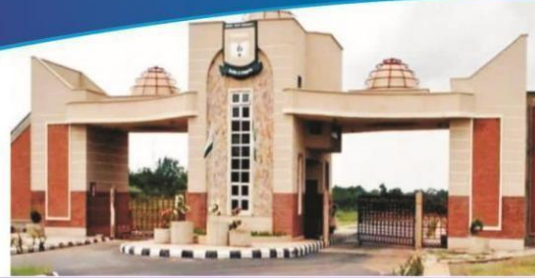


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## DIGITAL INNOVATION, SMALL BUSINESS ENGAGEMENT, AND ENTREPRENEURIAL MOTIVATION AMONG UNDERGRADUATES: EVIDENCE FROM THE FEDERAL POLYTECHNIC, ILARO

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### Abstract

*This study examines the influence of digital innovation on small business and entrepreneurial engagement of undergraduates in the Federal Polytechnic, Ilaro. The population comprised all students in the Institution and survey approach involving the use of questionnaire was adopted for data collection. A four-point likert questionnaire was used for a two-week online survey via Google Form in which 421 students participated. Data collected were analysed with frequency count and percentage while the hypotheses were tested with linear regression at 0.05 level of significance on SPSS Version 25. The results showed that digital platforms offer a number of entrepreneurial opportunities to youth undergraduates and that it facilitates small business engagement orientation and motivation for entrepreneurial engagement among the students. It was concluded that different platforms and applications offered by digital innovations play significant role in engendering small businesses orientation and entrepreneurial inclinations among undergraduates. The study recommends, among others, that youths in tertiary institutions should make productive use of digital platforms and channel their use of such platforms for entrepreneurial activities and productive engagements.*

**Key Words:** Digital innovation, Entrepreneurial engagement, Small businesses orientation, Undergraduates

### Background to the Study

Due in large part to its beneficial effects on a nation's economic development in terms of growth, innovation, employment creation, and poverty reduction, entrepreneurship has become a more popular research topic. Because of globalization, it

has become increasingly important for all nations, as the growth in entrepreneurship activities is considered to have tremendous contributions to both job creation rate and a decline in the unemployment rate. Government initiatives in recent years have tended to encourage jobless graduates to start their own businesses by applying their knowledge and talents rather than staying idle.

In every part of Nigeria, youth unemployment is a problem confronting the society and it is seen as the source of many security problems. This and many other challenges are responsible for poor labour market situation and recession, and the effects are manifested in the poor economic situation marked by series of crises (Chuta, 2016). Nigeria, being one of the countries with highest level of youth unemployment in the world is being faced with myriad of problems associated with youth unemployment (Federal Ministry of Labour and Productivity, 2008; Gachathi, 2016). Unemployment is generally known as a topical and thorny issue in contemporary Nigeria. The job market in Nigeria, formerly characterized by protracted periods of underemployment and unemployment, is now one in which graduates of higher education typically have to wait a long time, if at all, before landing their first job (Oyenuga, 2011).

The Nigerian Labour Force Survey (2024) put employment-to-population rate in Nigeria at 76.1. The high rate of unemployment makes it necessary to meaningfully involve the youth, who make up about 70% of the population that is about 160 million of the Nigeria's total population in order to prevent them from choosing hazardous options. Such involvement in entrepreneurship-related and productive activities is referred to as entrepreneurship engagement (Bahrami, 2014). In developing and under-developed economies, entrepreneurship programmes are aimed to ensure that young people are not only self-reliant but employers of labour (Shane, 2000). In order to achieve this, several efforts have been made by government at all levels to increase the participation of youths in entrepreneurial and vocational activities with the sole goal of achieving technological and industrial development of the nation and reduction in unemployment and poverty.

Engagement in entrepreneurship entails taking significant risks in order to launch and grow a new company or create novel methods of operation. As risk taking and identifying opportunities are salient parts of being an entrepreneur, it is critical to understand what drives entrepreneurs to look for, identify, assess, investigate, and seize opportunities when they present themselves (Sharma, 2015). Entrepreneurs are self-starters, self-sufficient, and driven to take charge of their own lives by pursuing hazardous and uncertain business ventures (Bahrami, 2014).

The process of finding, assessing, and seizing opportunities by individuals is known as entrepreneurial engagement, depicting multiple levels of involvement in entrepreneurial activities or enterprises (Lim et al., 2016). It includes every stage of the process, from the lowest level of involvement, known as potential entrepreneurship—to the highest level—known as established entrepreneurship. A person's level of engagement in an entrepreneurial process is defined as his or her involvement in the identification, assessment, and exploitation of possibilities. This level of engagement is dependent on both environmental and individual factors (Shane, 2000). Frederick (2016) emphasizes that there are seven levels of entrepreneurial engagement: “contemplating it, working on starting-up, having a young firm, having an established business, giving up, no longer an entrepreneur, and never considering it”. The levels are grouped and categorized into: outsider (indicating never having thought about it); nascent (involving thinking about it and taking steps for starting up); business (involving having a young and older business); latent (indicating preference for entrepreneurship over paid employment) and exit (involving giving up and no longer being an entrepreneur). (Gachathi, 2016).

Entrepreneurial engagement is a term which encompasses various forms of business and vocational activities - small business engagement, which relates to entrepreneurial activities in the realm of small businesses, and entrepreneurial involvement which emphasizes the active participation and commitment to entrepreneurial endeavours (Igram, 2019). Small business and vocational engagement are two terms which share similarities and involve entrepreneurial activity, they however, differ in focus, scope, skillset, and market orientation (Talukder et al, 2024). Small business entrepreneurship encompasses a wide range of industries and independent enterprises engage in commercial activities typically to generate profit while vocational entrepreneurship applies entrepreneurial principles within specific vocational fields, leveraging technical expertise to create value and innovation (Patni, 2022; Talukder et al, 2024). Both small business owners and entrepreneurs work for themselves; they frequently have modest beginnings and grow as a result of their drive for achievement. Both independent person and small business owners work independently, and they are fundamentally more alike. The majority of entrepreneurs begin as modest tiny firms, but they grow because they are

always thirsty for more success (Frederick, 2016; Cavada et al., 2017).

Numerous factors have been identified in extant literature to explain why people engage in entrepreneurship and why entrepreneurs choose to follow this path. These factors include financial instability, fear, the desire to start own business (Shane & Venkataraman, 2000), intention of a person to take an entrepreneurial action (Nyoko & Hanafiah, 2024), economic, social, and personal factors, including the mindset and drive towards implementing entrepreneurial initiatives (Reynolds et al., 2005; Ogunrinade, 2024), as well as the emergence of opportunities and the need for economic sustenance and independence (Hisrich et al., 2017). However, the growing trend in technology and digital innovation has helped to foster a number of entrepreneurial activities and the involvement of young people in entrepreneurship, where technology serves as the resource offering these opportunities (Udekwe & Iwu, 2024). Thus, it is important to examine the impact of digital innovation on entrepreneurial engagement of youths with particular emphasis on undergraduates.

As a result of the trend in technological use and its capacity to drive economic activities, the use of digital innovation and related technologies are becoming the vogue. Today, digital technology and innovation processes are being deployed in almost all aspect of human activities and for production purposes. This has transcended to the entrepreneurial activities of people at different levels (Achimugu et al., 2018). A wide range of hardware devices, including desktops and laptops, scanning devices, photographic software, database programs, and multi-media applications as well as information technology tools like cellphones, fax devices, virtual conference tools, and the internet, are now being used in small business and production activities due to possibilities offered by digital innovation (Newhouse, 2012; UNESCO, 2016).

Digital innovation and different forms of information and communication tools, application and platforms are changing the way enterprises and individual conduct businesses (Slaton & Becker, 2000), thus paving way for more economic activities and entrepreneurial inclination among users who identified such opportunities (Cavada et al., 2017). Access to information for a variety of uses is both a result and a catalyst of the digital revolution, claims Sharma (2017). Knowledge and the acceptance of this body of knowledge are the cornerstones of effective and efficient business administration and behavior. The digitization of this set of knowledge into a network connects all individuals and grants them the freedom to access and utilize it, opening the door for digital governance, service delivery, product marketing, reaching a wider audience, and other uses (UNESCO, 2016; Cavada et al., 2017; Foisal & Abedin, 2023)

According to Jayanetti (2014), digital innovations are upending long-standing economic norms and increasing competition beyond anything seen in the past. More adaptable competitors are joining the same market and exploring similar possibilities and offering as the internet offers wider opportunities and marketplaces to take advantage of. They are all vying for market share by offering value propositions at lower prices. Murgatroyd (2023) estimates that 4.59 billion individuals use social media accounts globally, and entrepreneurs or business owners are on one or more social media platforms enabled by digital technologies and innovation to get business information, attract clients and customers, market ideas, services and products and to facilitate transactions.

The present study is premised on Innovation Diffusion Theory which emphasizes the need for in-depth understanding of the motivation, reasons and how innovative ideas and new technology usage spread within a social system and at what pace do such take place (Rogers, 2003). According to the theory, digital platforms serve as channels for disseminating innovations, allowing entrepreneurs and small businesses to showcase their offerings, gather feedback from users, and iterate on their solutions rapidly (Wani & Ali, 2015). By harnessing the power of digital platforms, entrepreneurs accelerate the adoption of their innovations and gain a competitive edge in the market. The invention and development of digital platforms and technologies make entrepreneurial processes to be more fluid and porous, thus expanding the horizon of entrepreneurial involvement (Lyytinen et al., 2012; Foisal & Abedin, 2023).

As a result of the important use of digital technology and related social platforms, young people are leveraging on technology for a whole lot of purposes (Edna, Gikandi & Solomon, 2014). The objectives of this study were to identify the various digital platforms offering entrepreneurial opportunities to young people and the extent to which such digital platform usage is perceived as facilitating small business and entrepreneurial engagement among the undergraduates.

## Methodology

The study employed the survey approach with the use of questionnaire. Based on the scope and nature of the study, the population comprised students of the Federal Polytechnic, Ilaro, Ogun State at the time of the study. The students were deemed relevant as they fall in the category of youth and are undergraduates.

The Federal Polytechnic, Ilaro students participated in an online survey which was open for two weeks, from February 10 to February 25, 2024. Using a Google form to create a four-point Likert-type questionnaire, the study used the snowballing method. Through communications on electronic and social media channels that individual courses and groups were using, the students were asked to take part in the poll.

In all, 421 students completed the survey within the two weeks that the link to the Google Form-assisted questionnaire was distributed to the students. The Statistical Package for Social Sciences (SPSS) version 23 was used to assist in the analysis, which included descriptive and inferential methods of data analysis.

In pursuant of the focus and objectives of the study, it was hypothesized that:

*H0<sub>1</sub>*: There is no significant contribution of digital platform usage to online small business engagement among undergraduates in the Federal Polytechnic, Ilaro.

*H0<sub>2</sub>*: There is no significant contribution of digital platforms usage to the perceived motivation for entrepreneurship engagement among undergraduates in the Federal Polytechnic, Ilaro.

## Results and Discussion

Analysis of data were done with regression statistics at the 0.05 level of significance. The criteria for determining the acceptance of the hypotheses were based on the threshold of the P-value being less than the 0.5 level of significance.

**Table 1:** Summary of mean responses on digital platforms used for entrepreneurial engagement

Digital platforms	Data set	Weighted Mean
WhatsApp, Facebook, Instagram, SnapChat, X/Twitter, Telegram, Tik Tok, YouTube, Reddit, Pinterest, LinkedIn	421	3.2727

*Source: Field Survey Results, 2024*

Table 1 shows the mean rating for the responses on known digital platforms which the youths are perceived as offering them opportunities for entrepreneurial engagement. The result shows a grand mean of 3.27. Thus, the identified platforms are considered good by the respondents for entrepreneurial engagement.

*H0<sub>1</sub>*: There is no significant contribution of digital platform usage on small business engagement orientation among undergraduates in the Federal Polytechnic, Ilaro.

**Table 2: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.621 <sup>a</sup>	.385	.382	.16354

a. Predictors: (Constant), DP

b. Dependent variable: SBE

*Source: Field Survey Results, 2024*

The result in Table 2 indicates a relatively weak positive relationship between the variables ( $R=0.621$ ). The result also indicates that about 38% of the total variation in small business engagement orientation among the youths could be attributed to the use of digital platforms.

**Table 3: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.130	1	3.130	170.541	.002 <sup>b</sup>
	Residual	2.327	420	.027		
	Total	5.457	421			

a. Dependent Variable: SBE

b. Predictors: (Constant), DP

**Source: Field Survey Results, 2024**

As shown in Table 3, P-value of 0.002 is significantly less than 0.05 threshold of significance. This indicates that the model used to relate the variables is adequate and sufficient for the statistical test.

**Table 4: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.622	.220		2.228	.001
	DP	.410	.061	.621	11.438	.002

a. Dependent Variable: SBE

**Source: Field Survey Results, 2024**

The co-efficient of the influence of the independent variable (digital platforms) influence on the dependent variable (small business engagement) is provided in Table 4. A p-value of  $0.002 < 0.05$  in the finding indicates that respondents' interaction with small businesses is significantly influenced by digital innovation platforms. According to the results, a unit change in the digital innovation platform will result in a shift of roughly 41 units ( $B=0.410$ ) in the students' orientation towards engagement in small businesses. The null hypothesis is rejected and the alternative hypothesis is accepted at a t-value of 2.228 and a significant value of 0.002, both of which are lower than the significance threshold of 0.05. Thus, we uphold that digital platform usage has significant influence on small business engagement orientation among undergraduates of the Federal Polytechnic, Ilaro, Ogun State.

The results revealed that the identified digital platforms are considered as avenue for being into entrepreneurial activities by the youths. Such platforms include WhatsApp, Facebook, Twitter, Tik Tok, Instagram, Pinterest, Reddit, LinkedIn, etc. which the youth use for social interaction and communication. This result shows that the use of the platforms could transcend social purposes and offers the undergraduates the orientation towards identifying and embracing small business activities via the digital resources and platforms. The findings are in line with Achimugu et al. (2018) that digital innovation has made small business activities of people a lot easier at different levels. The result also aligns with Cavada et al. (2017) as well as Foisal and Abedin (2023) that digital platforms and are paving way for more economic activities and entrepreneurial inclination among users who identified such opportunities.

**H<sub>02</sub>:** There is no significant influence of digital platforms on motivation for entrepreneurship engagement among undergraduates in the Federal Polytechnic, Ilaro.

**Table 5: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.734 <sup>a</sup>	.538	.533	.14534

c. Predictors: (Constant), DP

d. Dependent variable: MEE

*Source: Field Survey Results, 2024*

Table 5 shows the model summary of the statistical relationship between digital platforms and small business engagement. The result indicates that there is a moderate positive relationship between the variables (R=0.538). The result also indicates that about 53% of the total variation in the motivation for entrepreneurial engagement of the youths could be attributed to the use of digital innovation platforms.

**Table 6: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.120	1	5.110	210.341	.003 <sup>b</sup>
	Residual	4.116	420	.024		
	Total	8.236	421			

a. Dependent Variable: MEE

b. Predictors: (Constant), DP

*Source: Field Survey Results, 2024*

In Table 6, P-value of 0.003 is an indication of the fitness of the model in relating the variables under consideration, that is digital platforms and motivation for entrepreneurial engagement.

**Table 7: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.411	.312		3.218	.000
	DP	.554	.052	.734	12.438	.003

a. Dependent Variable: MEE

*Source: Field Survey Results, 2024*

The co-efficient of the independent variable's (digital platforms) influence on the dependent variable (motivation for entrepreneurship engagement) is provided in Table 7. The outcome demonstrates a p-value of  $0.003 < 0.05$ , suggesting that digital innovation platform usage have a major impact on the drive to engage in entrepreneurship. The results show that undergraduates' engagement with entrepreneurial activities will change by about 65 units (B=0.554) for every unit change in how they use digital innovation platforms. At t-value of 3.218 and a significant value of 0.003, both falling below the 0.05 threshold of significance, we reject the null hypothesis and accept the alternative hypothesis. Therefore, we uphold that undergraduates of The Federal Polytechnic, Ilaro, Ogun State, are highly motivated to engage in entrepreneurship as a result of digital platforms usage.

This result indicates that digital platforms usage has significant influence on motivation for entrepreneurial engagement of

the youths. The results point to high disposition of the youth towards entrepreneurial engagement as a result of their belief that the use of digital platforms offers limitless possibilities. It was revealed that knowledge about some vocations as well as production or creation of certain products could be acquired via online platforms, raw materials or input can be sourced from online stores and that various designs and types of some items produced with vocational skills are available on digital platforms. These findings lend support to Agi and Yellowe (2013) that access to information for multifaceted purposes that are driving entrepreneurship activities are available in different formats and on different resources enabled by ICT and Sharma (2017) that young people are leveraging on technology for a whole lot of such purposes.

## Conclusion and Recommendations

From the findings of this study, it can be concluded that digital innovation is one of the key drivers of business activities and a potent factor for the stimulation of small business and vocational entrepreneurship orientation among undergraduates. The ability of a youths to take advantage of the trends in technological innovations depicts their ability virtual enterprising activities as digital platforms offer them with a multifaceted opportunity to start and operate their own business, even with limited capital.

It can also be concluded that a number of small-scale businesses initiatives are springing up among youth undergraduate who could leverage on digital platforms for communication, information sourcing and dissemination, relationship and networking, online content creation, intermediary relationship, etc.

Based on the findings of this study, the following recommendations are made:

- Undergraduates and youths should focus on developing their digital competence with a view to having 21<sup>st</sup> Century skill necessary to take advantage of small business opportunities.
- Undergraduates should channel their usage of digital tools towards productive and economic activities rather than social communication and interactions.
- Government and non-governmental organisations should provide opportunities to youths for capacity building in the use of digital technology for entrepreneurship.
- There should be policy support from Government to encourage youth participation in small businesses of all types.
- Tertiary institutions should intensify campaign against youth use of digital platforms for fraudulent activities while activities on digital platforms and social networks should be strictly monitored by relevant agencies.

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