From Catalogue to Capital: A Statistical Assessment of Entrepreneurial Opportunities for Library and Information Science Professionals in the Digital Economy

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Abstract

With the advent of the digital economy, information became a key economic asset, creating new business opportunities for the Library and Information Science (LIS) workforce. Traditionally, LIS practitioners were engaged in cataloguing, preservation, and information management within institutions; however, these roles were expanded and monetised through digital publishing, information consultancy, content management, online training, data services, and knowledge brokerage. Although infopreneurship is emerging, empirical research on entrepreneurial readiness and influencing factors among LIS professionals remained limited. This study examined the relationship between entrepreneurial intention and digital competence among LIS professionals in the digital economy. A quantitative cross-sectional survey design was adopted. Data were collected from library staff of selected federal universities in the South-South region of Nigeria using a structured questionnaire. Total enumeration was used. The instrument measured entrepreneurial intention, digital competence, financial constraints, mentorship support, and involvement in digital economic activities using Likert scales. Data were analysed using simple linear regression at 0.05 significance level. Validity and reliability were established through expert review, pilot testing, Cronbach's alpha, and exploratory factor analysis. Findings showed high entrepreneurial intention and moderate-to-high digital competence among respondents. Regression results indicated a significant positive relationship between entrepreneurial intention and digital competence. Financial constraints and lack of mentorship were identified as key barriers. The study concluded that LIS professionals have strong potential for digital entrepreneurship beyond traditional roles. It recommended integrating digital entrepreneurship training into LIS curricula, strengthening mentorship structures, and improving access to funding to enhance participation and professional relevance in the digital economy.

Keywords: Digital Competence, Digital Economy, Entrepreneurial Intention, Infopreneurship, Library and Information Science

Introduction

The digital economy has experienced rapid expansion and has significantly changed the ways in which information is created, shared, and monetised across sectors. Digital platforms, data-driven services, and knowledge-based enterprises are key drivers of economic growth and innovation (World Bank, 2021; Organisation for Economic Co-operation and Development, 2020). Information is increasingly regarded as an economic asset; however, rather than being only an institutional resource managed and controlled within organisations, it is now utilised to generate tangible economic returns (Gillwald et al., 2018). This revolution has far-reaching consequences for Library and Information Science (LIS) professionals, whose traditional roles have centred on cataloguing, preservation, and management of institutional information. In an era of increasing digitisation of knowledge systems and market orientation, LIS professionals have opportunities that extend beyond custodial functions to entrepreneurial engagement within the digital economy (IFLA, 2022; Kumar & Sharma, 2023). The competencies acquired through LIS training, including information organisation, metadata design, digital curation, information management, user-centred information services, and knowledge brokerage, are transferable to entrepreneurial activities such as digital publishing, information consultancy, data management, and online training (Mohammed et al., 2022).In many developing economies, unemployment and underemployment among graduates continue to pose significant challenges, making entrepreneurship in the digital information sector a promising pathway for professional sustainability and economic empowerment (Ivwurie & Ocholla, 2016). Despite growing recognition of entrepreneurial opportunities for LIS professionals, existing studies have focused largely on conceptual discussions and potential roles rather than empirical assessment of actual engagement and constraints (Akpena & Duosakeh, 2020; Friday & Sawyer-George, 2023). Consequently, there is limited understanding of whether LIS professionals possess entrepreneurial intentions that can facilitate participation in digital markets, whether such intentions are reflected in their digital competence, and whether structural factors such as finance and mentorship influence entrepreneurial involvement (Kazungu, 2021). Without empirical evidence, discussions surrounding LIS entrepreneurship may remain aspirational rather than evidence-based, thereby limiting effective policy formulation, curriculum transformation, and professional development initiatives (Ikenwe, 2021). The transformation from catalogue to capital therefore requires systematic investigation to determine whether it represents an emerging professional reality or merely a theoretical proposition. To address this gap, this study provides a quantitative assessment of entrepreneurial opportunities for LIS professionals within the digital economy. Specifically, it examines entrepreneurial intention, analyses its relationship with digital competence, and investigates whether finance and mentorship constitute major barriers to entrepreneurial involvement. The study contributed empirical evidence to ongoing debates on professional relevance, economic adaptation, and participation in the knowledge economy within the LIS field.

Literature Review

Entrepreneurship Concept.

Entrepreneurship is becoming more and more conceptualised as a process of value production by identifying and taking advantage of the opportunities in the circumstances of uncertainty. However, modern literature has extended the definition of entrepreneur and started to focus on entrepreneurial behaviour as enterprising human action that generates value in an economy via innovation, whether of a product, process or market (Organisation for Economic Co-operation and Development, 2020). The OECD-Eurostat Entrepreneurship Indicators Programme defines entrepreneurial activity as the quantifiable value-creating behaviour which allows statistically

comparing sectors and economies. The orientation of behaviour is particularly relevant in digitally mediated markets where entrepreneurship is increasingly defined by platform-based services, knowledge-based microenterprises, and the growing use of **intellectual property (IP)** by traditional firms. (UNCTAD, 2021; Lungu et al., 2024). For the purpose of this project, entrepreneurship is an economic activity that relies on opportunity identification, innovation and mobilisation of strategic resources, with sustainability and exposure to risk being determined by the situation of the ecosystem, financial resources available and the management of its operations (Leboea, 2017; Naude & Chiweshe, 2017; Small Enterprise Development Agency, 2016; Bureau for Economic Research, 2016).

Entrepreneurial Intention

Entrepreneurial intention simply means a conscious and deliberate intention by an individual to start a new venture in the future. It includes motivational and cognitive antecedents of entrepreneurial behaviour that is an expression of commitment to exploiting opportunities. Studies have always demonstrated that intention is generally a precursor of entrepreneurship action, and intention is one of the best predictors of entrepreneurship creation (Ajzen, 1991). The entrepreneurial intention is related to perceived feasibility, perceived outcomes, self-efficacy, risk orientation and support structures. In a digital economy where entry barriers are less important and professional autonomy has been facilitated by technology, entrepreneurial intention is proving to be a more prominent factor in the decision of individuals to capitalise on the digital infrastructures as economic participants (Mohammed et al., 2022; Kazungu, 2021; Kehinde, 2021; Lose and Khuzwayo, 2022). For Library Information Science (LIS) practitioners, entrepreneurial intention refers to a desire to monetise the knowledge they have in the domain of LIS and support research, organisation of information and curation of digital content by transforming it into an income-generating service in the knowledge-based markets.

LIS Opportunities in Business.

With the development of the digital economy, LIS has significantly given rise to entrepreneurial opportunities. The skills and knowledge acquired during LIS training are highly transferable to knowledge-intensive enterprises (Wema, 2021; Ogbonyomi, 2024; Kumar and Sharma, 2023). Digital archiving services, information consulting, research data management, academic editing and publishing support, Digital content production, online training services, automation enabled services, and Platform mediated information broking are the opportunities that are emerging (Mohammed et al., 2022; El-Kalash et al., 2016; Technopedia, 2021; Skrba, 2020; Andrew, 2020). Spatial and financial constraints have been brought down even more by the new remote working systems and the international online market spaces, which enable practitioners to operate outside of the communal organisation (Gillwald et al., 2018; Independent Communications Authority of South Africa, 2018). As a result, LIS practitioners can become infopreneurs and use intellectual and digital capital to create economic value instead of physical infrastructure to do so (Ivwurie and Ocholla, 2016; Aregbesola et al., 2019). These changes put LIS skills in the context of the wider shift of knowledge to market-based assets.

Entrepreneurship issues in Library and Information Science

The digital transformation offers new opportunities for entrepreneurs, but also has structural implications, which can affect the viability and sustainability of entrepreneurships. One of the major challenges remains financial capital particularly in the case of knowledge-based microenterprises, which lack formal funding opportunities and traditional collateral (Leboea, 2017; Small Enterprise Development Agency, 2016; Bureau for Economic Research, 2016).

Absence of mentorship and lack of good professional networks also hinder an entrepreneur from growing as it reduces his exposure to strategic advice and experience as well as the opportunity recognition structures (Ramugondo, 2021; Amakiri & Marie, 2019; Chux-Nyehe & Nwinyokugi, 2020). The study of entrepreneurial ecosystems has highlighted the fact that early-stage businesses can draw a lot of advantages out of relational resources that support them in terms of information, emotions, and instruments (Naude& Chiweshe, 2017). In the transfer of LIS professionals into independent enterprise, a lack of financial access and mentorship infrastructure can be seen to have a very powerful impact on the entrepreneurial success of these individuals. The entrepreneurial involvement thus cannot be analysed only through the lens of the entrepreneur's motivation, but also through the structural and relational determinants.

Library and Information Science Ideas and Professionals.

LIS is an interdisciplinary field that is related to the systematic organisation, management, preservation, retrieval and distribution of information in the physical and digital environment. The profession has long been associated with the custodial and service roles, but the technology change and digital transformation (International Federation of Library Associations and Institutions, 2022; Kumar and Sharma, 2023) have been changing the profession. Modern LIS professionals, such as librarians, information specialists, archivists, data managers, and digital curators, operate in a complex system of information where they need to have the skills to manage digital resources, data governance, organisation of knowledge, and design systems for information (Iheanacho, 2018; Udofot, 2021). The evolution widens the scope of the profession, and is not limited to the provision of services in the institutions anymore, but rather reflects the new possibilities of entrepreneurship based on knowledge.

Digital Economy and Competency

The digital economy is defined as an economy in which economic activity is enabled by digital technologies, internet infrastructures, data analytics and information and communication technologies (ICTs) (OECD, 2020; UNCTAD, 2021). It is manifested through the centrality of information as an economic resource, an increasing trend towards platform-based business models, and a growing virtualisation of production and service delivery systems (World Bank, 2021; Lungu et al., 2024). Labour market shifts and barriers to entering into micro-entrepreneurship have changed as a result of digital transformation, enabling individuals to create businesses around their skills using digitally mediated systems (ILO, 2023; Statistics South Africa, 2019, 2020).

Digital competence is a combination of knowledge, skills, attitudes and behaviours which enable an effective, critical and responsible engagement with digital technologies (Iheanacho, 2018; Nweze, 2018). Digital competence makes people more flexible, efficient and creative in their work (Mole, 2019). Empirical evidence has also been found to be associated with the increase of the professional visibility, the development of networks and other dimensions of social capital of the entrepreneurs, which are highly relevant in the process of entrepreneurial success in digitally mediated markets (Lungu et al., 2024; Amakiri and Marie, 2019). Digital competence is a skill in LIS that helps the transfer of competences into an economically sustainable, long-term use of expertise.

Theoretical Review

This study is primarily anchored on the Theory of Planned Behaviour (TPB) developed by Ajzen (1991), which posits that behavioural intention serves as the most immediate predictor of an individual's behaviour. The theory identifies three key determinants of intention: attitude towards the behaviour, subjective norms, and perceived behavioural control (PBC). In the context of

entrepreneurship, TPB suggests that individuals are more likely to engage in entrepreneurial activities when they perceive entrepreneurship as desirable, socially acceptable, and achievable. Accordingly, entrepreneurial intention among Library and Information Science (LIS) professionals can be viewed as a product of cognitive evaluation and perceived capability, which subsequently influences their participation in the digital economy and the development of related competencies (Kazungu, 2021; Kehinde, 2021; Lose & Khuzwayo, 2022).

Theoretical Framework

Human Capital Theory

Human Capital Theory supports the view that education, skills, and professional qualifications constitute productive resources that positively influence economic outcomes (Mole, 2019). The theory posits that investments in knowledge and competencies enhance individuals' productivity and capacity to generate economic value. From this perspective, the digital competence of Library and Information Science (LIS) professionals can be viewed as a form of human capital that strengthens their entrepreneurial potential (Nweze, 2018; Iheanacho, 2018). The strategic application of these competencies is essential for facilitating the transition from traditional institutional functions to capital-generating digital enterprises (Kumar & Sharma, 2023; Ogbonyomi, 2024).

Social Capital Theory

Social Capital Theory provides an explanatory foundation for understanding the role of mentorship and access to financial resources in entrepreneurial engagement. The theory argues that social capital, embedded in networks and relationships, facilitates access to information, resources, and strategic support necessary for venture creation and growth (Ramugondo, 2021; Amakiri & Marie, 2019). Through social networks and mentoring relationships, individuals can acquire knowledge, opportunities, and support that enhance entrepreneurial viability. Conversely, limited access to financial and relational resources may constrain entrepreneurial outcomes (Leboea, 2017; Small Enterprise Development Agency, 2016). Accordingly, mentorship and financial support are considered important factors that can influence the entrepreneurial participation of LIS professionals in the digital economy.

Conceptual Framework

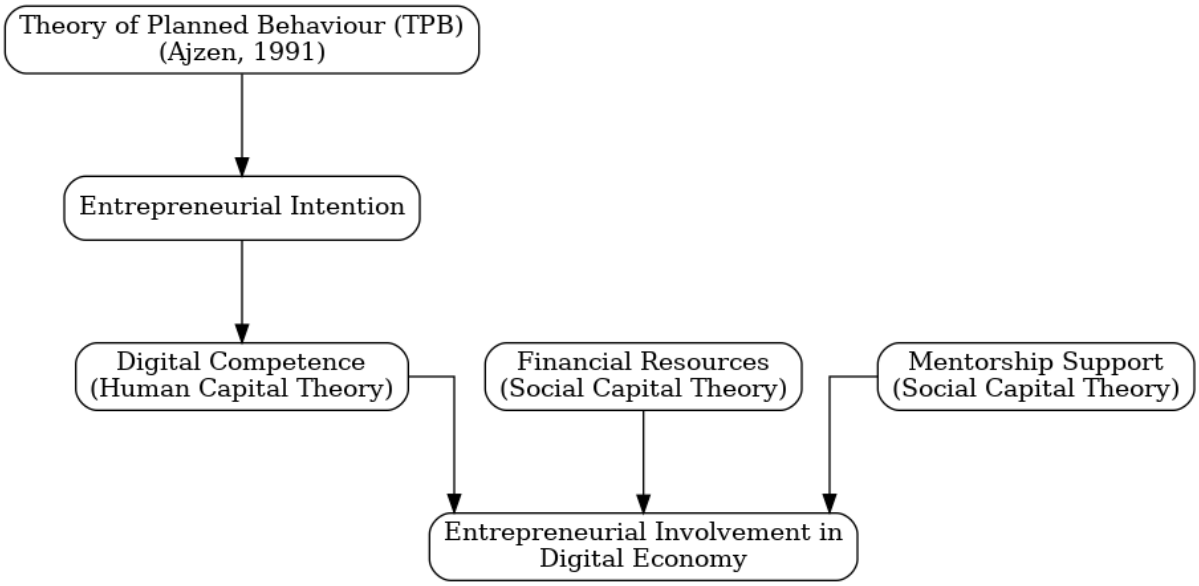


Figure 1: Authors' Conceptualisation., 2026

Empirical Review

Empirical studies on entrepreneurship in Library and Information Science (LIS) profession have been gaining more interest in the context of facing digital transformation and limited job opportunities in traditional Library settings (Ivwurie & Ocholla, 2016; Dewah & Mutula, 2016). Most of this work, however, is descriptive survey work with a focus on level of awareness, participation and perceived barriers.

Friday and Sawyer-George (2023) conducted a study on infopreneurship practices among Librarians in the Public University Libraries in South-South Nigeria with a survey design. The results they obtained showed that, although they are becoming aware of alternative employment opportunities, their level of entrepreneurial involvement is not high and is rated as low to moderate. The key constraints identified were limited institutional support, lack of entrepreneurial competencies and lack of funding. The results corroborate other studies that indicate that financial and ecosystem constraints are powerful influences on entrepreneurial involvement in developing settings (Leboea, 2017; Bureau for Economic Research, 2016).

Likewise, Akpena and Duosakeh (2020) in their work on the involvement of librarians in Bauchi State, found that the involvement of librarians in the infopreneurial activities is low, which is attributed to lack of digital skills, economic constraints and poor entrepreneurial orientation. Other related studies also center on the necessity of digital competence and institutional readiness in enhancing entrepreneurial involvement of LIS professionals (Nweze, 2018; Iheanacho, 2018; Usuka et al., 2019).

Within a technology-driven environment, Mohammed et al. (2022) investigated the new avenues of entrepreneurship in the LIS domain in terms of opportunity identification. They identified opportunities in areas of digital publishing, consultancy services, information broking, and services in the knowledge area more broadly. Nevertheless, the study highlighted the ongoing

problems such as financial constraints and the lack of technological infrastructure. Studies have been carried out in other African contexts, and they have all concluded similar findings, that infrastructure and ecosystem constraints limit the commercialisation of information services (Aregbesola et al., 2019; El-Kalash et al., 2016).

Similarly, Okolo and Oghenetega (2021) conducted a study on entrepreneurial skills and opportunities of Nigerian librarians and noted that though the awareness of entrepreneurial opportunities among Nigerian librarians was relatively high, the skills of managing a business and access to start-up capital was not adequate enough. This suggests a disparity between spotting entrepreneurial opportunities and having the muscle to take advantage of them. Research on LIS and LIS graduates' schools throughout Africa has also revealed the entrepreneurial intention-actual implementation gap (Kazungu, 2021; Kehinde, 2021; Lose & Khuzwayo, 2022).

The overall regional context, Ramugondo (2021) conducted a review of the literature to determine the overall empirical and conceptual studies to evaluate infopreneurship as an employment option for LIS graduates in South Africa. Digital content services, consultancy, and information broking emerged as potential areas of engagement from the review, and there was also a focus on the development of entrepreneurial mindset and curriculum reform as well as mentorship support. While the study was literature-driven, it endorsed the emerging understanding of entrepreneurship as a promising career option in the LIS profession that are increasingly becoming digitally inclined economies (OECD, 2020; World Bank, 2021).

Methodology

The study used a quantitative cross-sectional survey design to explore the opportunities for the LIS professionals working in the digital economy as entrepreneurs. The design allowed an evaluation of associations between entrepreneurial intention, digital competence, participation in the digital economy and perceived challenges in the structures at a single time. The population consisted of 255 library workers from six federal universities in the South -South region of Nigeria namely, Federal University of Petroleum Resources, Effurun (FUPRE 13), Nigeria Maritime University, NMU 18, Federal University Otuoke, (FUOTU) 24, University of Uyo (UNIYO) 19, University of Benin (UNIBEN) 141 and University of Port Harcourt, UNIPORT (40). UNICAL was recognised but was not included because the central library was vandalized and not working. A structured questionnaire consisting of 30 items on a Likert scale was used to gather data, which also included demographic items. The validity was proven by the expert's review. Cronbach's alpha was used to test the level of reliability with 0.70 and above was considered as reliable. The constructor validity test was conducted using Exploratory Factor Analysis, the KMO value was 0.60 or higher, and the Bartlett's value was accepted. Data were analysed descriptively and simple regression at 0.05 level of significance.

Result and Discussion

In this section descriptive statistics and simple linear regression were used to present the findings of the study on the entrepreneurial opportunities for Library and Information Science professionals in the digital economy. Descriptive statistics were used to show the level of entrepreneurial intention, digital competence, digital economy participation, finance constraints, and mentorship constraints among LIS professionals while simple linear regression was used to test the relationship between the independent and dependent variables at 0.05 level of significance.

Distribution of the Study Population

The study covered library employees from six federal universities in the South-South geopolitical region of Nigeria. The total accessible population was 255 respondents. Since the population was manageable, total enumeration was adopted.

Table 1: Distribution of Library Employees by University

S/N	University	Number of Library Employees	Percentage
1	Federal University of Petroleum Resources, Effurun	13	5.1
2	Nigeria Maritime University	18	7.1
3	Federal University Otuoke	24	9.4
4	University of Uyo	19	7.5
5	University of Benin	141	55.3
6	University of Port Harcourt	40	15.7
	Total	**255**	**100 %**

Source: Authors' Computation, 2026

The distribution of library staff across selected Federal Universities in South-South region of Nigeria is shown in Table 1. University of Benin had the highest number of library employees with 141 respondents accounting for 55.3 per cent of the total population. The University of Port Harcourt and Federal University Otuoke tied with 40 respondents (15.7%) and 24 respondents (9.4%) respectively. University of Uyo had 19 (7.5%) respondents, Nigeria Maritime University had 18 (7.1%) respondents. The lowest number of respondents (5.1%) were from Federal University of Petroleum Resources, Effurun. The distribution is based on the actual population size of library staff of the selected universities for the study.

Table 2: Reliability and Construct Validity Results

Variable	Number of Items	Cronbach's Alpha	Decision
Entrepreneurial Intention	6	0.881	Reliable
Digital Economy Participation	6	0.864	Reliable
Digital Competence	10	0.902	Reliable
Finance Constraints	4	0.846	Reliable
Mentorship Constraints	4	0.833	Reliable
Overall Instrument	**30**	**0.891**	**Reliable**

Source: Authors' Computation, 2026

Table 2 shows that all the constructs had Cronbach's alpha values above 0.70. This indicated that the instrument was reliable and internally consistent. The overall Cronbach's alpha value of 0.891 shows a high level of reliability.

Table 3: Exploratory Factor Analysis Result

Test	Accepted Value	Obtained Value	Decision
Kaiser Meyer Olkin Measure	≥ 0.60	0.812	Adequate
Bartlett's Test of Sphericity	$p < 0.05$	$p = 0.000$	Significant

Source: Authors' Computation, 2026

Table 3 also shows that the KMO value was 0.812, which is above the minimum acceptable value of 0.60. Bartlett's Test of Sphericity was significant at $p = 0.000$. This means that the data were suitable for Exploratory Factor Analysis and that the items adequately measured the intended constructs.

Descriptive Results of the Main Variables

The mean and standard deviation were used to determine the level of entrepreneurial intention, digital competence, digital economy participation, finance constraints, and mentorship constraints among LIS professionals.

Table 4: Descriptive Statistics of Study Variables

Variable	Number of Items	Mean	Standard Deviation	Interpretation
Entrepreneurial Intention	6	4.18	0.61	High
Digital Competence	10	3.89	0.68	High
Digital Economy Participation	6	3.74	0.72	High
Finance Constraints	4	4.12	0.66	High
Mentorship Constraints	4	4.05	0.69	High

Source: Authors Computation, 2026

Table 4 revealed that the entrepreneurial intention score of the LIS professionals had a mean score of 4.18, reflecting high entrepreneurial intention among LIS professionals. In other words, the respondents were very willing to invest in entrepreneurial activities in the digital economy. The mean score of digital competence was 3.89, which shows a moderate to high level of digital competence among LIS professionals. This means that LIS professionals have relevant digital skills that can help with digital publishing, information consultancy, online training, data services and digital archiving and knowledge brokerage. The mean score of the digital economy participation was 3.74, showing a high level of involvement in digital economic activities. However, there was high mean score of finance constraint (4.12) and mentorship constraint (4.05). This indicates that lack of finance and limited mentorship are still key issues in LIS entrepreneurship. The digital competence and entrepreneurial readiness in digital economic activities were selected as major indicators of outcomes in the field of entrepreneurship of LIS professionals. A regression analysis was then conducted to determine the magnitude of the effects of entrepreneurial intention, finance constraints and mentorship constraints on these outcomes.

Simple Linear Regression Results

Simple linear regression was used to test the relationship between the major variables. The analysis was conducted at 0.05 level of significance.

Table 5: Summary of Simple Linear Regression Results

Hypothesis	Relationship Tested	R	R Square	F Value	Beta	t Value	p Value	Decision
H_{01}	Entrepreneurial Intention → Digital Competence	0.682	0.465	219.90	0.682	14.83	0.000	Significant
H_{02}	Entrepreneurial Intention → Digital Economy Participation	0.641	0.411	176.62	0.641	13.29	0.000	Significant
H_{03}	Finance Constraints → Digital Economy Participation	0.552	0.305	111.09	-0.552	-10.54	0.000	Significant
H_{04}	Mentorship Constraints → Digital Economy Participation	0.506	0.256	87.05	-0.506	-9.33	0.000	Significant

The Digital Competence of LIS professionals have a positive and significant relationship with entrepreneurial intention with $R = 0.682$, $R^2 = 0.465$, $\beta = 0.682$, $t = 14.83$ and $p = 0.000$. This indicated that 46.5% of the change in digital competence was accounted for by entrepreneurial intention. The p value was < 0.05, which indicated a statistically significant relationship. Furthermore, the result indicated that the entrepreneurial intention has a significant predictive power on the digital economy participation with $R = 0.641$, $R^2 = 0.411$, $\beta = 0.641$, $t = 13.29$, $p = 0.000$. This indicated that 41.1 percent of its variation is accounted for by entrepreneurial intention. This suggested that entrepreneurship intention is a positive predictor of the involvement of LIS professionals in the digital economic activities. Finance constraints had a significant negative effect on digital economy participation, $R = 0.552$, $R^2 = 0.305$, $\beta = -0.552$, $t = -10.54$, $p = 0.000$. This is an explained variance of 30.5 percent, due to finance constraints. The negative beta value suggests that the more the financing constraints, the less participation in digital entrepreneurship. Mentorship constraints also had a significant negative effect on digital economy participation, $R = 0.506$, $R^2 = 0.256$, $\beta = -0.506$, $t = -9.33$, $p = 0.000$. This indicated that 25.6 per cent of the variance in participation in the digital economy was due to mentorship constraints. The negative beta value shows that mentorship is a negative factor that inhibits LIS professionals from efficiently participating in the digital economy.

Discussion of Findings

The Entrepreneurial Intention of LIS Professionals

The results found that the entrepreneurial intention of Library and Information Science workers was high. This suggested that LIS professionals are ready to transcend their library roles and go beyond and into income generating activities in the digital economy. This finding affirms the major argument of this study which postulates that LIS professionals can convert their professional knowledge from catalogue-based services to capital generating digital enterprise and corroborates Adetayo and Hamzat (2021), who found that infopreneurship helps LIS professionals to be financially satisfied in the tertiary institutions. It also corroborates the findings of Ivwurie and Ocholla (2016) that infopreneurship is emerging as a new profession for LIS practitioners in Nigeria and South Africa. Likewise, Ramugondo (2021) discovered that infopreneurship may be an employment opportunity for LIS students and graduates particularly in situations where employment prospects are limited. The entrepreneurial intention is also congruent with

Mohammed, Gora, Usman and Ibrahim (2022), which found that there are currently some entrepreneurial opportunities for LIS professionals for twenty first century, such as information brokerage, digital publishing, consultancy, online training and research support services. Similarly, Ogbonyomi (2024) has highlighted the entrepreneurial opportunities of LIS graduates as a lot that can aid to the sustainable development of a nation. Thus, the present finding reaffirms the growing awareness about the economic value of the professional skills of LIS professionals.

Entrepreneurial Intention and Digital Competence

The result indicated that entrepreneurial intention positively and significantly correlates with digital competence. The obtained R^2 value of 0.465 reveals that 46.5% of the variance of entrepreneurial intention was accounted for by the digital competence. This signifies that those who intend to be entrepreneurs in LIS are more likely to master and apply their digital skills required for participating in the digital economy. This is supported by Iheanacho (2018) who emphasized the need for the importance of skills and ethics in library and information service businesses. It also concurs with Nweze (2018) who stressed the importance of ICT facilities and digital skills in the effective teaching, learning, and working of the twenty first century. Besides, Kumar and Sharma (2023) contended that now LIS professionals are working in emerging entrepreneurial roles in the digital era, which demand the use of digital competence. The discovery also corroborates Human Capital Theory, which suggests that education, skills and professional abilities are a productive asset that can enhance economic results. This study views digital competence as a significant type of human resources that can be used by LIS professionals to turn their professional expertise into economic opportunities. This aligns with Lungu, Georgescu and Juravle (2024) who associated digital entrepreneurship with knowledge, innovation and digital capability. Thus, entrepreneurial intention goes beyond merely reflecting entrepreneurial interest, it also serves as a motivational force for obtaining and using digital skills.

Entrepreneurial Intention and Digital Economy Participation

The study revealed that entrepreneurial intention was a significant determinant of the participation in the digital economy. Overall, an entrepreneurial intention accounted for 41.1 percent of the variance in digital economy participation, as reflected in the R^2 value of 0.411. Those with a stronger entrepreneurial intent are more likely to be involved in digital economic activities like data services, information consultancy and knowledge brokerage, online training, digital publishing, and content management, as well as LIS professionals in general. This discovery was consistent with the Theory of Planned Behaviour which suggests that intention is one of the most important determinants of behaviour. In this context, entrepreneurial intention has a direct impact on entrepreneurial actions of LIS professionals from the awareness stage to the participation stage in income-generating digital services. This finding is similar to that of Kazungu (2021) who found that among the African university students, infopreneurship is one of the career options. In addition, it supports Kehinde (2021) who discovered that the personal and professional elements were seen as affecting the interest of LIS undergraduates in infopreneurship. The finding also corroborates the study conducted by Lose and Khuzwayo (2022) that attitudes towards infopreneurship affect students' consideration of information-based entrepreneurship. Similarly, Wema (2021) concluded that there are opportunities for entrepreneurship for LIS professionals in Tanzania but professional readiness and awareness are needed to participate in entrepreneurship. It indicates that mindset, motivation and willingness to take advantage of digital opportunities are closely related to entrepreneurial involvement of LIS professionals.

The Participation in Digital Economy is Constrained by Finance.

Financial constraints were found to significantly affect the participation in the digital economy based on the result. This indicated that financial constraints diminish the potential of LIS professionals to be effective in the digital entrepreneurship. The negative beta value means that the higher finance constraints are, the lower the participation in the digital economy is. This discovery is in line with the discovery of Aregbesola et al (2019) who cited funding as one of the key challenges faced by infopreneurs in developing countries. It also serves as a platform of support for Akpena and Duosake (2020) who identified that librarians in Bauchi State, have some problems in the practice of infopreneurship such as lack of financial support. Likewise, Mohammed et al. (2022) noted that finance is also among the important factors inhibiting LIS entrepreneurship. This is also in line with Leboea (2017) who found that finance is one of the factors that contribute to failure of SMEs. The finance condition was also identified as an important factor for the survival and growth of small enterprises by Bureau for Economic Research (2016) and Small Enterprise Development Agency (2016). While not reliant on the same physical set-up as a conventional business, digital entrepreneurs need cash for devices, internet, paid software, website development, branding, training, business registration, and online promotion.

The Link Between Mentorship Constraints and Digital Economy Participation

The finding revealed that the constraints of mentorship had a significant negative relationship with participatory in the digital economy. The R^2 value was 0.256, which means that 25.6 per cent of the variance in digital economy participation could be accounted for by the constraints of mentorship and this implies that the capacity of LIS professionals to be meaningfully involved in digital entrepreneurship is negatively affected by lack of mentorship. The finding corroborates that of Amakiri and Marie (2019) who emphasised the importance of empowering office and information management professionals to be infopreneur. It is also concurred with Ramugondo (2021) which identified mentorship, professional guidance, curriculum reform as important factors for the development of infopreneurship among LIS students and graduates. The authors, Chux-Nyehe and Nwinyokugi (2020) also identified employment sustainability as one of the impacts of infopreneurship, but this necessitates support systems to guide the individuals toward successful infopreneurship. Mentorship is significant because it offers guidance, exposure, entrepreneurial confidence, networking and knowledge and practical experience. While information management is well understood by many LIS professionals, they may not be familiar with pricing information management services, finding clients, packaging digital products, managing online platforms, or promoting the services or maintaining a business. That's why mentorship is a key driver in how well professionals become entrepreneurs. The discovery also confirms Social Capital Theory, an idea that posits that networks, relationships and professional networks can also increase access to information and economic opportunities. For LIS professionals, mentorship can act as a stepping stone to move from professional knowledge to business performance. Hence, it is recommended that professional bodies, universities and library associations should introduce mentorship programs to link the experienced infopreneur and the new LIS entrepreneurs.

Conclusion and Recommendation

The study found that there were entrepreneurial potentials in the digital economy among Library and Information Science professionals by a large margin. The respondents showed a relatively high entrepreneurial intention which meant that they were ready to pursue their professional activity beyond the traditional library activities into digital services that generate profits. This indicated that LIS professionals may redefine their skills in the field of information organisation, digital resource management, research assistance, content development, information consultancy

and knowledge broking to create value from these skills in the economic sector. The study also confirmed that there was a positive relationship between entrepreneurial intention and digital competence. The implication was that, LIS professionals who are more entrepreneurial oriented are more inclined towards developing and utilizing the digital skills needed for the involvement in technology driven and knowledge-based enterprises. Digital competence was thus a significant enabler in the process of making the process of professional knowledge into viable entrepreneurial activity. The findings also revealed that entrepreneurial intention had a significant impact on the participation in the digital economy. The findings revealed that being prepared to be an entrepreneur was one of the significant factors that facilitated the involvement of LIS professionals in digital publishing, online training, data services, content management, research support and information broking. Despite the study findings, the study also found that finance and mentorship obstacles still posed significant barriers for effective entrepreneurial participation. Weak financial support restricted access to key digital equipment, training, branding, internet facilities and business development resources, and weak mentorship resulted in not being exposed to valuable practical information, professional networks and business experience. Based on this, the study found that the capacity of LIS professionals was capable of giving a meaningful contribution to the digital economy, which needed institutional, financial and mentorship support to be fully realised. The study recommended the following based on the findings:

i. Entrepreneurship development should be strengthened in LIS professionals through the implementation of practical entrepreneurial orientation in the professional training and continuous development programmes of the Universities, library schools and professional associations. Programmes should help LIS professionals realize the economic value of their skills, and how library and information services can become marketable digital services. This will help to maintain entrepreneurial intention and foster professionals' awareness to action.
ii. It is necessary to increase the focus on developing digital competence in LIS education and profession. The training should be digital publishing, information services online, management of databases, digital archives, content generation, tools for supporting research and data services and online consulting. This will facilitate LIS professionals to develop skills in technical competence to be able to join effectively in the digital and knowledge-based enterprises.
iii. Digital entrepreneurship should have practical aspects in LIS curricula and professional development programmes. These should include service packaging, service pricing, service branding, client management, online visibility and service delivery via digital channels. This hands-on experience will enable LIS professionals to turn entrepreneurial intentions into action in the Digital Economy.
iv. Financial aids in the form of financial support mechanisms should be provided by the relevant institutions, professional bodies and government agencies for those who would like to use digital entrepreneurship in their professional activities. These may include seed grants, cooperative funding, entrepreneurship loans, professional training through sponsorship and support for digital tools. With better access to finance, the barriers to LIS professionals setting up and running digital ventures will be overcome.
v. Structured mentorship program must also be established for LIS professionals. The provision of mentoring to the emerging LIS entrepreneurs for experienced librarians, infopreneurs, digital consultants and information service entrepreneurs should be encouraged. Mentors should aim to help their mentee with the following: business planning, service pricing, client acquisition, branding, digital platform management and sustainability. This will enhance the

competence of the LIS professionals to translate their professional competence to a successful entrepreneurial practice.

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