Intrapreneurship in Philippine Academic Libraries: Developing and Implementing Entrepreneurial Activities

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Abstract: Higher education institutions are expected to take an active role in a more entrepreneurial climate. Academic libraries are consequently becoming increasingly involved in campus entrepreneurial ecosystems. It is not uncommon for librarians who have become innovative out of necessity to invent and initiate entrepreneurial endeavours. They constantly innovate and continuously identify, analyse, and capitalise on opportunities to create a new generation of services and programs, even though academic libraries operate in an increasingly unstable environment due to rapid technological advancement and challenges from the economic, financial, and political sectors of society. Academic libraries participate in entrepreneurial initiatives for various reasons. This paper investigates how library management develops entrepreneurial activities in terms of idea generation, opportunity recognition, opportunity development, venture launch, and impact measurement. In addition, it explores the driving factors for successfully implementing entrepreneurial initiatives and determines the challenges and solutions library administrators face in meeting the goals of entrepreneurial activities. Semi-structured interviews were conducted with the directors and chief librarians of the target libraries to collect and document their entrepreneurial activities and practices. This research will contribute to the expanding body of literature on entrepreneurial librarianship by highlighting the development of entrepreneurial initiatives in academic libraries in the Philippines. The results will also help library management and school administration understand and recognise the stimuli that can drive sustainable entrepreneurship in academic libraries. It also attempts to fill a gap in the literature on developing an entrepreneurial university library in the Philippines by offering empirical data on the issues of sustainable entrepreneurship.

Keywords: entrepreneurial librarianship, entrepreneurial librarians, intrapreneurship, academic libraries

1. Introduction

Higher education institutions are expected to take an active role in a more entrepreneurial climate. Consequently, academic libraries are becoming increasingly involved in campus entrepreneurial ecosystems. As entrepreneurship in universities flourishes, academic libraries have struggled to rebrand their identity as service units and learning space within the community. College students often saw the library as a quiet place to study and conduct research rather than as a resource for reference and research assistance (Lumley, 2014). Despite the technological advancements in higher education, many people perceive the library as somewhat traditional. Some school administrators fail to acknowledge the library's function, importance, and contributions to university student life and the school's internationalisation and entrepreneurship endeavours. Furthermore, Lumley (2014) claims staffing reductions, growing need to invest in or reapportion resources toward technology, and requirement to demonstrate a return of investment to students who now consider themselves paying users all impact libraries.

Given this, it is common for librarians who have become innovative to invent and initiate intrapreneurial endeavours (Scanlon & Crumpton, 2011). They are constantly innovating and continuously identifying, analysing, and capitalising on opportunities to create a new generation of services and programs, even though libraries operate in an increasingly unstable environment due to rapid technological advancement and challenges from the political, economic, and financial sectors of society (Jantz, 2012, as cited in Macdonald & Vanduinkerken, 2015). The dynamic business climate and constant technological innovation pressure libraries to continue reinventing their services to support entrepreneurship (Gupta & Rubalcaba, 2022). They further claimed that entrepreneurial libraries could serve as a nexus of "entrepreneurial activities and market knowledge" (p.1). Entrepreneurial activity drives organisational performance (Schumpeter, 1934, as cited in Mezeh et al., 2021). Entrepreneurial activity is "the enterprising human action in pursuit of the generation of value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes, or markets" (Ahmad & Seymour, 2011, p. 14).

Academic librarians may be considered intrapreneurs because of their innovative mindset and the fact that innovation is often linked with the intrapreneurship (Huang et al., 2021). Coined by Pinchot in 1978 (Franco & Pinto, 2017), intrapreneurship is defined as "employee initiative from below in the organisation to undertake something new; an innovation which is created by subordinates without being asked, expected, or perhaps even given permission by higher management to do so" (Vesper, 1984, as cited in Huang et al., 2021, p. 295). In other words, intrapreneurship is a people-centred, bottom-up approach to eliciting employee initiatives to identify and exploit opportunities and challenge established processes to create new or improve existing library

services (Antoncic & Hisrich, 2003; Farrukh et al., 2019). It consists of the following main elements: "business self-renewal, new business ventures, and innovativeness related to product, service, process, or technology" (Antoncic & Antoncic, 2011, as cited in Huang et al., 2021, p. 2). Academic libraries, as service units of academic institutions, have adopted a business model that views library services as a non-profit knowledge-based enterprise and provides user-friendly information products and services (such as an online catalogue, live chat with a librarian, and reference services) for free or a small fee. Therefore, intrapreneurial librarianship is not focused primarily on generating profits but on encouraging an entrepreneurial mindset to inspire a fresh approach to library services.

Intrapreneurs are defined by Lemkau et al. (1991), those who rely primarily on innovation for success are ready to assume the associated risks and build a structure and environment within an organisation that embraces and supports innovation. Furthermore, intrapreneurs are independent, competitive, ambitious, individualistic, and motivated by problem-solving, bringing about change, innovating, boosting productivity, and attaining goals (Lemkau et al., 1991, p. 272). In the library world, librarian intrapreneurs have essential entrepreneurial skills, such as allocating resources for service quality, delegating and organising, reducing individual and team stress, accepting leadership responsibility, motivating at all levels, and selecting and developing a good team (Pantry & Griffiths, 2000). DeVries (2003) contends that almost every type of library has intrapreneurs, even though librarians may not match the stereotype of profit-driven, innovative risk-taker entrepreneurs.

Pantry and Griffiths (2000) asserted that the information and library service is suitable for the development of the entrepreneurial spirit. However, academic librarians require additional training to develop their understanding of entrepreneurship and intrapreneurship. Moreover, Lemkau et al. (1991) claimed that "intrapreneurship is an effective managerial style and problem-solving technique for information support units" (p. 275). However, there is a gap in the literature. There is a dearth of research into the viability of intrapreneurial approaches in academic libraries and the process for developing intrapreneurial activities. Moreover, there have yet to be empirical studies on intrapreneurial activities in Philippine academic libraries. Studies on entrepreneurial librarianship are primarily focused on discussion on entrepreneurial initiatives of academic and public libraries abroad, the status of entrepreneurship in libraries, entrepreneurial orientation and capabilities of librarians, entrepreneurship resources in libraries, entrepreneurial leadership behaviours of librarians, and the role of libraries in entrepreneurial university (Doulani et al., 2020; Edens & Malecki, 2020; Faulkner, 2018; Hoppenfeld & Malaf, 2015; Keshavarz, 2021; Mayombya et al., 2019; Mckeown, 2010; Sheshadri & Vijayakumar, 2018). Literature indicates that libraries have a long history of

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intrapreneurial activities. Several case studies on various entrepreneurial and intrapreneurial initiatives have been published. However, research has yet to be undertaken on how Filipino librarians and library administrators generate new and creative ideas and identify and capitalise on opportunities within the framework of sustainable development.

2. Research Problem and Objectives

Academic librarians can become intrapreneurs if they approach their services from a business perspective, strive to innovate and enhance their existing services (Gupta & Rubalcaba, 2022), or develop new, creative services. This can be accomplished by identifying, assessing, and exploiting hidden opportunities that generate value beyond the conventional constraints of available resources (Crumpton & Bird, 2019; DeVries, 2003). Lumley (2014) argues that academic librarians must adopt an entrepreneurial mindset as they continually develop fresh ideas for giving their students the knowledge and skills, they need to become independent lifelong learners. However, academic librarians, particularly Filipino academic librarians, might not be aware of concepts and practices in entrepreneurial librarianship. They may already be pursuing intrapreneurial initiatives within their organisations without realising it. On the other hand, academic librarians who desire to foster an entrepreneurial spirit may lack the competencies to initiate activities and programs.

Using Matzembacher et al.'s (2019) sustainable entrepreneurial process model, this paper investigates how library management develops intrapreneurial activities in terms of idea generation, opportunity recognition, opportunity development, venture launch, and impact measurement. In addition, it explores the driving factors for successfully implementing intrapreneurial initiatives and determines the challenges and solutions library administrators face in meeting the goals of intrapreneurial activities. By knowing, examining, and implementing intrapreneurial principles in academic libraries, library management can identify new opportunities to create new services and programs to promote lifelong learning and information access. These strategies can assist them in adapting to the ever-evolving needs of their users and the community at large.

This research will contribute to the expanding body of literature on entrepreneurial librarianship by highlighting the development of entrepreneurial initiatives in academic libraries in the Philippines. The results will also help library management and school administration understand and recognise the factors that can drive sustainable intrapreneurship in academic libraries. It also attempts to fill a gap in the literature on developing an intrapreneurial university library in the Philippines by offering empirical data on the issues of sustainable entrepreneurship.

3. Literature review

3.1 Entrepreneurship in libraries

Hui-Chen et al. (2014) examined the entrepreneurial process to investigate how motivation, opportunity, and ability (MOA) influence entrepreneurial intentions "through personal attitude, subjective norms, and perceived behavioural control" (p. 727). Leyden and Link (2015) developed a theoretical model of the entrepreneurial process, wherein entrepreneurs form social networks, select an innovation to pursue, and then plan out a search strategy to determine how to bring that innovation to reality. The proposed entrepreneurial process model includes "innate entrepreneurial characteristics, creation of social network, search for desired innovation, and success or failure" (Leyden & Link, 2015, p. 476). The case study of Matzembacher et al. (2019) examined the prior experience and knowledge of entrepreneurs in generating ideas and identifying and exploiting "opportunities in the context of sustainable development" (p. 1). They discovered that entrepreneurs' knowledge of initiatives that aims to solve social and environmental problems, experiences, and skills were determinants of idea generation. Their findings proposed a sustainable entrepreneurial process flow with five stages: idea generation, opportunity recognition, opportunity development, venture launch, and positive impact. Mets (2020) has recently conceptualised a novel multi-dimensional process model of the entrepreneurial process, which is a modified version of the "functional stage model of the entrepreneurial process" (p. 698). His entrepreneurial process model has four stages: "propositions, idea development, concept development, and business development" (p. 698).

3.2 Entrepreneurship in libraries

Several articles and essays examine the roles of libraries in promoting entrepreneurship and providing various support services for entrepreneurs. Schauder (1987) attempted to determine whether academic libraries can adopt entrepreneurship and whether they are suited to it. He identified the basic and innovative accomplishments of librarians. Basic successes of librarians include working effectively within the confines of their job, attaining effectiveness in deploying personnel, and advancing incrementally within one's job. The implementation of a new policy, creation of a new orientation or direction, the discovery of a unique opportunity, development of a new product or service, opening of a new market, creation of a new process, procedure, or technology for continued use, and implementation of structural changes are examples of innovative achievements (Schauder, 1987).

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Mckeown (2010) emphasised that librarians play a crucial role in accessing information resources, advising students on the best strategies to start a business, and teaching them deductive reasoning skills when evidence is insufficient or conflicting. In addition, Restivo (2014) said that academic libraries provide library spaces that encourage creativity among entrepreneurs; as such, they might serve as innovation hubs on campuses where entrepreneurship is growing. Macdonald and Vanduinkerken (2015) highlighted the specific traditional roles in academic libraries and the use of diverse business models to build entrepreneurial culture. They argue that academic libraries must transform into "entrepreneurial organisations" whose strategic decisions are founded on business models rather than long-held conventions.

According to Christe et al. (2017), libraries are important but frequently overlooked components of the country's entrepreneurial landscape. They described libraries as digital, decentralised networks that give access to information resources and creative tools to innovators from all facets of society. Additionally, Christe et al. (2017) considered libraries crucial gateways for first-time independent entrepreneurs to receive state and federal assistance for small enterprises. Cole and Lysiak (2017) studied the role of business librarians in communicating the significance of extensive patent research at the early stages of the startup life cycle. Similarly, Elliott et al. (2017) investigated the contribution of the University of Arizona Library in the early stages of invention development in the commercialisation pipeline. Sheshadri and Vijayakumar (2018) analysed and described the vital role of library professionals in the success of entrepreneurs who were successful in launching their businesses. Ghosh (2019) argued that libraries are essential in setting the groundwork for entrepreneurs, inspiring them from the outset, and creating an environment that supports an entrepreneurial culture. Recently, Harris (2022) conducted interviews with librarians from selected Caribbean university libraries to examine their entrepreneurial practices and prospects and their perceptions of the entrepreneurial library. He concluded that there is a lack of unanimity among librarians over the definition of entrepreneurship.

3.3 Entrepreneurial initiatives of libraries

Inventing and initiating entrepreneurial activities is common for practising librarians who have grown innovative by necessity (Scanlon & Crumpton, 2011). Schauder (1987) discussed why libraries engage in entrepreneurial activities, including boosting their financial resources, enhancing professional experience, offering financial rewards to library personnel, and highlighting academic libraries' potential to support economic growth and meet community needs. He further claimed that entrepreneurship demands not just change but risky change. According to Schauder (1987), creating an entrepreneurial library necessitates a challenging trade-off between the flexibility required for innovators to thrive and the control needed to maintain a library operational in the short to medium term. Kilgour (1992) discussed the entrepreneurial

opportunities of libraries in the 1990s. He identified nine outstanding entrepreneurial librarians that have made major innovative advances.

Neal (2001) developed a typology for entrepreneurial activity in academic libraries: "market-based, customised delivery and packaging of information; centre for research and design; innovative applications of technology; faculty, university, industry partnerships; e-commerce; lab for experimentation in teaching and learning; publishing ventures; and technology transfer" (Carpenter, 2012, p. 14). Kirk (2001) highlighted the entrepreneurial strategies of Sheridan Libraries, which possess business-attractive assets. Dempsey (2004) presented examples of library revenue streams, including used book sales, cafés, passport services, facility rentals, consulting, and fee-based corporate information services. The effects of open access on library operations are examined by Schmidt et al. and how entrepreneurial libraries discovered new methods to serve their customers in the emerging mixed open-access-traditional (MOA) environment.

Furthermore, university libraries successfully collaborated in developing and implementing conferences honouring librarianship's entrepreneurial spirit (Crowe et al., 2019; Ritchie-Baum et al., 2020; Scanlon & Crumpton, 2011). In 2009, the University Libraries of the University of North Carolina at Greensboro and the Z. Smith Reynolds Library of Wake Forest University co-hosted the first Conference for Entrepreneurial Librarians (Crowe et al., 2019). The conferences aimed to showcase how innovative and creative librarians are and how they develop new products and services. In some libraries, entrepreneurship is also a component of instruction in information literacy. Onaade (2012) examined the history and justification of information consultancy or information brokerage as a profession in Nigeria. Kirkwood and Evans (2012) described how Purdue University libraries collaborated with faculty to teach entrepreneurship and marketing courses, providing support through information literacy instruction. On the other hand, Carrol et al. (2019) looked into how information literacy training might be utilised to introduce undergraduate health sciences students to the medical entrepreneurship life cycle.

Academic libraries are increasingly repurposing their spaces to provide entrepreneurs with neutral, creative places that encourage entrepreneurial thinking, such as makerspaces, communal tables, collaboration spaces, green spaces, computer laboratories, and solo spaces (Bieraugel, 2019; Lumley, 2014; Nichols et al., 2017; Stover et al., 2019); thereby turning the libraries into one of the innovative hotspots on university campuses. Bieraugel (2019) reviewed several space assessment tools to determine whether libraries support entrepreneurial thinking. Aagaard and Arguello (2015) provided a practical guide for business librarians to evaluate their compliance with licensing

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agreements for electronic resources in entrepreneurship. In addition to the fee-based services offered by librarians, Hoppenfeld and Malaf (2015) discussed some resources and services made available to entrepreneurs, such as networking, outreach, business incubator support, intellectual property research support, and library instruction. Feldmann (2015) surveyed the 31 small business development centres to determine how they collaborate with libraries and librarians to assist entrepreneurs. Gupta et al. (2022) studied 50 academic librarians in Europe, Asia, America, Africa, and Australia to determine why librarians of entrepreneurial libraries used social networking sites to assist the business community in their market research. They concluded that entrepreneurial libraries are more likely to adopt new technologies smoothly.

3.4 Challenges in entrepreneurial libraries

Only some studies addressing the challenges of entrepreneurial libraries have been conducted (Feldmann, 2015; Hoppenfeld et al., 2013; Jusic, 2016; Mamza et al., 2021; Onaade, 2012; Schauder, 1987). For example, Schauder (1987) briefly discussed several barriers to entrepreneurial librarianship, such as performance-based library budget, multiple constituents, and "do good" ideology for public-service organisations. According to Onaade (2012), the tepid attitude of users towards librarians, the high illiteracy rate, and the lack of ICT infrastructure are obstacles faced by information brokers or independent information professionals in Nigeria. Hoppenfeld et al. (2013) stated that conducting market research, providing business literature, and maintaining market data databases can incur substantial expenditures. They also indicated that collaboration between librarians from other institutions increases the problem of insufficient research support staff time.

3.5 Research Methods

A qualitative multiple-case study method was used to collect data. A case study design is used when the purpose of the study is to address the "how" and "why" questions and to cover contextual conditions to describe a complicated real-world phenomenon (Yin, 2003, as cited in Baxter & Jack, 2015). The primary objective of this study is to investigate how library management develops intrapreneurial activities and explore the driving factors for successful intrapreneurial initiatives in academic libraries. According to Bouckenooghe et al. (2007, as cited in Bagheri & Pihie, 2010), "at the heart of entrepreneurship lie disjointed, discontinuous and non-linear events that cannot be studied with methods designed for continuous and linear processes" (p. 472). Thus, a case study design is suitable for process-related research (Hansen et al., 2012) such as this.

The subjects of this study were five librarians from four academic libraries that have received awards from the Philippine Association of Academic/Research Librarians (PAARL) for Outstanding Library of the Year, Outstanding Library

Program of the Year, or Innovative Library Design Award. The academic libraries were selected because they have developed innovative and sustainable services and programs that other libraries and information centres can replicate. To preserve anonymity, the subjects were referred to as Library A, the advocator; Library B, the designer; Library C, the gamer; and Library D, the trendy.

Data was collected primarily through semi-structured interviews recorded using Zoom. The discussions focused on the development and implementation of entrepreneurial activities based on Matzembacher et al.'s (2019) framework, the identification of motivating factors that influence the success of entrepreneurial activities, and discussion on the challenges they face and solutions to address the challenges. The interviews were transcribed verbatim using the closed captions feature of Canvas Studio Basic. Then, the authors evaluated the transcriptions for completeness and accuracy and sent them to the participants for validation. The data were analysed in two phases: preliminary data analysis and thematic analysis.

4. Results and Discussions

4.1 Idea generation

The findings suggest that the development of entrepreneurial activities initiated by library management has been a dynamic and iterative process that continues to evolve. As stated by Ge et al. (2022), citing Vogel (2017), the entrepreneurial process can be viewed as a progression from the initial concept to the opportunity for a new venture and expansion. The transition between the generation of ideas and the final implementation of an entrepreneurial opportunity takes time. In the early stages of the entrepreneurial process, ideas are stimulated and generated (McMullen & Shepherd, 2006). For example, Library B narrated that the idea of creating collaborative spaces started when the university president asked the library director whether she wanted to have a renovated library or a new library building. This strongly shows that top management can influence the development of new services and products by fostering an environment that encourages creativity inside the organisation (Chen, 2007). Therefore, as McMullen and Shepherd (2006) mentioned, individual and external system-level factors shape ideation activities.

Furthermore, the participants reported that the library director, head librarians, librarians, and support staff were involved during the brainstorming process. They also claimed that, both directly and indirectly, library users participated in the ideation process through customer feedback and user experience surveys. Since the lead librarians of Library C are also students at the same university, they were able to put themselves in the shoes of the library users who would be

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most interested in their gamification activity while brainstorming. Likewise, Library B reviewed the longstanding customer feedback and discussed which concerns could be addressed by the new learning spaces. According to Desouza (2017), managing ideas that do not consider clients is challenging but possible. He added that disclosing problems of interest to employees and soliciting their input is also essential. In generating fresh ideas, the participants utilised brainstorming and library benchmarking. Because not all ideas are inherently innovative and creative (Ge et al., 2022), they engage in brainstorming. Two participants reported participating in local and international learning visits. On the other hand, Library C examined the other libraries' websites and social media accounts to determine what other libraries do to increase user involvement in library instruction and look into their marketing strategies. Moreover, the participants claim that idea-sharing in the workplace is highly encouraged. Specifically, Library D shared that staff meetings provide opportunities to hear frontline staff feedback and discuss challenges and solutions.

4.2 Opportunity recognition and development

After generating an idea, intrapreneurs must take additional steps to identify the optimal opportunity to build a new venture, service, or product (Ge et al., 2022). The results demonstrate that librarians' expertise, desire to innovate and rebrand, dissatisfaction with existing services and programs, the availability of library resources, and customers' feedback can lead to opportunity recognition and exploitation. Herron and Sapienza (1992, as cited in Shao et al., 2020) claimed that unacceptable dissatisfaction drives individuals to seek new opportunities. Shao et al. (2020) added that the entrepreneur's competencies, past accomplishments, and personality subconsciously affect the search for ideas and the level of aspiration. In the opportunity development stage, Library D reported that "*Some ideas needed further exploration. Although the purpose is clear, other things need to be considered, such as timeline, staffing, logistics, and budget... More research needed to be done, and a structured proposal had to be drafted*." Dimov (2007) supports such action. He defined opportunity development as the growth or shaping of an idea, which entails a continual stream of ideas (Dimov, 2007). de Koning (2003, as cited in Hansen et al., 2012) said that cognitive processes involved in generating ideas, including thinking-through-talking, can assist entrepreneurs in realising that their opportunities require further development if they have difficulty articulating them.

Ideas can be evolved into numerous forms, such as business concepts, business models, business plans, and new businesses (Hansen et al., 2012). In the opportunity development stage, the participants of this study created project proposals or plans based on the idea, outlining the purpose, target recipients, guidelines, mechanics, logistics, technology requirements, staffing, budget, and evaluation. The proposals were presented to the employees, library

management, and school administrators for evaluation, feedback, approval, and support. The participants stated that proposals are modified or altered suitably to meet customers' needs and demands. According to Matzembacher et al. (2019), assessing the social needs and assets associated with opportunity recognition is necessary. Library D emphasised the importance of conducting research "*to check available technologies and processes to deliver the service, and to determine buy-in from concerned offices.*" During this phase, key library personnel participated in the planning. Library C reported that its strategic partners, such as publishers and service providers, were involved in creating materials and narratives for the gamification activity. When participants were asked when they realised that the idea could be executed and that the opportunity to do so exists, their responses varied. Library D responded

> *when it responded to an existing or impending challenge, when it provided an opportunity to insert innovation and creativity into processes and programs that we have been doing or have not been doing, and when it presented the possibility of the library being the "first" to do it.*

Hansen et al. (2012), citing Stevenson and Gumpert (1985), stated that opportunities are at the heart of entrepreneurship and that recognising and capitalising on opportunities are a successful entrepreneur's most crucial skills. Additionally, Sa'ari and Johare (2014) concluded that recognising opportunities is one of the entrepreneurial skills necessary for implementing innovative behaviour in academic libraries. Hence, academic librarians must develop their opportunity recognition skills.

4.3 Launching and impact measurement

Launching happens when new library services, spaces, and programs are announced and made available to the target market. It requires the development of strategies, the acquisition of any lacking tangible and intangible resources, and the organisation of a team (Matzembacher et al., 2019). Plans for launching intrapreneurial activity vary. Library D said, "*depending on the activity, the launch could be an email communication with announcements through onsite posters, videos, and social media or a formal launching program with a walk-through, exhibit, or activities.*" Library B said that the launch of the new library spaces was held during the 70th founding anniversary of the university. In the case of Library C, the launch was part of a bigger event. The participants utilised various resources in the launch, such as electronic bulletins, videos, and staff skills. Two libraries in this study reported collaborating with colleges and other offices when necessary. Some participants reported mistakes or failures during the implementation, such as failure to provide workstations for librarians, miscommunication of the plans and game mechanics, and late furniture

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delivery. Since intrapreneurial activity involves taking risks and testing new ideas, tolerance for mistakes and failures is necessary (Ng, 2012). Therefore, library management should not punish failures but view them as learning opportunities (Ng, 2012).

It is essential to evaluate the effectiveness of intrapreneurial endeavours based on key performance indicators that emphasise outcomes and impacts (Appleton, 2018). When the participants were asked about the outcomes of their intrapreneurial efforts, their responses were positive. After the launch, Library B sought increased social media engagement and received numerous requests from alumni, school administrators, and other libraries to visit the new building. Library C observed a utilisation increase of some databases. In addition, Library A highlighted the encouraging feedback from students and faculty members who used the virtual reference services amid the COVID-19 outbreak. As such, the participants measured their success based on resource utilisation, user satisfaction, customer feedback, and return experience. Furthermore, their accomplishments were recognised with mini celebrations for the library staff, highlighting victories during staff meetings and in the annual report, releasing posters and infographics, and honouring staff members directly involved in the program. According to Pantry and Griffiths (2000), intrapreneurial libraries must acknowledge their successes and disseminate information regarding their accomplishments within the organisation. They added that critical success factors (CFS) must be developed for each service, and there must be an ongoing conversation between libraries and their patrons to provide the necessary feedback. Appleton (2018) cited some examples of CFS for libraries as follows: "efficient and reliable suppliers; motivated, skilled and technically expert staff; accessible service models; a robust IT network infrastructure; and customer-focused mission" (par. 6).

4.4 Motivation and success factors

When participants were asked what motivated them to produce ideas and transform them into a new service or program, their responses differed. For instance, the director of Library A explained that the circumstances when the COVID-19 pandemic struck in 2020 compelled her to think outside the box strategies to reach students and faculty remotely, such as virtual reference services via Facebook Messenger, and she had to persuade school administrators that librarians and support staff are a necessary workforce to prevent layoffs. Like Sarma et al.'s (2022) findings, the fundamental premise of opportunity recognition or new service creation was the introduction of new services, new approaches, and new communication channels for students and faculty. In addition, Library B and Library C were motivated by the decision of top management, the desire to address the customers' feedback, user satisfaction, the desire to rebrand the image of the library profession, the declining attendance in information literacy webinars, and the personal vision to do better

or create new services. Recognising a solution to a problem presents an opportunity (Matzembacher et al., 2019) to create new or enhance existing library services, programs, and spaces. According to Library D, *"foresight is important in generating ideas because it allows the library to be ready and proactive in responding to the users' needs. Other enablers include user needs, support from administration, technology, staff expertise, and budget."*

Furthermore, the participants were asked to identify the factors leading to the success of intrapreneurial efforts. Among the factors contributing to successful intrapreneurship in libraries are innovative culture, strong collaboration with student organisations, effective communication skills, extensive and careful planning, customer insights, stakeholder support, staff expertise, technology, budget, and partnerships relationships. On the other hand, lack of collaboration, communication, foresight, and planning could be among the factors for failure. These findings are consistent with studies of Yeh and Ramirez (2016), Antoncic and Hisrich (2001), Kitsios and Grigoroudis (2020), Häikiö and Koivumäki (2016), Wang et al. (2022), and Sung et al. (2011). Specifically, Huang et al. (2021) categorised enablers of intrapreneurship as enablers-individual level (e.g., self-attitude, capabilities, judgments, and personality attributes) and enablers-organizational level (e.g., developmental support, work design, managerial style, and innovative culture). According to Sa'ari and Johare (2014), the availability of technology and a company's capacity to leverage that technology contributed significantly to innovative performance.

4.5 Challenges along the way

Executing entrepreneurial activities entails various risks, difficulties, and challenges (Ahmed & Harrison, 2021). As a challenge, Library A noted changing administrators and unsupportive university administrators. There were delays in the delivery of library furnishings to Library B. Library C indicated that obtaining participants from various autonomous campus units, communicating with other university libraries in the system, and accommodating staff schedules were challenging. Due to their lack of knowledge, Library C participants struggled to construct the gamified library orientation. Limited budget and technology become challenges for Library D. Matzembacher et al. (2019) agreed with this finding that funding and other forms of support for entrepreneurial activity are also obstacles. In addition, the attitude of employees toward introducing new services may also be an impediment, particularly when employees perceive new services as an additional workload. Mayombya et al. (2019) also discovered that funding to initiate and sustain intrapreneurial ventures in the library is challenging. Leitch and Volery (2017) argued that entrepreneurial leaders' personal and functional competencies are essential for overcoming obstacles and dealing with ongoing innovation and change.

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5. Conclusion

This study's primary purpose is to analyse how library management creates intrapreneurial activities and identify the factors motivating successful intrapreneurial efforts in academic libraries. The findings suggest that the intrapreneurial process, from ideation to impact measurement, is dynamic and iterative. Developing intrapreneurial activities requires commitment, dedication, and a willingness to learn from successes and failures. Moreover, the findings indicate that creating new or modifying existing library services and programs to enhance the user experience is the key motivator for innovation. Employee involvement and customer feedback are essential to successful idea generation, opportunity recognition, and opportunity exploitation (Kanagavalli & Baghavathi Priya, 2022; Liang & Straub, 2021; Raza et al., 2022).

Islam et al. (2021) said that the participants demonstrated positive changes in user behaviour and resource utilisation resulting from intrapreneurial endeavours. Although this study did not examine whether the intrapreneurial behaviours of the participants contributed to the successful implementation of intrapreneurial activities, it is recommended that academic libraries adopt an intrapreneurial mindset and cultivate a culture of innovation, creativity, and risk-taking. Academic libraries can create new services, programs, and places to satisfy the changing demands of their communities if they nurture an intrapreneurial culture. Encouraging employees to innovate can drive organisational growth and help academic libraries develop a sustainable approach to achieve innovations within the library and contribute to the library's competitiveness (Alam et al., 2020). Therefore, the benefits of intrapreneurship in academic libraries, if they employ it effectively, include remaining relevant, adapting to changing environments, driving growth, staying competitive, and developing a sustainable approach to achieve innovations (Alam et al., 2020; Huang et al., 2021; Moghaddas et al., 2020; Vassilakopoulou & Grisot, 2020).

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