DIGITAL BUSINESS TRANSFORMATION AND COMPETITIVENESS OF OIL AND GAS TRAINING FIRMS IN NIGERIA

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A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF DOCTOR OF PHILOSOPHY (Ph.D) IN THE DEPARTMENT OF BUSINESS MANAGEMENT, COLLEGE OF MANAGEMENT AND SOCIAL SCIENCES, COVENANT UNIVERSITY, OTA, OGUN STATE, NIGERIA

NOVEMBER, 2021

ACCEPTANCE

This is to attest that this Thesis is accepted in partial fulfilment of the requirements for the award of the degree of the Doctor of Philosophy in Business Administration in the Department of Business Management, College of Management and Social Sciences, Covenant University, Ota, Nigeria.

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DECLARATION

I, **EMIELU, EMMANUEL TAYO (18PAB01812)** declare that this research work was carried out by me under the supervision of Prof. Rowland E. Worlu and Prof. Chinonye L. Moses of the Department of Business Management, College of Management and Social Sciences, Covenant University, Ota, Ogun State, Nigeria. I attest that the thesis has not been presented either wholly or partly for the award of any degree elsewhere. All sources of data and scholarly information used in this thesis are dully acknowledged.

EMIELU, EMMANUEL TAYO **----------**

Signature and Date

CERTIFICATION

We certify that the thesis title, '**DIGITAL BUSINESS TRANSFORMATION AND COMPETITIVENESS OF OIL AND GAS TRAINING FIRMS IN NIGERIA**' is based on original research carried out by Emielu, Emmanuel Tayo under our supervision and that it has not been submitted for the award of any degree in this or any other University.

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DEDICATION

I dedicate this work to the glory of God Almighty, who gives mortal man the power for extraordinary accomplishments and to Viano, in the hope that it will inspire him to go early for his Ph.D. when he comes of age, and not delay till old age like his grandfather did.

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LIST OF ABBREVIATIONS

AI	Artificial Intelligence
AR	Augmented reality
DPR	Department of Petroleum Resources
EdTech	Education Technology
FAANG	Facebook, Apple, Amazon, Netflix, and Google
FINTECH	Financial technology
ICT	Information and Communication Technology
LDNI	Learning and Development Network International
MOOCS	Massive Online Open Courses
NCDMB	Nigerian Content Development and Monitoring Board
NOGIC	Nigerian Oil and Gas Industry Content
OGTAN	Oil & Gas Trainers Association of Nigeria
SMACIT	Social, mobile, analytics, cloud, and Internet of Things
SMEDAN	Small and Medium Enterprise Agency of Nigeria
VR	Virtual reality

ABSTRACT

This thesis examined the effect of digital business transformation on competitiveness of corporate training firms in a developing economy environment. The pervasive and rapid rate of digital disruption motivates diverse organisations to leverage digital capabilities for competitive survival. However, the effect of digital capabilities on competitiveness does not seem to be fully captured yet. In this study, the explanatory power of digital sensing, digital seizing, digital re-configuration, digital adoption, and digital infrastructure was examined with respect to competitive intelligence, distinctive competence, innovativeness, customer value orientation, and service quality, as variables of competitiveness. Dynamic capability theory underpinned this research, supported by technology adoption and institutional theories. The methodology involved an online survey of 373 corporate training firms which was analysed using IBM SPSS 25 and Smart Partial Least Squares 3.0. The findings showed that digital business transformation has a significant effect on the competitiveness of the training firms surveyed. Particularly, the most significant and positive relationships were between digital sensing capability and competitive intelligence ($\beta = 0.879$, $R^2 = 0.772$, $t = 23.711 > 1.96$, $p = 0.000 < 0.05$), digital reconfiguration capability and innovativeness ($\beta = 0.884$, $R^2 = 0.781$, $t = 24.406 > 1.96$, $P = 0.000 < 0.05$), and between digital infrastructure and training service quality ($\beta = 0.880$, $R^2 = 0.774$, $t = 24.676 > 1.96$, $p = 0.000 < 0.05$). Besides, the study revealed that the training sector is experiencing increasing competitiveness which is likely to exacerbate with the trend towards online training. To boost competitiveness through digital transformation, corporate training firms should focus on strengthening their competitive intelligence, building distinctive competence, and driving innovativeness through digital sensing, seizing, and reconfiguration capabilities. In addition, by optimising their digital infrastructure acquisition and adoption, greater customer value orientation and service quality will be realized towards being more competitive in the face of digital disruptions. The study was limited to quantitative method and one business sector, which may be a basis for further research.

Keywords: Competitiveness; Corporate Training; Digital Business Transformation; Dynamic Capability