TECHNOLOGY INCUBATION AND TECHNOLOGY ENTREPRENEURSHIP
GROWTH IN NORTH WESTERN NIGERIA

BY

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ABSTRACT

Technology Incubation is an intervention program designed to reduce the risk of technology enterprise start-ups’ failures and assist in the growth of existing ones. This study attempted to empirically assess the contributions of technology incubation to technology entrepreneurship growth in North Western Nigeria. Despite the intervention, literature has indicated the existence of high mortality amongst the incubated enterprises. Positivist epistemology with objective ontology together with interpretive epistemology with subjective ontology were employed. The study used cross-sectional, descriptive and correlational designs, employing quantitative and qualitative approaches. The data were collected using non-standardized instruments (Questionnaires and Interview Guide), with items on technology incubation and technology entrepreneurship growth, with a sample size of 86. The instruments were tested for their validity and reliability. Factor analysis was used to describe the study variables through component principal analysis (CPA). All communalities were above 0.5 with rotated component matrices loading highly on distinct factors with Eigen values greater than one and cumulative percentages of variance above 60%. The data were analyzed at univariate, bivariate and multivariate levels using frequency, percentages, mean, correlation and regression. The results showed that incubator-based activities correlate and contribute to growth at 5% level of significance with \( p<0.000 \) and \( R^2=0.311 \) implying that the variable explains 31.1% of the variation growth. Environmental based activities also correlate and contribute to growth at 5% level of significance with \( p<0.000 \) and \( R^2=0.457 \) implying that 45.7% of the variation growth is explained by the variable. Overall, technology incubation correlates and significantly contributes to growth at 5% level with \( p<0.000 \) and \( R^2=0.399 \) implying that technology incubation explains 39.9% of the variation growth. The study found out that physical infrastructural deficit, absence of science parks and platforms (physical and electronic) for marketing new innovations, and adaptation challenges were the major causes of incubated enterprises failure in North Western Nigeria. Government should therefore provide the required physical infrastructures by itself or through partnership with the private sector. Incubation centers should also provide platforms to facilitate marketing of new innovations. Science parks should be provided for each incubation center. In order to localize the adaptation strategy to suit the local environment, pro-active business development stance based on a sound appreciation of the business needs of incubatees should be pursued by the incubators.

Keywords: Technology Incubation, Incubatees, Technology Entrepreneurship Growth.