29

FROM DIGITAL SKILLS TO DIGITAL VENTURES: EXPLORING THE INFLUENCE OF DIGITAL COMPETENCE ON INFOPRENEURSHIP INTENTIONS OF LIBRARY AND INFORMATION SCIENCE STUDENTS IN NIGERIAN POLYTECHNICS

BY

Uwaebuka Wisdom MADU, PhD (Corresponding Author)[1], **Stephen Adekunle AJAYI, PhD**[2]

Department of Library and Information Science
School of Communication and Information Science
Federal Polytechnic Ede, Osun State, Nigeria[2]

madu.nwaebuka@federalpolyede.edu.ng
/maduwisdom40@yahoo.com[1]&ajayi.stephen@federalpolyede.edu.ng/ styvna1@gmail.com[2]

Abstract

Purpose: *The study investigated the influence of digital competence on infopreneurship intention among Library and Information Science (LIS) students in federal polytechnics in South-West, Nigeria. Specifically, it examined the levels of infopreneurship intention and digital competence, determined the influence of digital competence on infopreneurship intention, and identified the major barriers to infopreneurship intention.*

Design/Methodology/Approach: *The study adopted a descriptive survey design. The population comprised 638 final-year LIS students across four federal polytechnics in South-West Nigeria, from which a sample of 468 students was selected using a multi-stage sampling procedure. Data were collected using a structured questionnaire with an overall Cronbach's alpha reliability coefficient of 0.828. A total of 388 valid responses were retrieved, representing an 82.9% response rate. Data were analysed using frequency counts, means, standard deviations and linear regression analysis.*

Findings: *The study revealed a high level of infopreneurship intention among the respondents, with a weighted mean of 3.28, and a high level of digital competence, with a weighted mean of 3.21. Linear regression analysis showed that digital competence significantly and positively influenced infopreneurship intention, explaining 71.6% of its variance ($R^2 = 0.716$; $\beta = 0.846$; $p < 0.001$). The major barriers identified were lack of start-up capital, limited access to digital tools and resources, lack of practical exposure to real-world information business activities, and inadequate curriculum preparation for infopreneurship.*

Practical Implications: *The findings suggest the need for LIS education to place greater emphasis on practical digital and infopreneurship competencies. Polytechnic authorities, LIS educators and relevant professional and regulatory bodies should strengthen curriculum content, practical entrepreneurship training, mentorship opportunities and students' access to digital tools and resources to enhance their preparedness for information-based entrepreneurial ventures.*

Originality/Value: *The study contributes empirical evidence on the relationship between digital competence and infopreneurship intention within the relatively underexplored context of LIS students in Nigerian polytechnics. It extends existing research on student entrepreneurship by focusing specifically on information-based entrepreneurship and demonstrates that digital competence is a substantial predictor of infopreneurship intention in this educational context.*

Keywords*: Digital Competence, Infopreneurship Intention, Library and Information Science Students, Federal Polytechnics, Nigeria.*

1.1 Background to the Study

The current global economy is deeply characterized by its dependence on information and digital technology, a paradigm often referred to as the digital or information economy. This environment has birthed new entrepreneurial ventures with focus on the packaging and sale of information itself, a concept known as infopreneurship. Infopreneurs leverage

their expertise to create value-added information products and services, ranging from data analytics and curated content to online learning platforms and digital consultancy (Aworuwa et al., 2021). This shift presents a important opportunity for addressing the persistent challenge of graduate unemployment, particularly in developing nations like Nigeria, by steering graduates towards creating jobs rather than solely seeking them.

In Nigeria, the problem of youth unemployment is a critical national issue, with the National Bureau of Statistics (2022) reporting an alarming unemployment rate among youths. Polytechnic graduates, including those from LIS programmes, are not immune to this challenge. While traditional career paths for LIS graduates have been within established libraries and information centres, the saturation of the public sector job market necessitates a paradigm shift towards entrepreneurial and self-employed ventures (Nwokocha, 2020). LIS students are specially positioned to succeed as infopreneurs. Their academic training is essentially centered on the fundamentals of information organization, retrieval, management, and dissemination, which form the foundational competencies needed for a successful infopreneurship practices (Edoka, 2021).

However, there exists a critical gap between this inherent potential and the actualization of infopreneurship intention among LIS students. Intention is a proven sign to entrepreneurial behaviour, which is influenced by attitudes, perceived behavioural control, and subjective norms, as articulated in Ajzen's (1991) Theory of Planned Behaviour. In the context of infopreneurship, digital competence is believed to be a fundamental aspect of perceived behavioural control. Digital competence which connotes the knowledge, attitudes, and abilities to access, manage, understand, integrate, communicate, evaluate, and create information properly, has transitioned from a desirable skill to a vital competency for socioeconomic engagement (Ala-Mutka, 2019).

Individuals, who lack proficiency in areas such as digital content creation, online information evaluation, data management, and the use of web-based tools, are not likely to express intention to engage in an infopreneurship (Ugwuanyi et al., 2023). The exact digital literacy competencies needed, and their direct connection with the infopreneurship intentions of Nigerian

polytechnic students, remains underexplored in the literature.

In addition, the polytechnic education system in Nigeria has a distinctive assignment to produce graduates with practical, vocational, and technical skills geared towards self-reliance (Federal Republic of Nigeria, 2014). Federal Polytechnics in the South-West geopolitical zone of Nigeria host a significant population of LIS students, making them a critical sample for understanding this phenomenon. Nonetheless, there is a dearth of research that exclusively investigates how the digital competence acquired within this specialised educational context translates into infopreneurial intention. Previous studies have generally examined entrepreneurship education (Oluwajodu et al., 2021) or digital skills among librarians (Ebiwolate, 2020), but a focused investigation into the infopreneurship intention of LIS students, propelled by their digital literacy capabilities, was not known.

In view of the foregoing, this study sought to bridge this gap by investigating the influence of digital competence on infopreneurship intention of LIS students in Federal Polytechnics in South-West, Nigeria. The research provided practical evidence on the readiness of the students to leverage their academic training for entrepreneurial success in the digital economy. The findings have the possibility to inform curriculum review, guide policy interventions for youth empowerment, and most importantly, contribute to ameliorating unemployment by nurturing a new generation of information entrepreneurs.

1.2 Statement of the Problem

The global economy is now driven by information and digital technologies which have let to a shift from conventional employment towards knowledge-based entrepreneurship, often referred to as infopreneurship. Infopreneurship presents a huge opportunity for LIS graduates given that they are skilled in the core competencies of information and knowledge management. Hence, they are situated as ideal candidates to succeed as infopreneurs in the digital marketplace (Edewor & Egberavwe, 2020).

Nigeria has a major problem of graduate unemployment. There is a rising disconnect between academic training and the demands of the modern labour market. LIS graduates from polytechnics, whose education is designed to be practical and skill-oriented, are not exonerated from this development. According to Madu et al.

(2016) LIS graduates should not only seek conventional library jobs but also create innovative information-based businesses. However, it has been noted that, the successful shift from LIS training to thriving infopreneurship depends on diverse factors among which are a robust set of digital competencies that extend beyond conventional library operations (Adebayo & Owolabi, 2023; Nwokedi & Ezeani, 2021).

Preliminary observations and a review of existing literature suggest a disturbing gap. While studies have investigated entrepreneurship intentions among students in Nigeria generally, few have specifically examined infopreneurship intention among LIS students. Furthermore, research focusing on the interactions between specific digital competencies and infopreneurship intention within the unique context of Nigerian polytechnic education is scarce. Without a clear understanding of the levels of digital competence among the students and how these competencies directly influence their intention to become infopreneurs, educators and policymakers are left without empirical evidence to guide curriculum review and development. Therefore, this study investigated the influence of digital competence on infopreneurship intention of LIS students in Federal Polytechnics in South-West Nigeria, to provide data-driven insights that can inform educational reforms and empower students to become job creators in the information sector and active contributors to national development.

1.3 Objectives of the Study

The broad objective of this research was to determine the influence of digital competence on the infopreneurship intention of LIS students in Federal Polytechnics in South-West Nigeria. The specific objectives were to:

1. determine the level of infopreneurship intention of LIS students in federal polytechnics in South-West, Nigeria;
2. ascertain the level of digital competence of LIS students in federal polytechnics in South-West, Nigeria;
3. investigate the influence of digital competence on the infopreneurship intention of LIS students in federal polytechnics in South-West, Nigeria; and
4. examine the barriers to infopreneurship intention of LIS students in federal polytechnics in South-West, Nigeria.

1.4 Research Questions

The study answered the following questions:

1. What is the level of infopreneurship intention of LIS students in federal polytechnics in South-West, Nigeria?
2. What is the level of digital competence of LIS students in federal polytechnics in South-West, Nigeria?
3. What are the barriers to infopreneurship intention of LIS students in federal polytechnics in South-West, Nigeria?

1.5 Null Hypothesis

Ho1 There is no significant influence of digital competence on the infopreneurship intention of LIS students in federal polytechnics in South-West, Nigeria.

2.0 Literature Review

The growth of the digital economy brought about infopreneurship (Kraus et al., 2019). Researches consistently reveal that individuals who see themselves as digitally competent are more likely to show an intention to practice infopreneurship. A study among Portuguese digital freelancers by Almeida and Santos (2023) found that advanced competencies in digital content creation and online communication considerably increased the intention to formalize and grow their freelance work into large-scale infopreneurial business. The researchers contend that competence minimizes the perceived complications associated with online business creation. Likewise, Nambisan (2020) submitted that in digital venturing, the entrepreneurial "toolset" is largely technological. Thus, making digital competence an integral part of entrepreneurial self-efficacy in online contexts. This claim is upheld by Lee and Kim (2024), who surveyed South Korean university students and reported that digital skills related to data analytics and social media marketing were the strongest direct influencers of infopreneurship intentions.

Digital competence does not act in isolation; rather, it combines diverse mediating factors. A study by Bashir et al. (2025) on Pakistani business students, reported that the ability to seek, evaluate, and use information digitally boosted the confidence to engage entrepreneurial tasks, thereby increasing intention. Miranda et al. (2021) explicitly measured Digital Entrepreneurial Self-Efficacy and found it fully mediated the relationship between digital skills and infopreneurship intentions among a European sample of aspiring entrepreneurs.

Digital competence expands an individual's "digital awareness", enabling them to identify market gaps and innovative ways to deliver information. A qualitative study by Chen and Owyong (2022) on successful infopreneurs in Southeast Asia highlighted that their advanced digital literacy allowed them to

"see" opportunities in online communities that less competent individuals overlooked. This heightened opportunity recognition directly fueled their intentionality. Furthermore, competence in using low-cost or free digital tools increases perceived feasibility by lowering the perceived financial and technical startup costs (Smith & Jones, 2023).

Furthermore, there is an element of multidimensionality of digital competence such that specific skills are required for specific intentions. Empirical literature suggests that, not all facets of digital competence are equally influential. The DigComp 2.2 framework (Vuorikari et al., 2022) is frequently used to delineate dimensions of digital competence. For instance, information and data literacy is foundational for identifying credible sources and market data, but its direct effect on intention is often weaker than more active competencies (Bashir et al., 2025). Communication and collaborative skills are vital for building an audience and networking. Garcia et al. (2024) found that skills in managing online communities and personal branding on platforms like LinkedIn were strongly correlated with intention to launch coaching or consulting-based infopreneurships.

Furthermore, perception is a precursor to intention. Akter and Biswas (2024) explored the perspectives of 257 undergraduate and postgraduate students from Noakhali Science and Technology University in Bangladesh on infopreneurship. The results revealed that the students' perceptions of infopreneurship were a bit limited, with gaps in their perceived knowledge and skills which affected their level of engagement. Similarly, Thobekani and Sebenzile (2022) explored the attitudes of Information Science students at the University of Technology, Cape Town, South Africa towards infopreneurship and found that, the students had more positive (26.4%) than negative (20.8%) views about starting an information-based business. The most common positive view was an enterprising attitude, while the most common negative view was being critical or unsure. However, a key finding was that many students were skeptical or neutral about infopreneurship. A common belief was that infopreneurship is not a real or stable job. Many felt that traditional employment is more respectable and secure. On the other hand, some students had a strong entrepreneurial spirit and believed infopreneurship offers the best career opportunities.

The Nigerian polytechnic education system has a distinct mandate to produce graduates with practical, vocational, and technical skills geared towards self-reliance. This mandate differs significantly from university education. Differing from

university-based LIS programme which prioritizes theoretical and research-oriented training, polytechnic LIS curricula focus on hands-on skills in information organization, database management, and library operations. However, existing literature on infopreneurship has been predominantly university-based (Chris-Israel et al., 2021; Sulyman et al., 2024), leaving the polytechnic subsector underexplored.

This contextual gap is important for multiple reasons. The first is that polytechnic students typically come from lower socioeconomic backgrounds than their university counterparts (National Bureau of Statistics, 2022). Therefore, they are more likely to consider infopreneurship as economic necessity instead of career preference. Again, polytechnic education is more directly connected to immediate employment outcomes, with little emphasis on postgraduate study as an alternative path. Furthermore, federal polytechnics in South-West Nigeria operate within a region that is known for high digital infrastructure penetration when compared to other parts of the country (Adebayo & Owolabi, 2023). This combination of practical training orientation, economic anxiety, and appreciable digital access makes the population for this study theoretically distinct from university students in previous studies. Therefore, an empirical understanding of the digital competence levels among LIS students in federal polytechnics in South-West Nigeria and the direct influence of these competencies on their infopreneurship intention is needed to provide the pragmatic evidence for informed curriculum review and development.

Methodology

The descriptive survey design was employed for this study. The population for the study comprised all 638 final-year LIS students enrolled in the 2024/2025 academic session across four federal polytechnics offering accredited LIS programmes in South-West Nigeria: Federal Polytechnic Ede (Osun State, n = 384), Federal Polytechnic Ilaro (Ogun State, n = 139), Federal Polytechnic Ado-Ekiti (Ekiti State, n = 73), and Yaba College of Technology (Lagos State, n = 42). The population included both National Diploma (ND II) and Higher National Diploma (HND II) students, as both levels complete entrepreneurship coursework and practical projects prior to graduation.

The sample size was 468 selected through multi-stage sampling technique. First, purposive sampling technique was used to

select only the final year students in the four (4) federal polytechnics that offer LIS programme as at the time of the study. Secondly, proportionate stratified sampling was applied across the levels (ND & HND) and institutions to ensure adequate representation of each stratum. At the third stage, the simple random sampling technique was employed to select the respondents to the research instruments. The sample size for the study was determined using Krejcie and Morgan's table for sample determination. The sample frame is as shown in Table 1.

Table 1: Sample Frame

S/N	Name of Polytechnic	ND II		HND II		Total	
		N	S	N	S	N	S
1.	Federal Polytechnic Ede	180	123	204	132	384	255
2.	Federal Polytechnic Ilaro	85	70	54	48	139	118
3.	Federal Polytechnic Ado-Ekiti	73	59	-	-	73	59
4.	Yaba College of Technology	42	36	-	-	42	36
	Total	**380**	**288**	**258**	**180**	**638**	**468**

(N - Population S – Sample)

The instrument used for the data collection was a structured questionnaire titled "Digital Competence and Infopreneurship Intentions Questionnaire (DCIIQ)" with three (3) sub-scales that measured the study constructs. Section A (Infopreneurship Intention) included eight items adapted from Fatoki (2014) and Chris-Israel et al. (2021), measuring students' deliberate plans to initiate information-based ventures. Section B (Digital Competence) contained 8 items operationalizing Eshet-Alkalai's (2012) Digital Literacy Model dimensions: photo-visual literacy (2 items), reproduction literacy (2 items), information literacy (2 items), and socio-emotional literacy (2 items). Section C (Barriers) contained 8 items adapted from Friday and Sawyer-George (2023) and Iwu et al. (2025). The 4-point Likert scale including Strongly Agree, Agree, Disagree and Strongly Disagree was used for measuring intentions and perceived barriers.

In order to ensure the validity of the instrument, it was presented to two experts in the field of LIS for face and content validity. All modifications, corrections, feedbacks and inputs from the validators were incorporated before the instrument was used for data collection. Cronbach's

alpha was used to calculate the reliability of the instrument which was done after a pilot study that involved thirty (30) LIS students from the Federal Polytechnic Offa, Kwara State, Nigeria. The overall result of the reliability test indicated an internal consistency of as 0.828 which attested to the reliability of the questionnaire.

Table 2: Cronbach's Alpha Result for Reliability Test Results

Research Questions	Cronbach alpha Reliability Scale	Items	Decision
Infopreneurship Intention	0.891	8	Very good Reliability
Digital Competence	0.798	8	Good reliability
Barriers to Infopreneurship Intention	0.796	8	Good reliability
Overall result	**0.828**	**24**	**Very good reliability**

Source: Researcher, 2025

The data for this study were gathered via a survey administered over a three-week period, from December 1st to December 22nd, 2025. A total of 468 copies of questionnaire were distributed to the target population. Of these, 388 were duly completed and retrieved, resulting in a response rate of 82.9%. The analysis of the data involved two main approaches. First, descriptive statistics, specifically frequency counts, means, and standard deviations, were used to analyse and answer research questions. Second, linear regression analysis was conducted to test the study's null hypothesis at 0.05 level of significance.

Results and Discussion

Research Question One: What is the level of infopreneurship intention of LIS students in federal polytechnics in South-West, Nigeria?

Table 3: Level of Infopreneurship Intention

Item	SA	A	D	SD	Mean	Std Dev

1	I intend to start an information-related business after graduation.	163	179	33	13	3.27	.754
2.	I am motivated to provide information services for profit.	161	181	34	12	3.27	.746
3.	I believe infopreneurship is a viable career path for LIS graduates.	180	174	21	13	3.34	.732
4.	I regularly think about business opportunities in the information sector.	168	180	30	10	3.30	.723
5.	I plan to develop innovative information products/services.	155	181	38	14	3.23	.769
6.	I would like to use my LIS training to create income-generating ventures.	172	177	28	11	3.31	.729
7.	I feel confident that I can succeed as an infopreneur.	183	161	31	13	3.32	.763
8.	I have a strong desire to pursue infopreneurial activities.	163	172	38	15	3.24	.784
	Weighted Mean					**3.28**	**.075**

Source: Field Survey (2025) Note: N = 388. SA = Strongly Agree (4), A = Agree (3), D = Disagree (2), SD = Strongly Disagree (1). Criterion mean = 2.50.

Table 3 presents analysis of data on the level of infopreneurship intention of respondents. The result indicate that the level of infopreneurship intention among the students was generally high, as all mean scores are significantly above the criterion mean of 2.50 (ranging from 3.23 to 3.34). The highest mean score (3.34) showed that the students believed that infopreneurship is a viable career path for LIS graduates. Also, the data show that the students feel confident that they can succeed as infopreneurs with mean score of 3.32. Furthermore, the students affirmed that they would like to use their LIS training to create income-generating ventures with mean score (3.31). Similarly, the data analysis revealed that the students regularly think about business opportunities in the information sector with mean score (3.30) and intend to start an information-related business after graduation and they are also motivated to provide information services for profit with mean scores (3.27). Given a weighted mean of $\bar{x}=3.28, \delta=0.75$ it could therefore be deduced that the level of infopreneurship intention among LIS

students in federal polytechnics in South-West, Nigeria is high.

The finding can be credited to high level of graduate unemployment and insufficient job opportunities in conventional library settings. These situations tend to propel many students toward self-employment as a practical necessity. Also, Nigeria's fast growing digital economy, encouraged by growing internet penetration, mobile money adoption, and an energetic tech startup culture draws them toward infopreneurship. In addition, Nigeria's LIS curricula now include courses on entrepreneurship and ICT applications which equip students with both the mindset and the technical skills for infoprenurial practices. This is further reinforced by a cultural environment where many students observe peers succeeding in side hustles or online businesses, making infopreneurship feel not just viable, but aspirational. The finding on this study resonates with the Sulyman et al., (2024) who reported high intention and readiness among Nigerian LIS graduates to create jobs through infopreneurial practices such research services, information repackaging, and digital publishing. It also aligns with Ramugondo (2021) whose study of South African infopreneurs, revealed that infopreneurship is viable as an employment option.

Research Question 2: What is the level of digital competence of LIS students in

federal polytechnics in South-West, Nigeria?

Table 4: Level of Digital Literacy Competence of LIS Students

S/N	Items	SA	A	D	SD	Mean	Std Dev.
1.	I can confidently use digital tools to create and manage information.	165	183	33	7	3.30	.701
2.	I am skilled in searching for information using online databases.	150	184	42	12	3.22	.757
3.	I am able to evaluate the credibility of online information sources.	145	189	40	14	3.20	.764
4.	I can effectively use office productivity software (such as Word, Excel, PowerPoint).	138	184	52	14	3.15	.783
5.	I can use social media platforms for professional or academic purposes.	181	168	28	11	3.34	.734
6.	I am knowledgeable about digital copyright and ethical information use.	144	178	51	15	3.16	.795
7.	I can troubleshoot basic ICT problems on my own.	130	160	82	16	3.04	.843
8.	I can use digital platforms to share, market, or distribute information products.	162	183	33	10	3.28	.727
	Weighted Mean					**3.21**	**.763**

Source: Field Survey (2025). Note: N = 388. SA = Strongly Agree (4), A = Agree (3), D = Disagree (2), SD = Strongly Disagree (1). Criterion mean = 2.50.

Table 4 presents analysis of data on the level of digital competence of LIS students in federal polytechnics in South-West, Nigeria. Result indicate that the students possess appreciable level of digital competence as all mean scores are significantly above the criterion mean of 2.50 (ranging from 3.04 to 3.34). Specifically, finding showed that the students can use social media platforms for professional or academic purposes with mean score $\bar{x}=3.34, \delta=0.734$. The students also affirmed their confidence in the use of digital tools for the creation and

management of information $\bar{x}=3.30, \delta=0.701$.; their ability to use digital platforms to share, market, or distribute information products $\bar{x}=3.28, \delta=0.727$; and their skill in searching for information using online databases $\bar{x}=3.22, \delta=0.757$. The students' digital competence is further characterized by their ability evaluate the credibility of online information sources $\bar{x}=3.20, \delta=0.764$; knowledge about digital copyright and ethical information use $\bar{x}=3.16, \delta=0.795$; ability to effectively use office productivity software like Word, Excel, and PowerPoint $\bar{x}=3.15, \delta=0.783$, and ability to troubleshoot basic ICT problems $\bar{x}=3.04, \delta=0.843$. The lowest digital competence score was for *troubleshooting basic ICT problems* (mean = 3.04). This is inspite of the high scores in social media use (3.34) and digital content creation (3.30). This divergence indicates that Nigerian LIS students possess application-level but not infrastructure-level competence. In other words, they can use digital tools but struggle when those tools malfunction.

Given an overall mean of $\bar{x}=3.21, \delta=0.763$, it can be deduced that there is a high level of digital competence among the LIS students in federal polytechnics in South-West, Nigeria. This result can be ascribed the practical training received by the students and their exposure to technology. These days, the coursework of LIS students includes hands-on use of computers, databases, and digital tools specifically pertinent to modern library work. More so, many of the students are already comfortable with digital devices like smartphones, tablets and the internet from daily life. This mix of academic instruction and personal experience could have helped them develop strong digital competencies.

The finding of this study aligns with recent empirical studies. This result corroborates with Bashorun et al. (2022), whose study reported high information literacy skills among undergraduates in University of Ilorin, Nigeria, ascribing this to frequent interface with electronic information resources and databases. The substantial competence in office productivity software and basic ICT troubleshooting reflects broader findings by Nwaogu and Ngwuchukwu (2025), who noted that LIS students possess strengths in basic ICT skills, digital communication, and information retrieval. The students' knowledge of digital copyright and ethical information use suggests effective integration of information literacy components into LIS curricula. Together, these findings from different Nigerian

institutions validate the high digital competence observed and show to contributory factors including, mandatory ICT courses practical curriculum content, frequent use of digital resources for academic works, as well as students' adaptive capacity within technology-mediated learning spaces.

Research Question 3: What are the barriers to infopreneurship intention of LIS students in federal polytechnics in South-West, Nigeria?

Table 5: Barriers to Infopreneurship Intention

S/N	Items	SA	A	D	SD	Mean	Std Dev
1.	I lack start-up capital to begin an infopreneurial venture.	161	160	52	15	3.20	.815
2.	I do not receive enough entrepreneurship training in my programme.	97	152	114	25	2.83	.880
3.	I am unsure of the business opportunities available in the information sector.	101	152	109	26	2.85	.887
4.	I lack mentorship or guidance on infopreneurship.	105	147	107	29	2.85	.908
5.	Fear of business failure discourages me from pursuing infopreneurship.	103	147	112	26	2.84	.894
6.	Limited access to digital tools and resources reduces my interest in infopreneurship.	112	173	83	20	2.97	.842
7.	I lack practical exposure to real-world information business activities.	110	155	93	30	2.89	.907
8.	The curriculum does not sufficiently prepare me for infopreneurship.	117	141	98	32	2.88	.934
	Weighted Mean					**2.91**	**.883**

Source: Field Survey (2025) **N** = 388

Table 5 presents analysis of data on the barriers to infopreneurship intention. The result shows that diverse challenges hinder the expression of infopreneurial intention

among LIS in federal polytechnics in South-West, Nigeria. Prominent among the challenges are lack start-up capital $\bar{x}=3.20, \delta=.815$; limited access to digital tools and resources $\bar{x}=2.97, \delta=.842$; lack practical exposure to real-world information business activities $\bar{x}=2.89, \delta=.907$; curriculum deficiency $\bar{x}=2.88, \delta=.934$; and lack of mentorship on infopreneurship $\bar{x}=2.85, \delta=.908$. Other noted challenges include; uncertainty of the business opportunities available in the information sector $\bar{x}=2.85, \delta=.887$; fear of business failure $\bar{x}=2.84, \delta=.894$; and insufficiency of entrepreneurship $\bar{x}=2.83, \delta=.880$. Since the all the mean scores of all the items in the table exceed the criterion mean of $\bar{x}=2.50$, and given the weighted mean of $\bar{x}=2.91, \delta=.883$, it is concluded that several factors impede infopreneurship intention, and addressing those issues could facilitate not only the expression of intention but active engagement in infopreneurship among LIS students.

Although lack of start-up capital was the highest-rated barrier (mean = 3.20), yet digital competence remained a strong predictor of intention. This suggests that students may perceive digital skills as capable of substituting for financial capital. In this context, they may believe that can be able start infopreneurial practices with little upfront investment using free digital tools, social media marketing, and low-cost content creation platforms (Smith & Jones, 2023). This finding challenges the conventional assumption that financial capital heralds entrepreneurship and supports the concept of "digital bootstrapping" which is becoming common in developing economies like Nigeria.

The findings from this study are robustly supported by recent studies in the field of LIS. The challenge of insufficient entrepreneurship-focused curricula and inadequate practical exposure has been reported as a deep-rooted issue in Nigerian LIS education. Consequently, different researchers have called for urgent incorporation of infopreneurial content to equip graduates with vital 21st-century skills for innovation and self-reliance (Mubofu & Malekani, 2023; Mohammed et al., 2022; Okolo & Ivwighreghweta, 2021). Likewise, research confirms that even where entrepreneurial courses are taught, significant execution gaps exist between educational intentions and practical delivery, including insufficient teaching aids, inadequate practical resources, and scarcity of lecturers with entrepreneurial exposure (Iwu et al., 2025). The apprehension for business failure reflects a well-known

psychological impediment. Report from Yuan et al. (2024) confirms that entrepreneurial fear of failure among college students is influenced by both exogenous factors (like absence of mentorship and limited resources), and endogenous factors, with students' unique social identities and educational contexts contributing majorly.

Test of Hypothesis

Ho1: There is no significant influence of digital competence on the infopreneurship intention of LIS students in federal polytechnics in South-West, Nigeria.

Table 6. Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	R^2	F	Sig.
	B	Std. Error	Beta					
(Constant)	2.213	.785		2.819	.005	0.716	974.601	0.000
IDC	.935	.030	.846	31.219	.000			

SPSS Output

From the Table 6 above, the R^2 value of 0.716 indicates that digital competence explains 71.6% of the variance in infopreneurship intention. The ANOVA table with F-statistics of 974.601 and Sig value 0.000 reveals that the model is a good fit and it explains the influence of digital competence on infopreneurship intention. The analysis shows that a unit increase in digital competence will increase infopreneurship intention by 0.935 units. Since the sig value (0.000) is < p-value (0.05), H_0 is rejected and concluded that there is significant influence of digital competence on the infopreneurship intention of LIS students in federal polytechnics in South-West, Nigeria.

The finding that digital competence explains 71.6% of the variance in infopreneurship intention ($\beta = 0.846$, $p < 0.001$) is substantially higher than comparable studies. For example, Bashir et al. (2025) reported an R^2 of 0.43 for information literacy's effect on entrepreneurial intention among business students in Pakistan, while Lee and Kim (2024) found R^2 values ranging from 0.38 to 0.52 across diverse digital competencies in South Korea. The larger effect size observed in this study may be ascribed to the three contextual factors of economic necessity, practical orientation, and the resource-constrained environment specific to Nigerian polytechnic LIS students.

First is the argument of economic necessity. Nigerian polytechnic students face severe graduate unemployment (National Bureau of Statistics, 2022). This economic anxiety may intensify the credence of PBC (digital competence) in intention development, as students with digital competence perceive a

more urgent and viable path to making money. Second, the practical oriented nature of the polytechnic education entails that digital competence is not abstract knowledge. Rather, it is directly relevant to business creation. Third, the resource-constrained environment may create a "digital leverage effect," where even moderate digital skills provide unequal advantage in a market with low overall digital penetration, making competence more strongly connected with intention.

The significant influence of digital competence on infopreneurship intention shows that mere theoretical knowledge of LIS is not enough. Hence, students need practical digital skills to become job creators instead of job seekers. Barau and El-Kalash (2024) emphasize this urgency. They argue that the current LIS curricula in Nigeria fail to equip graduates with the required 21st-century skills leading to the need to infuse infopreneurial content to foster innovation and capitalize on information opportunities upon graduation. Araoye et al. (2024) further support this by demonstrating that ICT proficiency propels innovativeness and creativity which are critical for self-reliance. Therefore, the finding of this study validates calls for curriculum reforms to equip Library and Information Science students for the digital economy.

Conclusion

This study examined the influence of digital competence on infopreneurship intention among LIS students in federal polytechnics in South-West, Nigeria. The results show high levels of both infopreneurship intention (mean = 3.28) and digital competence (mean = 3.21) among the students. The test of hypothesis revealed a significant positive influence of digital competence on infopreneurship intention. Major challenges, including lack of start-up capital (mean = 3.20) and inadequate access to digital tools (mean = 2.97), were identified, though these did not override the strong influence of digital competence on intention. These findings carry significant implications for LIS curriculum development and educational policy in Nigeria, suggesting that integrating practical digital entrepreneurship training is required for graduate self-dependence.

Recommendations

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

1. The National Board for Technical Education (NBTE) and Nigerian Association of Library and Information Science Educators (NALISE) should work together to revise the LIS curriculum to integrate compulsory, practical-based infopreneurship

modules that will specifically address the students' concerns about insufficient entrepreneurship training and lack of practical experience.

2. The LIS Department, through its faculty and alumni association, should create a formal infopreneurship mentorship set-up that pairs willing students with successful infopreneurs. In this regard, LIS alumni in business and industry professionals can provide ongoing guidance that will reduce the fear of failure, and clarify the business opportunities available in the information sector.
3. The Polytechnic Library, in collaboration with the LIS Department and ICT unit, should establish a well-equipped "Infopreneurship Resource Lab" that offers students free or subsidized access to essential digital tools, software, databases, and high-speed internet, thereby removing the barriers of start-up capital and limited access to digital tools and resources.

Acknowledgement

The authors acknowledge the financial support of the Tertiary Education Trust Fund (TETFUND), under the Institutional-Based Research (IBR) Grant of the Federal Polytechnic Ede, Nigeria.

Funding Declaration: This research was funded by the Tertiary Education Trust Fund (TETFUND), under the Institutional-Based Research (IBR) Grant of the Federal Polytechnic Ede, Nigeria.

References

Adebayo, E. T., & Owolabi, S. (2023). Infopreneurship as a strategic response to the knowledge economy: Redefining the value proposition of library and information professionals in Nigeria. *IFLA Journal*, *49*(1), 176–189.https://doi.org/10.1177/03400352221084031

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Akter, F. & Biswas, M. S. (2024). Perceived attitudes towards infopreneurship: An empirical study on a public university students in Bangladesh. *Business Information Review, 41(4).*

doi/10.1177/02663821241289826

Ala-Mutka, K. (2019). Mapping digital competence: Towards a conceptual understanding. *Publications Office of the European Union*. https://doi.org/10.2760/52342

Almeida, P., & Santos, C. (2023). From freelancer to infopreneur: The role of digital content creation skills in entrepreneurial intention. *Journal of Small Business and Enterprise Development*, 30(4), 567-585. https://doi.org/10.1108/JSBED-03-2022-0121

Araoye, A., Adeleke, A. F., Megbuwawon, A. F., & Ayoola, Y. O. (2024). Digital entrepreneurial skills: A tool to equip and promote self-reliance among students in colleges of education, Oyo State, Nigeria. *International Journal of Entrepreneurship, Technology and Innovation*, 4(1).

Aworuwa, B., Olojede, O., & Ogedengbe, O. (2021). Infopreneurship as a panacea for unemployment among library and information science graduates in Nigeria. *Library Philosophy and Practice*, 5221. https://digitalcommons.unl.edu/libphilprac/5221

Barau, H. M., & El-Kalash, K. I. (2024). *Twenty-first-century librarianship and the need for infopreneurial content in the Library and Information Science curriculum of a developing nation*. In Proceedings of the International Conference on Research in Education and Science (ICRES). International Society for Technology, Education, and Science.

Bashir, I., Talha, Naveed, M. A., Asghar, M. Z., & Rasool, S. F. (2025). From info seeker to startup superhero: How information literacy influences entrepreneurial intention and skills among business students. *Administrative Sciences*, 15(7), 239. https://doi.org/10.3390/admsci15070239

Bashorun, M. T., Rafiat, B. B., Shuaib, A. O., & Akinbowale, A. T. (2022). Information literacy competence and use of electronic information resources among undergraduates in University of Ilorin, Nigeria. *Mousaion: South African Journal of Information Studies* 40 (1). https://doi.org/10.25159/2663-659X/8546.

Chen, L., & Owyong, Y. M. (2022). Seeing the digital opportunity: How digital literacy shapes infopreneurial motivation and venture ideation in Southeast Asia. *International Journal of Entrepreneurial Behavior & Research*, 28(9), 1-20. https://doi.org/10.1108/IJEBR-11-2021 0923

Chris-Israel, H. O., Onuoha, U. D., & Ojokuku, B. Y. (2021). *Influence of information literacy skills on infopreneurship intentions of Library and Information Science undergraduates in public universities in South-West, Nigeria*. *Library Philosophy and Practice*. https://digitalcommons.unl.edu/libphilprac/7271/

David, R., & Dube, A. (2014). Infopreneurial behaviour among university graduates in the information science faculty of a university in Zimbabwe. *Infopreneurship Journal, 1*(2), 18-30. https://doi.org/10.13140/RG.2.1.1190.9601

Ebiwolate, P. B. (2020). Digital literacy skills for sustainable information access by librarians in Bayelsa State, Nigeria. *International Journal of Library and Information Science Studies*, 6(3), 1-11.

Edewor, N., & Egberavwe, M. (2020). Infopreneurship as an alternative career path for library and information science professionals in Nigeria. *Information Impact: Journal of Information and Knowledge Management*, 11(3), 52-63.https://doi.org/10.4314/iijikm.v11i3.5

Edoka, B. E. (2021). *Introduction to library and information science*. Onitsha: Ephrata Publishers.

Fatoki, O. O. (2014). The entrepreneurial intention of undergraduate students in South Africa: The influences of entrepreneurship education and previous work experience. *Mediterranean Journal of Social Sciences*, *5*(7), 294-297. https://doi.org/10.5901/mjss.2014.v5n7p294

Federal Republic of Nigeria. (2014). *National policy on education* (6th ed.). NERDC Press.

Friday, J. E., & Sawyer-George, O. (2023). Practice of infopreneurship by librarians in public university libraries in South-South Nigeria. *Evidence Based Library and Information Practice*, *18*(3), 27–52. https://doi.org/10.18438/eblip30235

Garcia, M., Fernández-Laviada, A., & López, J. (2024). Personal branding in the digital age: Its impact on entrepreneurial intention for knowledge-intensive services. *The International Journal of Entrepreneurship and Innovation*. *Advance online publication*. https://doi.org/10.1177/14657503241245678

Iwu, C. G., Maziriri, E. T., Sibanda, L., & Makwara, T. (2025). Unpacking the entrepreneurship education conundrum: Lecturer competency, curriculum, and pedagogy. *Administrative Sciences*, *15*(1), 2. https://doi.org/10.3390/admsci15010002

Kraus, S., Palmer, C., Kailer, N., Kallinger, F. L., & Spitzer, J. (2019). Digital entrepreneurship: A research agenda on new business models for the twenty-first century. *International Journal of Entrepreneurial Behavior & Research*, 25(2), 353-375. https://doi.org/10.1108/IJEBR- 06-2018- 0425

Lee, J., & Kim, S. (2024). Mapping digital skills to entrepreneurial futures: A study of infopreneurship intentions among Korean university students. *Education and Information Technologies*, 29, 3567–3587. https://doi.org/10.1007/s10639-023-11978-0

Madu, U. W., Ajayi, S. A. & Ebire, B. D. (2016). *Harnessing Infopreneurship for Sustainable Development: LIS Graduates in Perspective*. A paper presented at the 2nd National Conference of Nigerian Library Association, Ebonyi State Chapter at the Lecture Theater, Akanu Ibiam Federal Polytechnic, Uwana, Afikpo, EbonyiState. Date 2nd December, 2016. https://www.researchgate.net/publication/323417475

Miranda, F. J., Chamorro, A., & Rubio, S. (2021). Digital entrepreneurial self-efficacy: A key predictor for starting online businesses. *Technological Forecasting and Social Change*, 162, 120358. https://doi.org/10.1016/j.techfore.2020.120358

Mohammed, Z. A., Abbas, L. G., A., Auwal U., M., & Ibrahim, M. (2022). Inforpreneurship: Opportunities and challenges for Library and Information Science professionals in 21st century. *Asian Journal of Information Science and Technology*, *12*(2), 22–28. https://doi.org/10.51983/ajist-2022.12.2.3318

Mubofu, C., & Malekani, A. (2023). A systematic review of infopreneurship's opportunities and challenges. *Business Information Review*, *40*(2),

70-77. https://doi.org/10.1177/026638212311174403

Nambisan, S. (2020). *Digital entrepreneurship: Toward a digital technology perspective of entrepreneurship*. In Digital Entrepreneurship (pp. 1-27). Routledge.

National Bureau of Statistics. (2022). *Labour force statistics: Unemployment and underemployment report (Q4 2022)*. https://nigerianstat.gov.ng/elibrary

Nwokocha, U. (2020). Repositioning library and information science education for sustainable development in Nigeria: The infopreneurship imperative. *Journal of Applied Information Science and Technology*, 13(1), 66-75.

Okolo, E. S. & Ivwighreghweta, O. (2021). Entrepreneurship skills and opportunities for librarians in the field of Library and Information: A case perspective in view. *International Journal of Sustainability Management and Information Technologies*, 7(2), 27-35. https://doi.org/10.11648/j.ijsmit.20210702.11

Oluwajodu, F., Blaauw, D., Greyling, L., & Kleynhans, E. P. J. (2021). Graduate unemployment and entrepreneurship in Nigeria: The role of entrepreneurship education. *Journal of Entrepreneurship Education*, 24(3), 1-14.

Ramugondo, L. S. (2021). Infopreneurship as an employment option for library and information science students and graduates in South Africa: A literature review. *Library Philosophy and Practice*, 5948. https://digitalcommons.unl.edu/libphilprac/5948

Smith, T., & Jones, R. (2023). Lowering the barrier: How perceived cost reduction from digital tools fuels infopreneurial intention. *Journal of Research in Marketing and Entrepreneurship*, 25(1), 22-40. https://doi.org/10.1108/JRME-02-2022-0015

Sulyman, A. S., Ajani, F. O., Idowu, A. O., & Badmus, I. B. (2024). Infopreneurship and technopreneurship readiness for job creation among Nigerian Library and Information Science graduates. *Asian Journal of Information Science and Technology*, *14*(2), 27–33. https://doi.org/10.70112/ajist-2024.14.2.4278

Thobekani L. & Sebenzile K. (2022). Attitudes towards infopreneurship among information science students at a higher education institution. *Problems and Perspectives in Management*, *20*(1), 49-57. doi:10.21511/ppm.20(1).2022.05

Ugwuanyi, C. F., Eze, T. O., & Okwor, R. N. (2023). Digital literacy skills as correlates of infopreneurial intention among undergraduate students of federal universities in South- East Nigeria. *Journal of Information and Knowledge Management*, 13(1), 1-15.

Vuorikari, R., Kluzer, S., & Punie, Y. (2022). DigComp 2.2: The Digital Competence Framework for Citizens - With new examples of knowledge, skills and attitudes. *Publications Office of the European Union*. https://doi.org/10.2760/115376