

A Preliminary Investigation of Infopreneurship Education for Library, Information, and Archives Management Students in Hebei, China

Ba Xi¹, Nurussobah Hussin^{2*}, and Hanis Diyana Kamarudin³

^{2,3}College of Computing, Informatics, and Mathematics,
Puncak Perdana Campus, 40150 Shah Alam, Selangor, Malaysia
¹Hebei University of Economics and Business, Baoding, Hebei, China.

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Abstract. Infopreneurship education plays a pivotal role in imparting essential entrepreneurial skills and facilitating the growth and prosperity of information-based enterprises. China's research on infopreneurship education has continuously developed. However, there are still many shortcomings, such as insufficient teachers, not reflecting the characteristics of the specialty, and poor implementation of the practice. This paper focuses on the significance, necessity, and shortcomings of infopreneurship education for library information and archive management majors in Hebei Province, China. This paper adopts the literature analysis and other parties to cooperate in promoting the practical development and theory construction of infopreneurship education in Hebei method, extensively searches Chinese and foreign literature databases, and analyzes the closely related Chinese and English literature. Finally, the paper points out that there is a need for the government, schools, society, enterprises, scholars, China.

Keywords: Infopreneurship education library and archives management.

1. Introduction

With the development of information and communication technology, the commercial value of information has become increasingly prominent, and many new business entities have emerged around information, more enterprises and people becoming infopreneurs and infopreneurship in a practical sense. Information management majors should actively adapt and change in response to the changing times by developing infopreneurship education to cultivate competitive and forward-looking infopreneurs and workers. The development of infopreneurship education is significant to improving the educational model of the discipline, enhancing the content and quality of teaching, and stimulating students' self-reliance, entrepreneurship, and innovation, thereby reducing unemployment, increasing individual income, improving the business environment, and promoting economic growth.

Entrepreneurship education has been recognised globally as one way to equip students from various backgrounds with the skills to set up and run a business. In China, we call it "innovation and entrepreneurship education", a concept that was first introduced by the Chinese government in 2010 and continues to be promoted, and today the research has evolved into how innovation and entrepreneurship education can be integrated with professional education to support the whole process of training students in universities.

The primary mission of the library information and archives management discipline is to explore the regularity of realizing the value of information resources hidden in various

information records, amplify the functional utility of information resources with powerful scientific management, and discover their strategic importance to economic and social development. Developing information entrepreneurship education in library information and archives management is reasonable. It helps to cultivate infopreneurs with outstanding theory and practice.

The term infopreneurship comes from two words: information and entrepreneur (Ogbonna & Dare, 2020). Infopreneurs are entrepreneurs involved in the collection, creation, development, repackaging, dissemination, and sale of information and its products and services for profit, usually through the Internet (Adeline du Toit, 2000). David and Dube (2014) state that an information entrepreneur is a business person who recognises the opportunity to build an information-based business by assessing people's situations and selling targeted information over the Internet to meet those situations, thus recognising the opportunity to create an information-based business. El-Kalash, Mohammed, and Aniki (2016) argued that an information entrepreneur is a visionary and passionate person who at a cost, especially using the electronic medium to produce and disseminate information to interested customers.

2. Research Background

In China, there are three main fields of study that fall under the category of library information and archives management: library science, archival science, and information resource management. As of 2023, there are 22 universities offering a library science major, 20 universities offering an information resource management major, and 34 universities offering an archives major at the undergraduate level. Some universities offer two or three of these majors simultaneously. At the postgraduate level, 27 universities offer information resource management majors, 23 universities offer library science majors, 27 universities offer intelligence science majors, 13 universities offer archives majors, and 52 universities offer library and intelligence science majors. Some universities offer two or three of these majors simultaneously, and 13 of these universities have the authority to grant doctoral degrees. In Hebei Province, there are two schools that offer majors related to librarianship and archives management: Hebei University and Hebei University of Architecture. These schools have approximately 400 undergraduate students and 100 graduates per year.

3. Objective

The primary focus of this study is to delve into the significance, essentiality, and inadequacies of infopreneurship education concerning library and archives management programs in Hebei Province, China. The research aims to provide a comprehensive understanding of the current state of infopreneurship education and how it can be improved to meet the needs of the industry.

4. Method

In this paper, the researcher uses the literature analysis method to search the English articles in the databases of ScienceDirect, Scopus, ProQuest, WOS and Google Scholar by using the English keyword "Infopreneurship education", since most papers on infopreneurship come from these databases. Explore the Chinese articles in the Chinese literature database National Knowledge Infrastructure (CNKI) by using the Chinese keyword "innovation and entrepreneurship education" with "library information and archive management". The keywords and search form were adjusted according to the needs during the process. Thirty-five articles in English and 21 articles in Chinese were found to be closely related to the theme.

5. Discussion

According to a study conducted by Thobekani Lose and Sebenzile Khuzwayo in 2022, graduates in Library and Information Science (LIS) did not think that infopreneurship was profitable and some held the view that it was a sector that cannot be considered for lifelong economic reliability. They still hold strong beliefs that being employed in big companies is the best because it offers economic and job security rather than self-employment. A survey was carried out on archival graduates from different colleges and universities to determine their career status and professional knowledge satisfaction. Results show that 40.77% of archival graduates prioritize job stability when choosing their careers. Furthermore, they mostly find employment in party and governmental organizations, industrial units, and state-owned enterprises, as stated by Zhao Chunzhuang in 2016. The study reveals some issues with LIS education, and measures are required to enhance the ability and enthusiasm of library information and archives management graduates to innovate and start their businesses.

5.1 Importance

5.1.1 The importance of infopreneurship

As in developed countries, issues such as unemployment, hooliganism, robbery, and terrorism have been effectively addressed through the promotion of infopreneurship. Infopreneurship will play a strategic role in the economic sector of Nigeria (Aregbesola, 2019). Infopreneurship can be an instrumental factor in economic growth, balanced regional development, and job creation in Nigeria (Kamaluddeen Isa El-Kalash, 2016). Infopreneurship will create dynamic graduates who are flexible enough and can adapt to changes and demands in the marketplace. (Khumalo, Njabulo & Nkala, 2020).

5.1.2 A higher learning institution is a typical platform for conveying entrepreneurship and infopreneurship knowledge and training

In China, graduates of archival science typically find employment in governmental organizations, public institutions, and state-owned enterprises. The job market for this profession is limited and doesn't offer much room for growth. As a result, graduates are often dissatisfied with their career prospects (Zhao Chunzhuang, 2016). However, for young people hoping to start a successful information-based business, a university education can provide the knowledge and skills necessary to become an "infopreneur." This education serves as a valuable platform for young people to launch their own businesses (David & Dude, 2014). The infopreneurship curriculum should be practical and tailored to the specific needs of the target group to adequately prepare students to become infopreneurs in their respective fields (Hussin, Nurussobah, et al., 2022).

5.2 Necessity

5.2.1 Effective infopreneurship education is urgently needed

It is suggested that universities to reform the educational system to prioritize quality education for self-sufficiency. This involves updating the content and methods of teaching within institutions that offer information-related courses to meet modern demands. According to Kamaluddeen Isa El-Kalash (2016), graduates express a need for practical programs to help them start their careers after school. Therefore, it is important to establish a comprehensive framework for educating students in infopreneurship, particularly for those studying information science, as proposed by Dewah and Mutula (2016). Infopreneurship should involve more than just business planning; it should also equip students and graduates with various skills and competencies, as emphasized by Khumalo, Njabulo & Nkala (2020).

5.2.2 Meet Professional Education Requirements

To excel in entrepreneurship and be competitive in the job market, it is crucial to have a deep understanding of entrepreneurial concepts and skills. This is highlighted in the China National Standards for the Quality of Teaching in Library Science Undergraduate Majors. In the field of the library and information industry, innovation and entrepreneurship education is an essential aspects that should be emphasized to cultivate students' inventiveness and ability to innovate, as suggested by Li Jing in 2017. Infopreneurship courses can help students develop a comprehensive understanding of entrepreneurship and become competent stakeholders in the information industry or even become infopreneurs themselves (Adeline du Toit, 2000)

5.3 Shortcomings

5.3.1 Practice Gaps

Neither of the two schools in Hebei that offer library information and archives management programs provide infopreneurship courses. The current innovative entrepreneurship education is not integrated with professional education in librarianship and archive management, and there is a shortage of teachers with information entrepreneurship experience. As a result, the educational effect has not been effectively implemented in actual entrepreneurship (Ye Xi, 2019).

Hebei University emphasizes the crucial theoretical and practical learning of archival and library science and requires students to possess basic information collection and analysis abilities. The Hebei University of Architecture places significance on the deep cross-integration of information resource management, computer science, and technical disciplines, with a focus on two training directions: information organization and retrieval, and information analysis.

The National University of Science and Technology (NUST) in Zimbabwe has included an infopreneurship education course as part of the final year Bachelor of Science Honours Degree in Records and Archives Management (BScRAM) (Dewah, P. & Mutula, S., 2016). The Faculty of Arts Prospectus at the University of Zululand in South Africa has offered the 'Infopreneurship' module to their final year students pursuing a BA in Information Science and a Bachelor in Library (Ramugondo, 2010).

5.3.2 Research Gaps

In 2014, Premier Li Keqiang called for "mass entrepreneurship, mass innovation," which led to a surge in innovation and entrepreneurship among college students. As a result, research on innovation and entrepreneurship education has increased dramatically, with a total of 21,286 articles published in academic journals, 10 doctoral dissertations, and 339 master's dissertations from 2015 to the present. The topics discussed cover the education system, talent cultivation, and the integration of industry and education. They span across fields of higher education and vocational education and involve many disciplines such as computer software and applications, enterprise economy, medicine, accounting, and education. However, the research on innovation and entrepreneurship education in library and archive management is minimal, with less than 20 closely related literature pieces. In contrast, other countries such as Zimbabwe, Nigeria, South Africa, Egypt, and Iran have a wealth of research on Infopreneurship and Infopreneurship education (Hussin, Nurussobah, et al.,2022).

6. Conclusion

The development of infopreneurship education in China is important for improving the career satisfaction and competitiveness of students majoring in librarian, information, and archives management, creating jobs to reduce unemployment, and promoting social industrial upgrading and sustainable economic development (Akidi, 2021). Colleges and universities are an important main body to carry out infopreneurship education, which coincides with the National Standard for Quality of Undergraduate Teaching in Librarianship (2015 Edition), which emphasizes the importance of the innovative spirit and creative ability of librarianship students as well as entrepreneurial knowledge. China urgently needs to incorporate infopreneurship into the teaching reform of library, information, and archive management majors and develop a special teaching plan. At the same time, it also needs the participation and support of the government, society, enterprises, scholars, and other parties (Adamu,2021) (Adetayo,2022), to join forces to build a feasible and sustainable infopreneurship education framework, and to enhance the development of the theory and practice of infopreneurship education. (see Appendix 1)

References

- Aregbesola, A., Van der Walt, T., Owolabi, S., Idiegbeyan-ose, J., Okocha, F., & Eyiolorunsho, T. (2019). Infopreneurship in a developing country: Opportunities and Challenges. *IOP Conference Series: Materials Science and Engineering*, 640(1), 012123. <https://doi.org/10.1088/1757-899x/640/1/012123>
- Adamu, M. S., Dogara, L., Abubakar, F., & Ahmed, Y. (2021). Revitalizing Entrepreneurship Studies In Library And Information Science Education For Job Creation And Poverty Eradication In Nigeria.
- Akidi, J. O., & Udoh, I. U. (2021). Infopreneurship Skills for Sustainable Development: A Focus on Library and Information Science Students of Selected Federal Universities in Nigeria. *Library Philosophy & Practice*.
- Adetayo, A. J., Suleiman, A. I., & Ayodele, M. O. (2022). Leveraging digital infopreneurship for financial well-being of academic librarians: the Nigerian perspective. *Library Philosophy and Practice*, 1-19.
- Babalola, G. A., Adamu, M. S., Aji, K. O., Abubakar, F. & Shekarau, M. I. (2018). Reinvigorating Library and Information Science (LIS) Curriculum in a Fast-Changing Society. *Information Impact: Journal of Information and Knowledge Management*, 9(4), 63 - 72.
- 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.
- Dewah, Peterson & Mutula, Stephen. (2016). Students' perceptions of the infopreneurship education in the Department of Records and Archives Management at the National University of Science and Technology. *SA Journal of Information Management*. 18. 10.4102/sajim.v18i1.717.
- Du Toit, A. (2000). Teaching infopreneurship: Students' perspectives. *Aslib Proceedings*, 52(2), 83–90. <https://doi.org/10.1108/eum0000000007003>
- Hussin, N., Kamarudin, H. D., Haron, M. F., & Achik, S. N. A. A. (2022). Strategies to Drive Successful Infopreneurship among Library Science Students. *Environment-Behaviour Proceedings Journal*, 7(S110), 25-29.
- Ivwurie, O. M., & Ocholla, D. N. (2016). The status and development of infopreneurship in Nigeria and South Africa. *Education for Information*, 32(4), 323-342.
- Kamaluddeen, Isa & Isa El-Kalash, Kamaluddeen & Mohammed, Samaila & Aniki, Mohammed. (2016). Exploring Infopreneurship for Economic Growth and Sustainability in a Developing Economy: The Nigeria Perspective. *Journal of Educational Policy and Entrepreneurial Research (JEPER)*. 3. 2408-770.
- Khumalo, Njabulo & Nkala,. (2020). The importance of infopreneurship training for records and archives management students in Zimbabwe. 48. 66-76.

- Li, Jing. (2017). Research on the Integration of Innovation and Entrepreneurship Education and Librarianship Professional Education--Taking Shaanxi University of Technology as an Example. *Journal of Lianyungang Vocational and Technical College* (02), 72-76. doi:CNKI:SUN:NYGZ.0.2017-02-020.
- Ogbonna, U. A., & Dare, L. A. (2020). Adopting the Social Media and Infopreneurship Skills for Overcoming the Unemployment Problems of University Graduates in Nigeria. *Library Philosophy and Practice (e-Journal)*.
- Ramugondo, Lugisani & Ocholla, Dennis. (2022). Can Infopreneurship be an Employment Option for Library and Information Science Students?. *Mousaion*. 40. 27-2639. 10.25159/2663-659X/9665.
- Ramugondo, L. S. (2010, September). An Exploratory study of infopreneurship as a job option for Library and Information Science students: A literature review [Conference session]. 11th DIS Annual Conference, Richardsbay, University of Zululand, South Africa
- Thobekani Lose and Sebenzile Khuzwayo (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
- Ye Xi. (2019). Research on the optimization path of innovation and entrepreneurship education in archival science majors. *Zhejiang Archives* (10), 25-28. doi: 10.16033/j.cnki.33-1055/g2.2019.10.009.
- Zhao, C. (2016). Investigation and research into the satisfaction of vocational condition and professional knowledge for the college graduates of archival science speciality(一). *Cnki; Archival Science Newsletter*.

Appendix 1:

