al.* (2020) described teleworking as advancing improved work formats that are well suited to addressing the turbulence within most business environment or settings. Full-time teleworking connects and integrates organizational members, despite geographical locations, in a way that ensures organizational goals are accomplished with minimal impact or influence from the business environment

Scott (2014) noted that the capacity for change comes with the acquisition of knowledge and skills which when applied enables the organization function more efficiently and effectively. This is because such knowledge and skill are required for equipping and transforming the organization in ways that drive its success in several ways – one of which is its capacity for digital functionality given the high level of turbulence within the context or environment of the organization. Doem *et al.* (2019) stated that organizations thrive on their competencies and the extent to which such competencies adequately address their challenges. In his view argued that full-time teleworking provides cohesion to work members through consistent communication, shared responsibilities and the ability to collaborate effectively on specific tasks. Such necessitates improved levels of cooperation between the workers – enabling effective communication and also knowledge sharing.

Charalampous *et al.* (2019) advised that organizations focus on training and developing their workers in line with the gaps in their environment and the trends of their markets. This perspective specifies the organization's role in the development and equipping of workers for the effective engagement of the workers and their functions. Bundy *et al.* (2017) affirmed that organizational competencies are primarily anchored on their workers capabilities and the extent to which workers skills and abilities are useful, relevant and in the same manner, match the needs and expectations of their environment and market. This position aligns with the evidence generated in this study which identifies the structuring of work and its format, especially that which translates as full-time teleworking as significantly enhancing and thus driving outcomes of employee cooperation, knowledge sharing and communication.

Conclusion and Recommendation

The relationship between full-time teleworking and organizational robustness presents a stance with regards the adoption and emphasis of teleworking practices in driving improved levels of relationships and enhanced levels of collaboration between workers. Thus, in line with the facts generated, this study concludes that actions structured or patterned towards enabling work systems or formats that support full-time teleworking enhances the nature and content of the workers relationships and bridges the social gaps or differences that may exist between the workers. This is because full-time teleworking is observed to create healthy boundaries between the workers and that way enhances their capacity to communicate, cooperate and share knowledge with co-workers without undue frictions or conflict noted to be prevalent within traditional workspaces in organizations. The study recommends that the adoption of full-time teleworking actions are structured to ensure consistency of communication between members of the organization through consistent meetings and the integration of functions and roles such that members are constantly in touch with each other and able to relate with other members of the organization.

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