

# Organizational Citizenship Behaviour: A Quantitative Examination of US Telecom Telecommuters

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**Abstract** Telecommuting innovate telecom organizations towards reduction in cost of operations. I examined correlational relationship between employees support for creativity and innovation as exemplified by the use of telecommuting in telecom environment, organizational commitment, and organizational citizenship behaviour. Moreover, this study was explained in context of diffusion of innovation theory. To examine the hypothesis in the study, I used the data from 324 randomly sampled telecom telecommuters to conduct a multiple regression analysis between the variables in the study. The results from the multiple linear regression were significant in predicting employee organizational citizenship behaviour. The findings indicated that Support for creativity and innovation, and organizational commitment were significant contributors to employees' organizational citizenship behaviour. The implications for change are also discussed.

**Keywords**— Telecommuting, Innovation, Diffusion, Employees' Commitment, Organizational behaviour.

## I. INTRODUCTION

Advancements in information technology offered US based telecommunication companies opportunities to adopt telecommuting as an innovative work environment [1][2][3]. In providing an insight into the relationship between telecommuting strategies of organizations and the influence technological advances [4], concurred with the Equal Employment Opportunity Commission (EEOC) observation that technology should enhance an employee's ability to work remotely, boost morale, and increase productivity to realize accruable gains to the organization. The use of technology to create a telework community comes with a cost [5][2]. Managers' implement telecommuting practices to effectively share the operational costs effectively through reduction in building space versus working from home, payment of real estate taxes, maintenance of the property, and catering for employees comfort in the building [6].

The numbers of employees engaged in the telecommuting practices more than tripled over the preceding 30 years, while the concerns over work-

life balance deteriorated [7]. A study on telecommuting reported that about 77% of employers allowed at least 63% of their workers to occasionally telecommute [8]. Arguably, managers' abilities to adopt telecommuting as a workplace standard was dependent on factors such as employee's openness, acceptance of work arrangements, the openness of company manager [2], the desire to benefit from the advantages accruable from telecommuting synergies, and the presence of the technological infrastructures necessary to implement the model.

## II. BACKGROUND OF STUDY

Telecommuting, as a technological work-driven environment, is uniquely different from traditional workplace. The replacement of physical workplace with virtual environment altered employees work-life dynamics and significantly eroded organizational culture [8]. The traditional workplaces bonded employees to one another, and to the organization in the same physical setting [8]. Telecommuting individualized social innovation by creating fragmented work groups, that excluded certain employees, and neglected relational processes and transformations [9]. The employees interactive and emotional relationships with peers and supervisors factored into the commitment to go beyond the call of duty in support of organizations goals. Managing employees in a traditional work environment may require managers to apply personal traits such as face-to-face meetings, judging personal dispositions, and expressing concern for individuals before considering disciplinary action. In two different studies on the telework research, [10] [11] argued that while the employees' commitment for teleworking remained ambiguous, the managers' apprehension about cost and control affected the need for such relationships. As reported in a study, ineffective management practices affect managers' attention to develop interpersonal skills; thus, impinging on the understanding of the behavioural and emotional relationships between employees [12].

In a study on offshore relationships on the role and development of trust as emotional relationship [13] concluded that the sense of well cultivated trust relationship is a crucial foundation for facilitating the development of a stable collaborative order. In a

physically described work environment, employees empathize with one another and shared intimacies of life changing events such as marriage between peers, graduation ceremonies, carpools, team lunches, potluck parties, and the occasional nicotine breaks exist; these occasions and events are non-existent in a technologically driven work environment. The absence of such empathetic behavior by managers suggested an emotionless characteristic of managers that affected organization citizen behavior. Several academic publications on innovation focused benefits of telecommuting as technological platforms to connect employees remotely, only a few studies discussed organization citizen behavior in relation to employees' emotions in telecommunication environments.

#### **A. Telecommuting in Telecom Workplace**

Innovation is the introduction of a new practice [14][15][16]. Innovation could also be the development, adaptation, and implementation of an idea that is beneficial and new to the organization at the time of adoption [17]. Innovation relates to new products and services, production methods and procedures, production technologies, and to administrative changes [18][19][20]. The management options to adopt a specific work practice are dependent on the changes in the global business environment, prevalent technology, and strategic intent [1][21][22][23][24]. The transformation of a work environment from traditional setting to technologically-based platforms allowed managers to use information management systems based innovations to restructure the organizations' capabilities and to remotely manage teams' tasks, notwithstanding distance [7]. Telecommuting was itself an innovation that managers used to expand the broader implication for organizations striving to achieve cost savings and product efficiencies [25]. From the organizational behavior perspective, innovation was crucial to organizational survivability and was a response to changing business environment. Telework (telecommuting) is employment activity in which an individual works from home and communicates with co-workers through technologies [26]. Despite the competitive advantages gained by organizations in using technology to advance the telecommuting work environment, some of the unexpected outcomes remain ambiguous [27]. Employees' headcount reductions, social seclusion, loss of physical presence or personal interactions among peers, and the development of poor management skills are some of the unexpected outcomes [28][29][26]. In modernizing workplace environment with technology, managers overemphasized the importance of the employees' competencies, and deemphasized the concern for employees' efficiencies, locations, temperaments,

behaviours, and visible physical challenges faced while solving the problems [30][31][32][33].

#### **B. Organizational Citizenship Behavior**

Organizational citizenship behavior (OCB) is the employees' perceptions of work environment, expression of tasks performed, and commitment to carry out the organization's goals [34]. OCB is vital in team building, developing and managing employees' skills, dissemination of organization culture, and driving organizations successes [35]. The organizational successes are better advanced through the employees' innovative creativity, infusion of technological advancements, and leadership commitment to creating a conducive organizational climate supportive of business goals and efficiency [36].

In relating OCB to organizational climate, [37] defined organizational climate as the shared perception of employees about their work environment. The shared perceptions included employees' positive views of the workplace environment, respectfulness, inclusiveness and psychologically safe; trust between leaders and co-workers, fairness, and diversity were indicators of the positive work environment [37]. The conduciveness and positive nature of the work environment were significant factors for fostering collaboration, innovation, and creative thinking; necessary for advancing organizations innovative culture [38].

Adoption and the diffusion of telecommuting as telecom workplace practices, have definitive impact on employees' relationships with peers, supervisors, and organizational leadership remains misunderstood in the context of the relationships between OCBs, the psychological perspective of the firm, support task performance, and interpersonal relationships [39][40][41][42][43][44]. The managers' lack of understanding of this relationship may be problematic to employees' attitude and commitment to organization goals. The concerns on decrement of empathy by managers who supervised remote employees [45], often relayed the feeling of lack of presence [46]. OCB connotes the actions of workers who exceeded beyond organizational expectations [36][47].

Despite wide acceptance of telecommuting in organizational setting, such practices in telecommunication work environment could negatively affected employee job performance, citizenship behaviours [28], the lack of understanding for the relationships between innovation, employee's behaviour, and the role of organizational culture could affect performance [48]. Telecom organizations use telecommuting innovation to remotely manage employees deemphasized the importance of human physical interactions, increased the possibilities of employees' isolation from peers and managers,

lowered employee's trust, lowered commitment to tasks, and eroded empathetic emotional relationships [46]. Therefore, the managers' understanding of the relationship between telecommuting resulting from the infusion of technological innovation and OCB remained an important research topic that needed further investigation from a telecommunication organization.

### ***Organizational and Employees' Commitment in Innovation Research.***

Adopting a technologically-based workplace required organizational adjustments to motivate the employees in accepting new approaches as critical functions to meet business needs, which depends employees' commitment to innovation adoption, organizational climate, and managers motivation strategies [49][50][51]. The adoption and diffusion of telecommuting as an innovation involves the inclusiveness of employee's commitment in a perceived work environment for achieving organizational effectiveness, and sense of belonging of being treated justly by the organization [52][53][54][55][56][57][58].

The of telecommuting to stimulate organizational growth, profitability, and success constituted a complex of organizational processes requiring the collaboration between employees and managers to achieve the essential meaning of innovativeness [59][60][61]. In a complex information technology sector where telecommuting have become essential for organizational success providing a conducive climate for employees' creativity, development of innovative culture, and investments on computer systems, broadband technologies, and skilled resources to achieve a desirable competitive advantage remains emblematic of such an environment [62][63][64][65][66].

Despite the implied benefits of adopting telecommuting by telecom organizations, the challenges faced by employees, managers, and organizations using these platforms presented a wider gap in the remoteness of employees from their managers and leadership [67][68][69][70][71] [72]. Managers' enthusiasm to build and foster personal relationships with their employees was relegated when the benefits of telecommuting were more focused on higher productivity than the symbiotic organizational citizenship behaviour relationship [73][74] [75][76]. How does a manager empathize with an employee in a work environment devoid of a physical presence? How does the employee remain committed to the organizational goals where the emphasis is more on productivity than their personal growth? The displacement of physical relationship with telework encourages the appetite for less humane consideration of the managers in disciplining employees [77][78][79] [80].

Telework synergies involve balancing of the relationship between employees' commitment and

trust for the organization in the transition from the traditional business environment to technology-driven workplace [81][82]. Employees' commitment was a critical component in supporting organizations' long-term goals in adopting telecommuting [83][84][85][86][87], and understanding of this relationship is useful in moderating employees' behaviour towards innovation in telework environment [88][89][90][91][92]. A study on the relationship between organizational commitment and OCB showed that commitment had a significant effect on OCB [93], yet only a small number of studies, and researchers attempted to relate employees' OCB to supporting telecommuting as an innovative work environment. This study will contribute to knowledge in organizations behavioural relationship with employees in a telecommunication-based environment; where innovation is a core competency for achieving competitive advantage.

### **III. THEORETICAL FRAMEWORK**

Rogers diffusion of innovation (DOI) is the theoretical framework for this study. In relation to innovation, the DOI framework has a solid foundation in innovation studies, behavioural studies, and information management sciences [94][95][96][97][98][99]. The adoption of telecommuting practice is consistent with Rogers (2003) five stages outlined as innovation processes and include (a) agenda setting, (b) matching, (c) redefining and restructuring, (d) clarifying, and (e) routinizing [100] [101] [102]. The conceptualization of telecommuting as an innovation becomes routinized, thus accurately align with DOI theory attributes as exemplified in a telecom organization [103][104][105][106] [107][108].

From organizational perspective innovation is essential for achieving competitive advantages [109][110] [111] [112], but employees' resistant to imposed innovation in a workplace has profound effect on employees' behaviours [113][114][115] [116][117]. Roger (2003) outlined uncertainties resulting from poor adoption of innovation to employees' emotional discontent, low support for creativity and innovation, and low motivation which align with employees' behaviours, innovation adoption attitude, and organizational citizenship behaviour [118][119][120][121]. Given the ambiguity encompassing the innovative use of telecommuting, this research paper is designed to examine the relationship between employees' adoption of telecommuting, employees' commitment to the organization, and organizational citizenship.

Hypothesis 1a. *There is no relationship between employees' adoption of telecommuting, employees' commitment to the organization, and organizational citizenship behaviours.*

Hypothesis 1b. *There is a relationship between employees' adoption of telecommuting, employees'*

commitment to the organization, and organizational citizenship behaviours.

IV.METHOD

A. Measure.

**Organizational citizenship behaviour.** This was the dependent variable, with constructs developed into a well-established facet of the organizational and employees work behaviours in the context of task performance [39]. The instrument assesses individual employees' perception of the organization and the extent they associated themselves with the organization. The OCB contained 24-items developed by Podsakoff et al. (1990). The items consisted of five subscales namely altruism, conscientiousness, sportsmanship, courtesy and civic virtue [122], scored with a seven-point Likert scale ranging from 1 to 7, with one representing strongly disagreed and six representing strongly agreed, and the Cronbach's alpha for the scale measured at 0.90.

**Support for creativity and innovation.** To measure employees, support for creativity and innovation which an independent variable in the study, I used The Climate for Innovation measure (CIM), a 22-item scale. The scale originally came from Siegel Scale of Support for innovation and was modified by Scott and Bruce in 1994 [123][124][125]. The scale is scored with a 5-point Likert-type scale ranging from 1 to 5 points, with one representing strongly disagree, and five representing strongly agree. The Cronbach's alpha for the scale was 0.92.

**Organizational commitment** is the second independent variable in this study. Organizational Commitment Scale (OCS) is the instrument used in accessing the account of an employee's psychological attachment to their organization. O'Reilly and Chatman (1986) established the Organizational Commitment Scale with a 12-item to measure employees' willingness to comply with organizational values and goals [126]. The three dimensions in the scale: are internalization, compliance, and identification. The items in the OCS is scored with a seven-point Likert scale where 1 equals strongly agree and 7 equals strongly disagreed. The Cronbach's Alpha for the Organizational Commitment Scale subscale was 0.92.

B. Participants and Data Analysis

The study participants were randomly selected from telecom employees telecommuting from home. 2012 - 2016. Participants were selected through random sampling technique. An appropriate sample size of 324 was considered adequate for the study. The inclusion eligibility criteria for participants were; (a) participant must be telecom employee, and (b) the participant telecommute from home. The participant's voluntarily accessed and completed the

survey questionnaires using Fluidsurveys.com, an online data collection tool.

Data analysis involved using the quantitative technique to answer the research questions and hypotheses. I extracted and uploaded the data from the participants into SPSS data analytical software, and data with outliers or missing values expunged from the dataset. The assumptions surrounding multiple linear regression techniques was addressed by assessing multicollinearity, outliers, linearity, homoscedasticity, and independence of residuals, and inferential statistics multiple regression was executed to investigate the relationship between the independent variables and the dependent variable [127][128][129].

V. TABLE

TABLE 1  
Descriptive Statistics, Multicollinearity, Collinearity Coefficients for Variables (N = 325)

Variable	Mean	SD	Collinearity Statistics	
			Tolerance	VIF
Organizational Citizenship Behavior	107.23	17.44		
Support for Creativity and Innovation	63.51	7.00	.995	1.005
Organizational Commitment	47.56	7.18	.995	1.005

TABLE 2  
Correlation Coefficients for Independent Variables (N = 325)

Variables	Organizational Citizenship Behavior	Support for Creativity and Innovation	Organizational Commitment
Organizational Citizenship Behavior	1.00	.424	.123
Support for Creativity and Innovation	.424	1.00	-.071
Organizational Commitment	.123	-.071	1.00

TABLE 3  
Regression Analysis Summary for Support for Creativity and Innovation, and Organizational Commitment, Predicting Organizational Citizenship Behavior (N = 325)

Variable	B	SE B	β	t	p
Constant	20.30	10.51		1.99	.048
Support for Creativity and Innovation	1.08	.124	.435	8.73	.000
Organizational Commitment	.373	.121	.154	3.08	.002

Note: Predictors (Constant), support for creativity and innovation, resistance to change, and organizational commitment

TABLE 4  
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F	df1	df2	Sig. F Change
1	.451 <sup>a</sup>	.203	.198	15.61	.583	41.100	2	322	.000

Note: Predictors (Constant), SumOfOC, SumOfCIM,

TABLE 5  
ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	20046.077	2	10023.09	41.100	.000 <sup>a</sup>
	Residual	78525.615	322	243.868		
	Total	98571.692	324			

Note: Dependent variable: SumOfOCB; b. Predictors: (Constant), SumOfOC, SumOfCIM

VI.RESULT

Table 1 and Table 2 depicted the output of the descriptive and collinearity statistics of the variables. Table 3 depicted an output from multiple regression indicating that the two predictor variables had significant standardized regression weights (creativity and innovation, Beta=.435,  $t = 8.725$ ,  $p < .000$ ; organization commitment, Beta= .154,  $t$

=3.08,  $p < .002$ ); each of the two predictor variables was a significant contributor to predicting organizational citizenship behaviour. In the final model, support for creativity and innovation, and organizational commitment variables were statistically significant, with support for creativity and innovation (Beta = .435,  $p < .001$ ) accounting for a higher contribution to the model than support for organizational commitment (Beta = .154,  $p < .002$ ).

As per the regression analysis summary for creativity and innovation, and organizational commitment predicting OCB in Table 3, all the  $p$ -values were significant ( $p < 0.00$ ) level of support for creativity and innovation, and ( $p < 0.002$ ) for organizational commitment. The predictor variables are significantly related to OCB, and also positively related to each other. The multiple correlation  $R = .451$  between OCB and the two predictor variables was significant, the combination of the two predictors variables accounted for over 20% of the variation in organizational citizenship behaviour (Table 4). Therefore, the regression equation is significant ( $F(2, 322) = 41.100$ ,  $p < .001$  (Table 5). Based on the statistical significance of the two predictor variables (employees' support for creativity and innovation and organizational commitment), I rejected the null hypothesis.

The positive slope for support for creativity and innovation as a predictor of employees' OCB in Table 3 indicated there was a 1.083 increase in employees' OCB for each one-point increase in the support for creativity and innovation. This outcome supported the deduction that employees' OCB tends to increase as support for creativity and innovation increases. The squared semi-partial coefficient (.434<sup>2</sup>) indicated that .188 or 18.8%, of the variance in employees' OCB was predictable by support for creativity and innovation variable.

The positive slope for organizational commitment (.373) as a predictor of employees' OCB in Table 3 showed that a .373 increase in employees' OCB for each additional one-unit increase in organizational commitment. This outcome provides that employees' OCB tend to increase as organization commitment increases. The squared semi-partial coefficient (.153<sup>2</sup>) estimation of how much variance in employees' OCB was predictable from organizational commitment was .023. The 2% of the variance in employees' OCB related directly to organizational commitment.

Conclusively, the findings from the regression analysis showed that support for creativity and innovation and organizational commitment were significant predictors of employees' organizational citizenship behavior. Overall, the results further indicated that a significant positive relationship exists between the predictor variables and employees' organizational citizenship behavior.

Based on the findings from the study, I rejected the null hypothesis.

## VII. DISCUSSION

As the empirical evidence in Table 3 indicates, employees' support for creativity and innovation, as exemplified by the innovative implementation of telecommuting, positively correlates with employees' OCB that is consistent with the findings in this study. The regression analysis indicated (Beta = .435,  $p < .001$ ) a moderate value that was significantly related to OCB. Organizational commitment reported as (Beta = .154,  $p < .002$ ) positively correlated with employees' OCB despite the low correlation values. This finding is consistent with a study of the determinants of OCB conducted by [118]. In that study, Jha linked OCB to increased efficiency, innovation, process improvement, and employees' commitment to organization goals.

Organizational climates, such as employees' attitudes towards creativity and innovation, job satisfaction, and organizational commitment remain major determinants in OCB [130][131][132]. Kesen (2009) in an empirical study linked organizational identification to individual creativity using OCB as the mediator to clarify the role of individual creativity and reflections organizational citizenship behaviors. The outcome of the study indicated a positive relationship between individual creativity and all dimensions of OCBs which has a similarity with the findings in this study.

In a quantitative study grounded in a socio-technical systems approach, [133] examined the role of organizational support in teleworker wellbeing and their individual perceptions of support and telework outcomes. The study by Bentley et al. involved a larger number of participants ( $N = 804$ ). Likewise, a study by [134] investigated the relationships between knowledge sharing, organizational citizenship, job satisfaction and organizational commitment among school teachers in Botswana. The findings in these studies suggest that organizational support positively affects work telecommuting environment. Both groups of researchers identified organizational commitment as significant predictors of OCB which mirrors with the findings in this study.

Employees' commitment relates to organizational values; especially when managers advances an organizational goal [135]. The study conducted by [136] on the relationships between performance and individual values, commitment, and OCB indicated that despite the dissimilarity in organization and participants in the study, the findings indicated a positive effect of commitment on OCB, which is similar to the findings of this study. This finding is consistent with the results of a multidimensional analysis of ethical climate, job satisfaction, organizational commitment, and OCBs conducted by [137] using hierarchical regression to examine

ethical climate, job satisfaction, and components of organizational commitment influencing different dimensions of organizational citizenship behaviours. The findings of the study showed managers could increase OCBs by influencing organizational commitment.

An exploratory and confirmatory factor analyses of OCB and its relation to organizational commitment conducted by Gautam et al. (2005) indicated a positive relation with affective and normative commitment which is similar to the findings of the study. Despite consistencies or similarities outlined above, Coldwell and Callaghan (2014) study on specific OCBs and organizational effectiveness presented a contrast with the findings in this study. Coldwell and Callaghan concluded that irrespective of positive the role of OCB in organizational effectiveness, it could be inimical due to the negative effect of entropic citizenship behaviour on organizational goals and effectiveness.

### **VIII. LIMITATIONS**

The biases, sincerity, and honesty of the study's participants, as well as the accuracy of the instruments used in assessing the variables limited the scope and results of the study. Second, the participants and companies used in this study were taken from the telecommunications industry; all participants used telecommuting as a workplace practice in the United States. Therefore, the findings in this research apply to the employees of telecommunication service providers in the United States; there may be limited applicability to other industries. Third, the sample of participants in this study were from different telecom companies across the United States; therefore, the extractions of shared experiences relating to telecommuting as an innovation adoption might differ between these employees, organizations, and companies. Fourth, the use of two independent variables and one dependent variable limit the findings in the study; thus narrowing the outcome on the relationships between the variables used in examining the perception experienced by the participants. Finally, the participants' sampled is a reflection or likeness to the general population. These five factors limited the generalizability of the study's results.

### **IX. IMPLICATIONS**

It is important for managers who oversee the implementation of new workplace environments and practices through technologies to recognize the positive role of support for creativity and innovation, organizational commitment, and employees' citizenship behaviour play in the organizational intent to achieve a competitive advantage. The outcomes of this study indicate a positive linkage between the variables and a good understanding of this relationship could contribute to positive social change if managers utilize these results to improve

employees' OCB to support telecommuting as innovation in telecom businesses. Telecom managers and organizational leaders could use the findings from this study to open dialog, or develop and promote new strategies that could positively advance employees' OCB. Committed employees are bound to go beyond the daily call of duty to promote organizational goals. Employees play vital roles in organization performance and survivability. Because of this vital role, managers should consider the importance of OCB as a crucial element in predicting employees' attitude and behaviour relevant to the success of the organization

### **X. RECOMMENDATIONS**

The two significant variables (support for innovation and creativity and organizational commitment) together with overall  $R^2$  indicated the model to be moderate and significant for predicting organizational citizenship behaviour. Future researchers should incorporate more organizational climate-related variables to achieve higher  $R^2$  which may improve managers' use of the model to predict employees' OCB. The work environment is affected by the surrounding culture of the people. The participants in the study were telecommuting workers from various telecommunication companies in the United States. A key recommendation is to repeat this study in another country using the same variables to determine if the culture has an effect on the findings and relationships between the individual preferences.

### **XI. SUMMARY AND CONCLUSION**

Based on the results, findings and analysis in the discussions, organizational values such as support for creativity and innovation, and employees' commitment have the propensity to affect OCB. Given that the objective of this study was to examine the relationship between variables about the use of telecommuting as the adopted innovation and employees' commitment in telecom service companies in the United States. On closer analysis, the findings connected literature relating to the variables and the selected theoretical framework to the relationship uncovered in the study. Overall, the significant variables, together with overall  $R^2$  (.20) in the model indicated a moderate level that was significant in predicting OCB. Conclusively, given that the result of the study confirmed the existence of positive relationships between support for creativity and innovation, organization commitment, and organizational citizenship behaviours, the null hypothesis was rejected.

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