Information Communication Technology, Organisational Flexibility and Performance of Small Medium Enterprises in Southwest Nigeria

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Being a PhD Thesis Submitted to the Department of Sociology, Faculty of Management & Social Sciences, Lead City University, Ibadan, Oyo State, Nigeria

In Partial Fulfilment of the Requirements for the Award of Doctor of Philosophy Degree (PhD) in Sociology

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Certification

This is to certify that **Joseph Dada OLOWO** with matriculation number **LCU/ PG/003188** carried out this research titled **"Information Communication Technology, Organisational Flexibility and Performance of Small Medium Enterprises in Southwest Nigeria"** in the Department of Sociology, Faculty of Management and Social Sciences, Lead City University, Ibadan, Oyo State, Nigeria for the award of Doctor of Philosophy Degree (PhD) in Industrial Sociology and this has not been previously submitted

…… ……

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Head of Department

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Dedication

This research is dedicated to God Almighty for being a source of strength, wisdom and knowledge to my life.

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Acknowledgment

I am thankful to the management of Lead City University, Ibadan, Oyo State, where my research was conducted, thank you all for the resources provided to make my thesis a reality.

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I love you all.

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Abstract

Small and Medium Enterprises (SMEs) play a crucial role in fostering economic growth, job creation, and poverty reduction worldwide. Despite contributing approximately 46.31% to Nigeria's GDP and employing over 60 million people, SMEs in the country face challenges such as technological disruptions, economic volatility, and shifting consumer preferences. To mitigate these challenges, adopting Information and Communication Technology (ICT) tools has emerged as a critical strategy. This study examines the influence of ICT tools, including Enterprise Resource Planning Systems (ERPs), Customer Relationship Management software (CRMs), social media, and Mobile Handheld Devices (MHDs), on the performance of SMEs in Southwest Nigeria, with a focus on the mediating role of organisational flexibility. Theoretically, the study was conducted to investigate the above relationships using three theories. These were the Resource based theory, Dynamic Capability theory and the theory of Organisational Adaptation. The theory of Organisational Adaptation was the underpinning theory for the study. Using a descriptive cross-sectional survey design, data were collected from 310 respondents across seven ICT-enabled SMEs in Oyo and Ogun States. Descriptive and inferential statistics, including regression and hierarchical modelling, were employed. Reliability tests yielded Cronbach's alpha values ranging from 0.774 to 0.891, ensuring data consistency. The findings reveal that ERPs usage significantly influences profitability, explaining 51.0% of its variance ($R^2 = 0.510$, $F(1,300) = 312.627$, $p = 0.000$). CRMs adoption enhances sales revenue growth, with a moderate positive correlation ($r = 0.345$, $p = 0.000$). Social media usage positively impacts customer satisfaction, accounting for 66.4% of its variance ($R^2 = 0.664$, $F(1,300) = 592.576$, $p = 0.000$). Additionally, MHD adoption explains 52.4% of the variance in employee satisfaction ($R^2 = 0.524$, $\beta = 0.590$, $p = 0.000$). Hierarchical regression analysis confirms the mediating role of organisational flexibility, with ICT usage alone accounting for 81.5% of the variance in SME performance ($R^2 = 0.815$, $\beta = 0.753$, $p = 0.000$). Including organisational flexibility improves the model fit ($R^2 = 0.837$, $\Delta R^2 = 0.022$, $p = 0.000$), emphasizing its critical role in enhancing business adaptability and resilience. The study conclude that ICT tools such as Enterprise Resource Planning (ERPs), Customer Relationship Management (CRMs), social media, and Mobile Handheld Devices (MHDs) positively impact various performance metrics, including profitability, sales revenue growth, customer satisfaction, and employee satisfaction; the adoption of ERP systems allows SMEs to streamline their operations, integrate various functions, and enhance decision-making capabilities, all of which contribute to better financial outcomes. The results further indicate that the use of mobile handheld devices (MHD) as an ICT management tool positively affects employee satisfaction. Based on these findings, the study recommends that SMEs invest in ERP and CRM systems, leverage social media for customer engagement, and adopt MHDs for task management and employee satisfaction. Additionally, fostering a culture of organisational flexibility is essential for maximizing the impact of ICT adoption as it amplifies it. Comprehensive training programs, tailored ICT solutions, and adaptive management strategy such as Organisational Flexibility. are crucial for sustaining SME growth in a rapidly changing business environment.

Keywords: ICT Usage, Organisational Flexibility, Small and Medium Enterprises Enterprise, Performance.

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List of Acronyms

Abbreviation	Meaning
ICT	Information communication Technology
SMEs	Small and Medium Enterprises
OF	Organisational Flexibility
ERPs	Enterprise Resource Planning Software
CRMs	Customer Relation Management Software
MHD	Mobile Hand-held Device
SPSS	Statistical Package for Social Science
eCRM	Electronic Customer Relation Management

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