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The Moderating Role of the Organizational Climate on the Relationship between IT alignment and Employee Performance

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Keywords:

Organisational
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Moderator Effects,
Employee
Performance

Purpose: The purpose of this study was to empirically establish the moderating role of the organisational climate on the relationship between IT alignment and employee performance at Umeme Limited. **Design/methodology/approach:** The research used a cross-sectional approach. To test their theories, the authors use hierarchical regression modeling. A sample of 165 respondents with a 100% response rate was selected from among the 290 employees of Umeme Limited using proportionate simple random and sampling procedures. **Findings:** Multiple regression results indicate that Information technology alignment is a significant predictor of Employee Performance in UMEME ltd (Beta = .534, $p < 0.001$). This implies that Information technology alignment explains 53.4% of the variance in Employee performance. When testing for moderating role of the organisational climate on the relationship between IT alignment and employee performance at Umeme Limited, the interaction term was positive and significant, resulting in the hypothesis “*organisational climate moderates the association between IT alignment and employee performance at Umeme Limited*” being accepted. **Practical implications:** The organisational climate in which Umeme employees operate is dynamic and rapidly changing, requiring constant modification of strategies and operations to reflect these changing circumstances if employee performance is to be increased. **Originality/value:** This is one of the few studies that focus on testing the moderating effects of organisational climate on the relationship between IT alignment and employee performance in the Service Sector in Uganda.

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INTRODUCTION

Organizations have used information technology alignment to boost productivity, group decision-making, lower costs, competitive advantage, build entry barriers, improve customer and supplier relationships, improve value delivery of service quality, boost profitability, real-time availability, and develop new products and business solutions (Chan & Reich, 2017). IT and business strategy misalignment has serious ramifications for organizations. (Alyahya & Suhaimi, 2013).

By offering proactive rather than reactive services, it is possible to invest wisely in IT, create channels for investment and funding, and build credibility with the clientele. Furthermore, the inability to measure its impact to the organization, the failure to convey strategy to employees, and the inability to link strategy to budgets all contribute to poor employee performance (Gerow et al., 2015). Organisations persistently experience unsatisfactory performance which is often attributed to the poor alignment between IT and employee objectives (Kashanchi & Toland, 2006; Ordanini & Parasuraman, 2011). Umeme annual reports (2016; 2017), Internal Auditors Annual report (2017), and Auditor General's Annual Reports (2017; 2018) noted that the performance of Umeme Limited as a service sector had been found to be below expectations.

Existing theories and published literature have not been able to fully explain the moderating role of the organisational climate on the relationship between IT alignment and employee performance, particularly at Umeme Limited. It is from that background that the study intended to explore the relationship between Information technology alignment and employee performance with the operating environment as a moderating variable in Umeme Limited.

THEORETICAL UNDERPINNINGS

The theories that reinforce this study include the Strategic Alignment Model (SAM), the Generic Alignment framework, and the IT Engagement Model. The SAM, detailed in Venkatraman et al. (1993) is an endeavour to improve the range of strategic choices managers face to achieve strategic alignment; and secondly to explore the way these choices inter-relate in order to guide management practices (Smaczny, 2001). The Wegmann et al. (2007) Generic Alignment framework is helpful in describing the complexity of the alignment domain. the factors that must be taken into consideration for a company to attain alignment. Additionally, this model highlights the distinctions between the components (whether departments or roles) and the connections (Tallon et al., 2016). Nils O. Fonstad of CISR, MIT, developed the IT engagement model. According to Fonstad (2006), IT departments have

the perennial challenge of implementing dozens or even hundreds of solutions for local projects while simultaneously reacting to urgent requests from business units to fulfill enterprise-wide initiatives.

LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

IT alignment and Employee Performance

For many organizations, getting business and information technology (IT) strategies to align has long been a substantial problem. Early in the 1990s, there was a lot of interest in strategic alignment as organizations began to view IT as a necessary element (Wegmann et al., 2007; Henderson & Venkatraman, 1993). The generation of value along the value chains of the organization's internal and external activities is the secret to successful IT business alignment (Pratt, 2022). Technology and process upgrades both contribute to the creation of this value. Many businesses utilize IT to supply real-time information to automate, integrate, assimilate, and integrate business processes (Shanks et al., 2012). Ross & Weill (2012) claim that the business driver in these situations is the harnessing of synergies across these otherwise inefficient operations.

H₁: IT alignment is positively associated with employee performance

Organisational Climate and Employee Performance

The idea of organizational climate can be seen as an example of how everyone generally perceives and understands the many elements of the organization. Structure, frameworks, and procedures, for instance (Martinez-Simarro et al., 2015). According to Ng'ang'a & Nyongesa (2012), an organization's climate has a significant impact on employees' productivity. This is because it establishes the organization's concept, the work environment that is offered, its performance goals, and the stability of the organization. They primarily focused on

corporate, consensual, bureaucratic, and competitive cultures. They conclude that most employees prefer the corporate culture since it maximises their capacity, thus exploiting their capacity for innovation, creativity, and independence in the face of micromanagement. In line with the behaviour of employees, Oduol (2015) argues that a good employee climate instils a robust behaviour of employees, which provides an environment conducive to the formulation of good policies and the implementation of strategies. However, it warns that the culture of an organisation should be compatible with the planned strategies if it will improve the performance of the organisation (Hofstede & Hofstede (2010); Burke & Litwin, 2007).

H₂: Organisational Climate is positively associated with employee performance

The Moderator Role of Organizational Climate in the IT alignment

According to research by Denison and Mishra (1995), the organizational environment is a reliable predictor of organizational success indices like job satisfaction and performance when accounting for IT alignment. Additionally, the findings of the study by Denison et al. (2007) showed that while there is no significant relationship in the Asian region regarding how it moderates between IT alignment and employee performance, there is a significant relationship in the three regions of North America, Europe, and the Middle East and Africa (EMEA). According to Kwantes and Boglarsky's (2007) research, organizational climate and effectiveness play a crucial role in influencing how IT alignment relates to employee performance. It is believed that a company's culture has a significant impact on the success or failure of the company (Sawner, 2000).

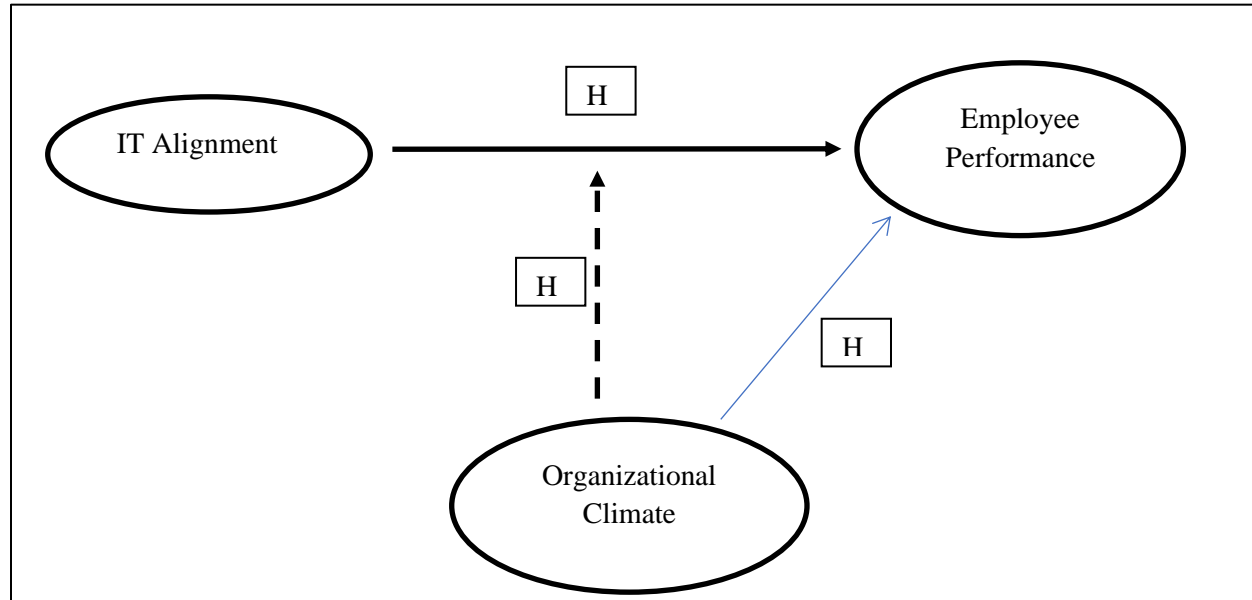
In addition to the effects at the employee level, the impact of organisational climate on how it relates to IT alignment is well documented (Cameron & Quinn, 2011). Studies on the organizational climate

in Uganda are lacking because of the conceptual gap present in those theories. In order to better understand the moderating role of the operating environment on the relationship between information technology alignment and employee performance, the study's chosen organizational climate factors will be analyzed. There is currently

no conclusive evidence linking organizational climate and performance (Kearns & Sabherwal, 2007).

H₃: Organisational climate moderates the association between IT alignment and employee performance

Figure 1: The IT alignment - Organisational Climate - Employee Performance Model



METHODOLOGY

Research Design and Participants

The study adopted a cross-sectional design. It enabled the study to compare different population groups at a single point in time. The study was able to receive views of different respondents in Umeme Limited, in terms of age, gender, income, and education as well as hierarchical levels, in relation to the strategic business technology alignment and employee performance in Umeme Limited. The population of the study was 290. These respondents were from Procurement Unit (5), Stores (10), Finance & Administration (20), Board Members (10), Directors (5), Other Departmental Heads (35), other employees (165), Prequalified Service Providers (25) and Contracts Committee members (15). Simple random sampling carried out in

proportion was used by the researcher. The sample size was established using the recommendations of Krejcie and Morgan (1970).

Measures

ITA was measured according to Gerow et al. (2014). It had dimensions such as IT governance, Integration of IT activities, IT investment, innovation, and IT implementation. Performance was measured according to De Toni & Tonchia (2011). It had dimensions such as collaboration, collective decisions, competitive advantage, customer satisfaction, profitability, real-time availability, and costs (Luftman et al., 2010). The operating environment was measured according to Harold et al. (2009). It had such dimensions as Customers Attitude and organisational climate.

Common Methods Variance and Multicollinearity

Levene's test was applied in order to verify the hypothesis of homogeneity of variance. Levene's test was used to determine whether the study variables had equal variances. For IT Governance, Integration IT, IT Implementation, and Operating Environment, Levene's test confirmed the homogeneity of variances (equality of variances in the samples) with a p-value greater than 0.05. Only in the case of IT Investment; $p > 0.05$. Overall, the data set passed the homogeneity of variance. To test the assumption of multicollinearity, the researcher established VIF and Condition indices. Variable Inflation Factors ($VIF < 3$) indicated the absence of multicollinearity. Tolerance levels were acceptable as they ranged between 0 and 1. A condition index showed all predictor variables were < 30 .

Tests of Factorability, Validity and Reliability

The Content Validity Index was used to determine validity (CVI). The average CVI for the survey was 0.868, hence the CVI was valid at values higher than 0.70. Cronbach's alpha, which averaged 0.940 when all the study's factors were taken into account, was used to interpret reliability. Bartlett and Kaiser-Meyer-Olkin (KMO) test of sphericity of Information technology alignment was 0.862; all the three factors of IT alignment (Information Technology governance, Information Technology implementation and Information Technology investment) explained 64.487% of the variation in Information technology alignment. The results of tests of factorability demonstrate that indeed among electricity providers in Uganda, IT alignment practices are a multidimensional concept with three factors, namely, information technology governance, information technology implementation, and information technology investment. However, the exploratory factor analysis results kicked out information technology integration of activities as a measure of information technology alignment; therefore, this study did not

test the association between the information technology integration of activities and Employee Performance.

Descriptive Statistics and Correlation Analysis

Respondents largely agreed with statements on IT alignment supported by a mean score of 4.01 and a standard deviation of 0.810 indicates positive skewness. On the other hand, statements of organisational climate scored a mean score of 3.00, indicating indecision; and a standard deviation of 1.123 indicating a wide range of responses. Correlation results indicate that information technology alignment and employee performance are positively and significantly correlated ($r = .534$; $p < 0.01$). This implies that positive changes that occur in ITA are associated with positive changes that occur in employee performance. Alternatively, this means that a change of 1 Standard Deviation in information technology alignment is associated with a change of 0.534 Standard deviations noted in employee performance. This indicates that hypothesis 2 has been supported.

RESULTS

Multiple regression results indicate that Information technology alignment is a significant predictor of Employee Performance in Umeme ltd (Beta = .534, $p < 0.001$). This implies that Information technology alignment explains 53.4% of the variance in Employee performance. This implies that other variables that are not part of this study explain the remaining 45.7%. These results further support the correlation analysis results above that hypothesis 2 of this study has been supported.

Fredrich (1982) cited in Paine (2013) states that in instances where two or more variables predict an independent variable, the study must suspect an interaction moderation effect. To test for this moderation, the study conducted a hierarchical regression. Results of the above process indicate that the predictive potential of the independent variables on the dependent variable increased from

27.6% in the first model (adjusted R² = .276, $p < 0.01$); to 31.4% in the second model (adjusted r² = .314, $p < .001$) to ultimately 47.3% in model 3 (adjusted r² = .473, $p < 0.05$). Furthermore, in model 3, information technology alignment appeared to be a positive and significant predictor of employee performance (beta = .318, $p < 0.001$). Also, organisational climate appeared to be a positive and significant predictor of employee performance (beta = .225, $p < 0.001$). Additionally, in the 3rd model, the interaction term (ITA*OC) appeared a significant predictor of Employee Performance (Beta = .426, $p < 0.05$). Since the interaction term is significant, this means hypothesis 3b, which states “*organisational climate moderates the association between IT alignment and employee performance at Umeme Limited*”, is accepted.

DISCUSSION

Results show a substantial and positive correlation between IT alignment and worker performance. This implies that improvements in IT alignment also result in improvements in staff performance. These results are consistent with those of earlier researchers like Smaczny (2001), who argues that IT alignment offers a framework for harmonizing a firm's IT and business activities in order to improve collaboration. In contrast, Venkatraman et al. (1993) said that the SAM openly distinguishes between the internal and external layers of IT, making group decision-making simpler. Millet et al. (2009) acknowledge that efforts to elevate IT alignment from its traditional role as a purely internal support mechanism and extend its functionality to both support and shape business policy all the while leading to firms enjoying competitive advantages. Li et al. (2016), while conducting a study on IT alignment, concluded that improved IT alignment results in customer satisfaction resulting from improved services. Luftman (2003) conducting a study assessing Business-IT alignment maturity demonstrated that

properly instituted IT alignment results in increased profitability.

Going by the results from the moderated model ITA was a true predictor of employee performance. Correspondingly, the organisational climate was also a true predictor of employee performance. Since the multiplicative term (ITA* OC) in the regression model was significant, it implied support for H3b: which states that there is an interaction effect of ITA and organisational climate on employee performance. The assumption of non-additivity is satisfied because these results show that ITA and organizational atmosphere have a favorable impact on employee performance (Bergeron et al., 2001; Jorfi et al., 2011; Tallon & Kraemer, 2003). This implies that the ITA's effectiveness depends on how well the workplace culture supports employee performance. This result lends credence to the idea that ITA components like information technology governance, integration, implementation, and investment necessitate an effective organizational climate in order to produce effective employee performance.

Theoretical Implications

The study found a positive and significant relationship between IT alignment and employee performance of Umeme Limited. This finding supports some of the tenets; for instance, the strategic alignment model assumes an alignment between the choices made across all four domains in response to business strategies which include enhancement of employee performance. Further still, the generic alignment framework is greatly valued in explaining the complexity of the domain of alignment which additionally also considers the positive relationship to employee performance at the tactical and operational levels. Finally, the IT Engagement Model allows traditionally independent stakeholders to relate positively to each other, learn from each other, build trust in the company and work collectively to achieve local and

company-wide objectives which include but are not limited to improving employee performance.

According to the study's findings, ITA and organizational climate have a favorable influence on employee performance. This research lends credence to several of the tenets of the Strategic Alignment Model, such as the assumption that Internal IT and business domains will integrate in response to business strategy. Only in environments where organizational culture can guarantee integration between internal IT and business domains can this approach be successful. The capacity of IT to both support and influence corporate policy, a crucial element of the Strategic Alignment Model, is further acknowledged by this research. Furthermore, as the tactical and operational levels are also presumptively taken into account, this finding is consistent with the Generic Alignment Framework. To create balance between the tactical and operational levels, this can only be appropriately supported by moderation in the organizational atmosphere. More so, this finding is in agreement with the IT Engagement Model, which assumes assessing and learning processes from project performance. This can adequately reach fruition under an enabling organisational climate to ensure the expected impact of ITA on employee performance. A possible theoretical gap identified by the study is that there may be additional moderators yet to be added to the ones currently supported by the Strategic Alignment Model, the Generic Alignment framework, and the IT Engagement Model to better moderate between ITA and employee performance besides organisational climate.

Methodological Implications

The study employs across sectional study design to provide answers to the formulated hypothesis. The study employed both qualitative and quantitative approaches (Triangulation) to data collection and analysis. The triangulation approach method to merge and marry findings from tools of data

collection (questionnaires and interview guide) was adopted. This approach was in complete agreement with the study findings of Sekaran & Bougie (2010), who elaborately explain that single sourcing contains inherent biases that distort outcomes. However, merging together findings from multiple sources firms up and strengthens the weight of findings making them authoritative. Furthermore, Denison et al. (2007) argue that triangulation of findings by blending findings arrived at from quantitative and qualitative approaches adds credibility and authenticity. A noteworthy enrichment to published literature was made by the study findings through the use of the triangulation approach. Using both quantitative and qualitative methods for data gathering and analysis, this was expertly accomplished. Overall, the triangulation strategy improves the validity and reliability of the tools used in this field study. Cooper & Schindler likewise came to similar conclusion (2003).

Policy and Managerial Implications

Given that the relationship between IT alignment and employee performance is positive and significant, it follows that improvements in IT alignment will also result in improvements in employee performance. Numerous policy and management consequences stem from this discovery. Umeme should implement policies that can more effectively support crucial IT alignment components that improve employee performance. Such policies include increased training and designing updated alignment plans. Management can be more supportive through faster implementation, closer supervision, and monitoring of key tenets in IT alignment at Umeme limited to result in improved employee performance.

Research results indicate that ITA and organisational climate positively impact employee performance. This finding has a number of policy and managerial implications. Policies that improve the organisational climate that better suits both employees and management must be consolidated.

Umeme personnel work in a dynamic and fast changing organizational context that necessitates regular revision of plans and operations to reflect changing conditions. The improved policies like suggestion boxes and regular refresher courses will ensure employees are less rude, serve customers better, and feel valued by the organisation. Management, on its part, can ensure resources are adequately allocated and policies duly and diligently implemented.

CONCLUSION

The researcher further hypothesised that IT alignment is positively related to employee performance in Umeme Limited. The study demonstrated a definite and significant association between IT alignment and employee performance. The study also suggests that good changes in IT alignment result in positive changes in employee performance. The study finally concludes that achieving a good balance between IT alignment results in improvements in employee performance of Umeme Limited Uganda. This balanced alignment is thus recommended to Uganda's service sector entities like Umeme as a good way forward.

According to the study, at Umeme Limited, the relationship between IT alignment and employee performance is moderated by organizational climate. After careful consideration, research results indicate that ITA and organisational climate positively impact employee performance. Based on the results from the moderated model, the study concludes that ITA was a true predictor of employee performance.

Limitations

The researcher encountered a number of limitations during the study. The study being cross-sectional by design directly resulted in a number of limitations. A case in point is information that took place in the past was not being captured because this requires using a longitudinal approach. Further, some of the targeted population exhibited some indifference,

apathy, and lack of willingness to respond to the questionnaires.

Recommendations of the Study

The study findings lead to the following recommendations:

Regarding the finding that there is a significant and positive relationship between IT alignment and employee performance, meaning that improvements in IT alignment at Umeme limited are likely to result in improved collaboration between departments, ease the process of making collective decisions, enjoy a competitive advantage over other industry players and increased profitability levels in Umeme Limited. This additionally increased customer satisfaction and ensured the real-time availability of system resources. It is therefore recommended that the management of Umeme limited take deliberate steps to try to consolidate these achievements through increased financial and human resource allocations, as Information technology alignment systems are indispensable tools for modern firms needed to achieve their mission and goals.

Considering the finding revealed that ITA and customers' attitude did not have the expected effect on employee performance. Based on the results from the moderated model, ITA was not a true predictor of employee performance. Customers' attitudes were not a true predictor of employee performance because the multiplicative term in the regression model appeared to be a non-significant predictor of Employee Performance. The findings of this study have therefore proved that the interplay between ITA and customers' attitude is not important when it comes to influencing employee performance in Umeme Limited. This suggests that the contribution ITA makes is not dependent on the contributions made by customers' attitudes towards boosting employee performance. This finding therefore does not support the initial assertion that ITA elements such as Information Technology

Governance, Information Technology integration, Information Technology implementation and Information Technology investment need customers' attitudes in order to improve employee performance. It is therefore recommended that Umeme Limited makes deliberate efforts to institute initiatives geared at improving customers' attitudes towards Umeme Limited to make it more positive and appreciative of the utility firm's efforts.

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