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Review article



Incorporating business courses into LIS programs in Hungary: An examination of ALA-accredited programs

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ABSTRACT

Libraries are currently undergoing drastic changes; these changes are a result of the proliferation of advanced technology, change in users' information-seeking behaviour and equally the diversity of information resources. As such, libraries and librarians are no longer enjoying the monopoly they used to enjoy as the sole providers of information. With the new changes, libraries are expected not only to be the custodians of information resources, but also facilitators of the same. This new role calls for libraries and librarians to have adequate skills and knowledge in a wide range of subjects that can enable them to survive the competitive environment. This study aims at establishing effective ways of incorporating business courses into LIS programmes in universities in Hungary as a strategy for enhancing economic development and sustainability in the country. The study used a literature review approach in analysing the implementation of business courses in Library and Information Sciences (LIS) programmes among the ALA (American Library Association) accredited programmes. The study established correlations between various ALAaccredited programmes that had incorporated business courses in their programmes. Using ALA-accredited programmes as a model, the study sought to analyse an appropriate model for restructuring LIS programmes in Hungary. From the findings, it was revealed that most ALAaccredited programmes had embraced various business courses in their programmes, although, it was noted that the majority of the programmes had business courses as electives. It was also observed that various titles of business courses amongst the ALA programmes were diverse and varied. From the analysis of this study, it was established that the incorporation of business courses in the LIS programme is beneficial, since most universities, globally, are trending towards the concept of entrepreneurial universities. However, there needs to be an appropriate strategy of ensuring that the courses chosen are market driven.

1. Introduction

Globally, libraries are undergoing unprecedented development and change, these changes have been necessitated by various factors, some of which are, the proliferation of advanced technology, the change in library users' information seeking behaviour, the diversification of information resources, the digital natives etc. Currently, libraries are no longer considered as mere custodians of physical books and disseminators of the same, they are expected to perform other roles and duties so as to quench their patrons' thirst for information. For librarians to be relevant and offer value-added services they need to possess adequate skills and knowledge that

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are commensurate to the trending requirements and expectations of their users. Librarians are expected not only to offer library services but also to be able to have adequate technical, managerial and leadership skills that can enable them to manage the people, the information resources, ICT infrastructure, the financial resources, and also be able to plan and strategize for the future. Thus, libraries need to reinvent themselves [1]. observes that most accredited LIS programmes are now offering courses and programmes that are focusing on "information" rather than "libraries". This, according to the author, is advantageous as it opens more opportunities for LIS graduates to work in various diverse departments and organisations as opposed to only being inclined to the library [2]. indicate that organisations and institutions are not fully aware of the requirements, roles and skills, needed for data scientists, hence, they seek professionals who can do it all, and who are able to "to excel in a wide range of traditionally distinct disciplines, as unicorns (Stodder, 2015; Bertolucci, 2013)" (cited in Ref. [2]; p. 65).

For libraries to be able to reinvent themselves they require adequate and effective training programmes. An outstanding library programme can be construed to be the one that develops librarians to become versatile informational professionals. With the current advanced technology trends and job market competitions, it is imperative to have a well-structured LIS university programme that can address these challenges. A programme that does not limit a LIS graduate only into the employment job market, but also opens one's possibilities for entrepreneurship and business venture, a LIS programme that can offer graduates with excellent innovation skills, impressive ICT and more so, an expert in various subject areas, [3] allude that with the rapid changes in global communication, it is important for LIS programmes to keep on changing and upgrading their programmes so as to prepare the graduates for employment in the rapidly changing and advancing environment. Noh et al. (2012), Yi and Turner (2014) as cited by Ref. [4] argue that "to keep up with the changing job nature of library and information professionals, educational institutions that offer accredited programmes in LIS have continuously been evaluating and updating their programmes to equip students with the skills required for employment after graduation". The value of a good LIS programme is more likely to be visible through its flexibility, the one that can offer learners adequate learning skills, knowledge and attitudes that befits the current trends and paradigm shift. In Hungary, the LIS programmes have undergone a great transformation for over a decade now, however, not much achievement has been forthcoming in the transformation of the programme to match the current trends [4]. note that the major problem facing LIS programmes is the lack of a unanimous agreement among accredited LIS programmes on the best courses that ought to be included in the LIS programme, the author argues that despite numerous studies that have been conducted to establish the best practise, there has always been a lack of consensus. B[5]; citing Oxbrow (2000) and Gorman (2001), argue that the focus of LIS programme training on traditional skills and practices is a great hindrance to the graduates who end up having deficiency in strategic level organization.

This study discusses the significance of inculcating Business courses in LIS programmes in Hungarian universities in order to develop Business librarians who are able to serve their communities in sustainable ways, as well as promote the work of librarians and libraries for the country's development.

2. Statement of the problem

The propagation of advanced technology and globalization, is bringing a lot of disruption in the way the library and librarianship profession is going to be transformed for future users. The expectation of library users is increasing, however, libraries are taking their humble time to adjust and subsequently LIS programmes are equally not proactive to revise their curriculum to address the new paradigm shift. Thus, if appropriate action is not taken, the librarianship profession is likely to be in the limbo of redundancy. This research study is undertaken with background information that LIS programmes in Hungary universities are yet to appreciate the current trend of implementing and adaptation of business courses in LIS programmes. It is the assumption of this study that the lack of business courses in LIS programmes in Hungary is the reason why librarians in Hungary are not being involved in economic development projects [6]:7126), the reason why LIS programme in Hungary is not lucrative and marketable as compared to other courses, the reason why there is dwindling low numbers of young graduate librarians, the reason why there is lack of appropriate innovation strategies and initiatives in Hungarian libraries and also the reason why Hungary's ranking in the EU's Digital Economy and Society Index (DESI) is still low. Kiszl and Fodor (2021:5), citing Campbell-Meier and Hussey (2019) and Fraser-Arnot, (2019a, & 2019b), say that "students need to be trained to be dynamic in a manner that qualifies them for the whole profession, to have a cohesive identity, and to be able to represent their own interests". [4]; citing Marco (1994) and Lo et al. (2017b, c) and Ho and others (2018), note that most LIS programmes have continuously been accused of developing "half-baked" graduates for the job market. Thus, it is imperative to conduct due diligence research and establish the job market requirements before a university's degree programme is implemented. Moreover, [7]; quoting Wiewel and Knaap (2005:1), state that there has been a growth in the learning interest of students in different areas, which are connected to the daily experiences, and issues that they are living; additionally, the role of universities is no longer independent from the social and economic development, as they are increasingly considered as the backbone of societies and communities (Wiewel and Knaap 2005:1; cited in Ref. [7].

The implementation of business courses into LIS programme cannot take place in a vacuum, it has to be enhanced, there is a need to have elaborate research that will be able to establish appropriate best practices models that can assist in the formulation of a feasible and a sustainable LIS programme and also offer solutions to the prevailing challenges and establish appropriate measures. It is therefore as a result of the above developments that form the backbone for this research study, that is, incorporating Business Courses into LIS Programs in Hungary: An Examination of ALA-Accredited Programs. The study was guided by the following objectives;

- a) Analyse business courses offered in ALA accredited LIS programmes
- b) Analyse the ratio of business courses in the accredited ALA programme and compare them with other courses being offered
- c) Establish and discuss the challenges and omissions of the accredited ALA programme

d) Establish and recommend appropriate model for the Hungarian LIS programme

3. Literature review

3.1. Library and information science (LIS) programme in Hungary

For quite some time, Hungary, just like the rest of central and Eastern Europe, had been experiencing a lot of challenges necessitated by political controversies, economic depression and advancements in technology. The challenges affected the socio-economic, political and educational activities, as such, the country's development stagnated. However it is only recently that Hungary started experiencing political stability and growth and as such, the revival of its education and business sector [8], note that "the dramatic changes brought about in Hungary in the late 1980s and the early 1990s were reflected in the library and information scene. There were changing functions as well as new services in libraries" The revival of business calls for the implementation of appropriate business programmes in universities. This paper seeks to establish the implementation of business courses in LIS programmes and their effectiveness in Hungary's library curriculum. The importance of business programmes cannot be underestimated, business courses are required in every facet of industrial development. Pálvölgyi and Tóth (1996:13) assert that in Hungary, there are only two universities that offer degree programmes in library and information sciences: Eotvos Lorand University and Kossuth University, Debrecen. However, to supplement the library training programme there exist some teacher training colleges that offer library programmes but as an additional subject area, these are; Berzsenyi College, Szombathely, Bessenyei College, N'yiregyháza college, and Szeged. Out of all these colleges and universities, it is only Eötyös University that offered the LIS programme as a standalone programme, the rest offered a double degree programme with either teaching courses, business courses or any other subject area. However, with the economic depression that was being experienced then, most librarians who had double degrees in library and business and worked in commercial organisations lost their positions, and were considered redundant and their positions became obsolete. It was only recently that new opportunities are emerging for information managers in commercial organisations. Kiszl (2021:7129), citing [9]; notes that the demand for financial literacy is so high that university students in Hungary enrol in NGOs to be taught business and financial courses. As such, librarians need to re-emerge strategically in terms of LIS programmes and courses [10]. declare that there is a concerning need for librarians to have specialization in other subject areas, the authors also note that"the fact that science and engineering and business librarians lack formal education in subject areas has caused concerns about the profession". Kiszl and Fodor (2021:1) allude that the concept of a library has taken a different approach from the traditional practice of document preservation and provision of library spaces, therefore with this new dispensation concepts like financial education cannot be avoided [11], points out that with the current political stability and economic improvement, Eötvös University in Hungary has started prioritising research and business courses in its library programmes. According to the author (2021:7129), Eötvös Loránd University (ELTE) now offers business courses in the LIS programme at both the bachelor's and Master's level (See Table 1.).

[12] indicate that "with new developments of the library professional identities, librarians need to learn to employ entrepreneurial skills in order to continuously anticipate services and develop skill sets to aid the library's ability to fulfill its purpose. On the other hand [11], is of the opinion that the lack of appropriate business and entrepreneurial competencies amongst library professionals is the reason most librarians are never involved in economic development in issues in Hungary [12].: 67–68) argues that "there is a need to remove the stigma from librarians as « jack of all trades, and master of none»" concept. However [11], argue that the notion that librarians should know about everything is not practicable during this digital age, they mention that the best way for the library profession is to have established collaborations with other research fields.

3.2. Significance of American library association (ALA) in accreditation in Hungary

ALA has been in existence for a long time, and it is a well-established Association. It is therefore not the intention of this study to discuss its establishment, since that information is well documented and elaborated on ALA websites and has equally been discussed at length by other predecessors' authors. [13] points out that ALA is the largest and one of the oldest library Associations, the author alludes that the Association has been very resourceful in shaping and advising other organisations [14]. notes that, ALA has been at the forefront in evaluating and approving LIS programmes in America to check for the relevance and quality of the programmes being offered against their stated objectives, mission and vision. [13] observes that as stated in the resolution of 1876, the sole purpose of ALA is to support and promote library and librarianship. Brewster (1976) as cited earlier by [13] notes the following core international

Table 1
Business development courses at ELTE LIS Programmes Kiszl (2021:7129).

LIS Master's & LIS Teacher Training program	LIS PhD program
Economics	Doctoral Special Elective
	Course
Market Economy and Librarianship in Information	
Society	
Business Information and Financial literacy	
Workshop on Fundraising Proposal writing	
	Economics Market Economy and Librarianship in Information Society Business Information and Financial literacy

activities of ALA; they offer international assistance to foreign libraries; offer advisory support to library association; offer collaboration and cooperative library services to library association, and foreign libraries; offer book donation services to foreign libraries; organize international library conferences; offer correspondence services and support to foreign libraries and library associations [14]. citing Kniffel (1999) laments that there are mixed reactions in regards to the significance of ALA accreditation of libraries in the USA, the author notes that some believe that ALA is influential while others are of the contrary opinion. [13] points out that the role ALA played from 1924 to 1949 significantly shaped modern librarianship in China. The authors note that ALA offered extensive advisory services, fellowship grants, book donations etc. and it is the reason China has been able to establish great libraries and librarianship programmes. [3] observe that in the implementation of new LIS programmes a university can as well conduct interviews with employers and employees to determine the job market requirement, however, the author notes that in cases where the course or curriculum being introduced is new, it is imperative to seek and conduct a research survey with well-established library association like American library association or Chartered Institute of Library and Information Professionals since they have been in the job market longer and have more experience in a wide range of new programmes. This, therefore, marks the justification why the current study is analysing the business courses using ALA. More so, ALA accredited programmes are in English and hence have a bigger market this is unlike the LIS programmes in Hungary [15]. notes that all the LIS programmes in Hungary are taught in the Hungarian Language hence, a language barrier for non-Hungarians speaking individuals.

3.3. Business information courses in LIS programmes

Globally, there is a trend that is emanating from various universities that offer library and information science programmes, and that is the introduction of business courses. This trend has been necessitated by the job market demand, unlike previously, where a business librarian was trained to work in a subject library, the current trend requires that a librarian graduate with business courses should be able to compete with a business graduate for the same position in an organisation. Whereas the trend is emerging in the 21st century, in the US, the concept was adopted over a decade ago [16], notes that in the US most ALA accredited universities have business courses in their LIS curriculum programme, in a survey that was conducted in 1993 over 41% of schools had a course entitled information economics [17].:4) while conducting research on content analysis of business information courses in the US, alludes to the importance of establishing the skills needed in business information courses so that the course skills match the market needs. The author notes that most universities introduce business courses in library programmes without analysing the required skills to fit the job market. Liu and Allen (2017:562) observes that despite the fact that most LIS programmes offer business courses, the business specialization in LIS programmes tends to be weak, and it is difficult for a business librarian to claim to be an expert in business related areas, as such, there is need for collaboration teaching between library LIS programme and business courses [18]. allude that there is a need to have a content analysis of a programme before its implemented, the author (2010:31) differentiates three types of content analysis that have been used in previous 1) examination of catalogues, 2) Interviewing or sending questionnaires to faculty teaching at various LIS programmes 3) assessing and evaluation of course syllabi.

3.4. Importance of implementing business courses in LIS programme

The changing trends in libraries necessitate the need to change and adapt for sustainability and relevance. The following significance forms part of the drivers behind the importance of business courses in the LIS programme.

- 1. Commercialization of Higher education: Higher education in most countries is expected to be self-reliant, to be able to source for their own funds and operate independently as such, all divisions within higher education are expected to emulate the change, including libraries. Garrison (2011) as cited by [12] notes that "higher education institutions are shifting toward more business-like practices while responding to economic and societal pressures, and libraries are challenged to re-envision themselves to fit within this new institutional structure"
- 2. Changing role of librarians: The changing trends and needs are forcing librarians to move out of their comfort zones and establish other specialisations. Friend (2008: 159) argues that with the current changes, and advancements in technology, libraries are expected to equally solicit for funds from other sources other than their parent organisations. Kiszl (2021:7124) notes that the current trend is expecting that future library graduates are able to "operate and manage their institutions successfully even while facing constant challenges presented by the economic-social-technological environment, whereby they can also meet the efficiency expectations imposed on public collections" [11] argues with the current high demand of business courses, library graduate with specialisations in business courses can be a great source to offer non-formal education in business related studies, this is because libraries and librarians are spread out to most areas of a country as opposed to colleges and schools [19]. point out that the current change in libraries is inevitable and libraries should be ready to adapt to the changes so as to effectively serve their users and survive the competition that is being brought about by the advancement in technology.
- 3. Competition and Marketing strategies: Libraries are no longer enjoying the monopoly they had a decade ago, they are currently faced with competition, thus, there is a need for librarians to learn how to survive the competition and win the trust of the library users. This will involve them to identify their competitors and also do extensive marketing of their roles [20]. argue that for libraries to continue being relevant in this current era, they need to adopt innovative strategies so as to ensure business continuity.
- 4. Change and Innovation in libraries: [12] citing Evangeliste & Furlong (2011:139) notes that change should be considered as an opportunity to improve effectively to meet the market expectation as such, only a skilfull leader is able to make this change possible.

Concept of Financial Literacy

According to Smith and Eschenfelder (2013), citing Ratway (2009), financial literacy represents the ability to comprehend, evaluate and discuss money and financial matters and services. According to Johnson and Sherraden (2007) as cited in Ref. [21], financial literacy (FL) represents the aptitude to "read, analyse, manage, and communicate personal financial conditions that affect material well-being", and that also encompasses "the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future, and respond competently to life events that affect everyday financial decisions, including events in the general economy (Orton, 2007)" [21]. [22] alludes that there is no precise definition or particular meaning given to FL, Financial Education (FE) or Financial Capability (FC), as there are many circulated definitions among scholars, which are related in general to the possession of certain financial knowledge and money management that allow individuals to perform their daily financial tasks, such as budgeting, banking, credits, making economies and so on. Furthermore, according to Johnson and Sherraden (2007) as cited in Ref. [22], "the term financial capability is intended to include not only the concept of education but also access to financial services and institutions, arguing that knowledge alone—without access to the resources and services of financial institutions, especially for those coming from under-or unbanked communitie will not ultimately allow people to choose a financially literate lifestyle (Johnsonand Sherraden, 122)" [22].

According to Jagman et al. (2014), citing the President's Advisory Council on Financial Literacy (2008), "Financial literacy may be defined as "[the] understanding of financial products, services, and concepts... [that empowers students] to make informed choices, avoid pitfalls, know where to go for help and take other actions to improve their present and long-term financial well-being".

Bon et al. (2020), in the Financial Literacy Through Public Libraries (FINLIT) project's mapping report, stated that financial literacy is the result of "an educational intervention", and that "it is a combination of financial awareness, knowledge, skills, attitude and behaviour, necessary to make sound financial decisions and ultimately achieve individual financial wellbeing" (Bon et al., 2020:2). The authors provide a selective variety of financial literacy definitions in their report for better understanding. According to ALA guideline, Financial capability is the "capacity, based on knowledge, skills, and access, to manage financial resources prudently and effectively. Efforts to improve financial capability, which should be based on evidence of effectiveness, empower individuals to make informed choices, plan and set goals, avoid pitfalls, know where to seek help, and take other actions to better their present and long-term financial well-being" (ALA 2020).

The role of libraries is constantly changing; with new trends in technology usage and the transformation of individuals' perceptions from the material world to the virtual digital realm, libraries are not storage for books and documents, instead they are institutions that contribute to filling the society gaps by being active social spaces and spheres [23]. Moreover, Smith and Eschenfelder (2013) observe that public libraries can assist their communities by providing financial literacy services. Although, the authors assert that there is unclearness regarding the preparedness of libraries to fulfil this task. Smith and Eschenfelder (2013) opine that public libraries are visioned nowadays as a "community information" source that guide and orient citizens to different social services that exist within the society. Libraries are trustworthy not-for-profit institutions that an individual visits in case of any information needs, and which include financial queries and money handling and management. It is recognizable that, according to Smith and Eschenfelder (2013), governments are the first supplier of financial information and services, however, it can be difficult to reach out to all society members, specifically the "undocumented minorities" the "undocumented minorities" (Cullen and Cobb 2011), due to the lack of trust in the materials offered by the government (Cullen and Cobb 2011). Thus, Smith and Eschenfelder (2013), citing (ALA 2008, 2009, 2010; Smith and Eschenfelder 2011) assert that public libraries are becoming the nucleus of "government information transfer cycle" (Smith, and Eschenfelder 2013).

Libraries are advocates for literacy, information literacy, digital literacy, and other types of literacies that include financial literacy. According to Špiranec, Zorica, and Simončić (2012) Information Literacy (IL) and Financial Literacy (FL) are conceptually correlated together. The authors defined IL as the potential to "identify, access, select, evaluate, and use information", which is necessary to build for individuals' cultural and social capitals that allow them to "achieve their educational, social, professional, and economic goals (Lloyd and Williamson 2008)" (cited in Ref. [21]. [21]; citing Remund (2010), assert that FL is the ability of money management that individuals should have in order to be able to interact within their communities. Furthermore, as stated by Ref. [21]; lacking FL and digital skills contribute in widening the digital divide, as it has been observed by Servon and Kaestner (2008) (as cited in Ref. [21], "socioeconomically disadvantaged groups are excluded from the financial mainstream", which consequently leads to discrimination and inequality among individuals and that leads to the instability inside societies. Adding to that, the authors state that the similarities of FL and IL are indispensable and that FL literacy can be considered as a subset to IL [21].

Bringing financial literacy to LIS students helps in their own long-term financial management, but also in the society's financial services [22]. states that the effectiveness of financial education can have a long-term positive financial behaviour change among youth, which can be also observed in the economic development of the society.

According to Jagman et al. (2014), citing ACRL President Trevor Dawes, there is a recognition of the important needs of undergraduate students concerning financial literacy as part of the LIS curricular and cocurricular. As it helps in their financial decisions and habits, as well as supports their future investment plans in the long-term.

Kezar and Yang (2010), as cited in Jagman et al. (2014), indicate that FL is becoming an important "life skill" that is necessary to acquire by all members of the society, which makes it very essential to include in LIS programmes and curriculums. The authors state

¹ "Executive order. (2013). establishing the president's advisory council on financial capability for Young Americans. https://www.whitehouse.gov/the-press-office/2013/06/25/executive-order-establishing-presidents-advisory-council-financial-capab. Retrieved from ALA website on the 21/03/2022. https://libguides.ala.org/finra-ore/personalfinance.

that in order for financial literacy education to be efficient and have long-term results, it "must occur across the curriculum, the cocurriculum, and administrative areas ... [and that] collaborative approach to financial literacy is one that provides many opportunities for contributions by academic librarians" (Jagman et al., 2014).

Moreover, another positive approach to enhance financial literacy education in LIS programmes and academic libraries is peer-to-peer education and tutoring [24]; Jagman et al., 2014) [24]. points out the research gaps within the field of LIS, especially, related to academic libraries concerned about peer-to-peer education, and more specifically, the one related to financial education. The author explores the benefits and challenges in informal financial education. Adding to that [24], states that "a review of the literature suggests the merits of peer-to-peer education and provides encouragement and support for an academic library interested in exploring a different type of financial education program". Although, the paper does not give any information about the methodology used for the literature review, it provides instead a good example on the Student Financial Education Center (SFEC) created at Penn State University Library, and that is based on assisting students on campus with financial literacy, and information relating to budgeting, loans and credits matters. In Accordance with this, Jagman et al. (2014) opine that inclusion of the "Assessment in Action" programme for ACRL, has brought into light the role of "peer-based tutoring" [25] in supporting the students' learning regarding financial literacy, which assists the informal education of students and aids in their day-to-day business educations.

As a further matter, [26]; citing [27]; opine that academic librarians are reliable and trustworthy providers of knowledge to students regarding financial education and literacy, which can help fill the gaps that patrons may have in business topics and matters (619). According to the authors, the interest about the role of libraries in providing financial education emanated with the growth of the discussion about students' financial literacy in academic libraries [26]. point out the importance of collaboration between academic librarians and other partners and entities, either on-campus or out-campus, to assist students concerning their financial queries and interests. Librarians are bridging entities, their role is to identify their community gaps, to help finding ways and solutions in fulfilling them, according to their substances and capabilities. The assistance that librarians can provide to their patrons, can help individuals manage their incomes, negotiate salaries (Geraci, Hickey, and LaVoice 2016; as cited in Ref. [26], apply for grants and funds for personal or associative matters.

4. Research methodology

This research study adopted the literature review methodology approach, combining theoretical and empirical literature, which allows the integration of different perspectives from other disciplines and fields of research, in order to generate innovative comprehensive concepts, theories and problem-solving findings.

A comprehensive process to the review is developed (by the authors) based on a figure from Miriam (2016), which can be applied in reviewing literature in any discipline. The process contains six phases that are as follows;

- Identification of the topic and establishment of research questions
- Carefully searching and selecting the literature
- Categorization of the literature found (empirical, theoretical)
- Analysing of the literature
- interpretation of the findings
- Report of the review and synthesis of the knowledge

Additionally to this, and in order to evaluate the importance of inculcating business education in LIS programmes, an analysis of the graduate ALA accredited programmes has been done by verifying each of the curricula proposed by each programme. The data was collected and sampled from the list of ALA accredited LIS programmes available on the website (https://www.ala.org/cfapps/lisdir/lisdir_search.cfm) [28]. A total number of Sixty-four (64) accredited universities were sampled and analysed for the study. Each of the ALA accredited LIS programmes was gathered and analysed one by one to verify the structure of the courses offered, core and elective

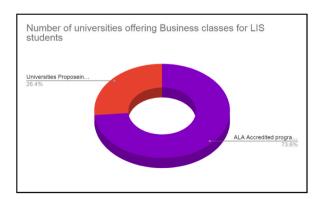


Fig. 1. Universities offering business courses among the ALA accredited Master programmes 2022.

courses, in purpose of detecting if there are any business courses offered and how they are labelled and categorized within the curricula. Due to the diversification of business courses, the study selected all the universities that offered any course on business or finance in LIS Programmes; these were courses ranging from economics, business research, marketing, business information technology, etc. The study used a descriptive analysis method to analyse the data collected.

4.1. Findings/results

The findings established that there are sixty-four (64) ALA accredited LIS programmes, out of these, 23 (26.4%) universities offer business courses in their LIS programmes out of those two universities offered two courses instead of one (see Figs. 1 and 2), which were categorized as either a core course or as a recommended elective depending on the specialization (Academic libraries, Public libraries, Special libraries, School libraries, Archives etc.), while 41 (73.6%) from the ALA accredited programmes did not offer any courses related to business education in their curriculums.

Similarly as stated by White (2014), the denotation of the business courses differs from one programme to another, however, the word "business" is always mentioned in the appellation of the courses (see Table 2), and which was the one of the keywords to detect in the courses within the programmes, and that was combined with the words like 'information', 'data', 'resources', or 'intelligence', other appellations were applied depending on the scope and interest of the curricula. There was no criteria regarding the names of the business courses in the ALA's "Standards for Accreditation of Master's Programmes in Library and Information Studies', nor is there a criteria indicating the purpose of these courses. However, these business courses are part of the LIS curriculums of each university offered to their LIS students, with the possibility to choose other elective courses (one or two additional classes) from other departments including the business department. Additionally, to the twenty-three (23) ALA accredited LIS programmes that propose business courses with two universities proposing two courses instead of one, there are six (6) (8.6%) other universities that offer financial information courses in their curricula (Fig. 4), against 91.4% who do not offer any financial courses within their curriculums (Fig. 5).

The type of courses offered in regard to business courses are generally elective ones, 62.5% are elective (equivalent to 15 courses), against 29.2% (7 courses) that are included within the curriculums of the seven universities, and only two (8.3%) business courses that are integrated as a core competency (see Fig. 3).

Furthermore, From the data collected, twenty-one (24.7%) universities offer courses in 'Marketing', either for libraries, information, or public relations and services (see Table 3); with one LIS programme at the university of San Jose State that provides three courses in Marketing instead of only one, which results into twenty-three (23) marketing courses offered by twenty-one (21) universities, against 75.3% of the LIS programmes that do not offer any marketing courses (see Fig. 6).

5. Discussion

In order for libraries and librarians to offer "high quality information services" to their patrons (Liu and Allen 2001), it is necessary to discern the educational patterns that make librarians experts in their field of concentration and interest. According to Ref. [29]; libraries are able to be a better assistant for small businesses, especially, in rural regions as they are able to deliver information that addresses the population's needs in their serving environment. However, from the above collected data, and as mentioned by Liu and Allen (2001), there is a lack of formal business education for library professionals. According to Liu and Allen (2001), citing (Echelman 1974), "To be successful, the business librarian must learn to speak and understand the language of business. He/she must do this not only to be able to serve his/her constituents, but also to function as an accepted member of the professional and managerial staff of a modern organization" (556). Currently, the trend in the job market favours graduates with job specialization and extra certification. For instance, a librarian with extra mastery and skills in ICT has a better chance of being recruited as opposed to a librarian with basic skills.

From the above findings, it was evident that the majority of the Universities of the ALA accredited graduate LIS programmes do not offer Business courses, nor financial courses. However, for the few universities that had the business courses available to their students,

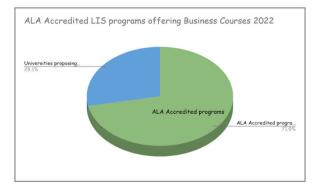


Fig. 2. ALA accredited LIS programmes proposing Business Courses in their curricula 2022.

Table 2Universities and name of Business courses proposed in the ALA accredited LIS programmes.

	University	Course's name	Type of course
1.	University of Wisconsin-Milwaukee	Business Information Sources and Services	Elective
2.	Arizona University	LIS 660: Business Information Resources	Elective
3.	Louisiana State University	LIS 7205 Business Information Resources	Elective
4.	Indiana University Purdue University	LIS-S 408 Business Data	Included
	Indianapolis	LIS-S 526 Business Information	Included
5.	San Jose State University	INFO 220: Resources and Information Services in Professions and Disciplines — Business	Core Competency
6.	South Florida University	LIS 6624 Information Sources and Services in Business and law	Elective
7.	Illinois at Urbana-Champaign university	IS 514 Applied Business Research	Included
8.	Washington, University	LIS 527 Business Information Resources	Included
9.	Western Ontario university	LIS 9323B Business and Industry Information	Elective
10.	Texas Woman's University	LS 5213. Information Sources in Business.	Included
11.	Ottawa University	ISI 6314 The Publishing Business: Transformations and Opportunities	Elective
12.	Kent State University	LIS 60623 Business/Finance Information Sources	Elective
13.	North Carolina at Chapel Hill University	709 Business Information	Elective
14.	Tennessee University	INSC 544 - Business Intelligence for Information Professionals	Included
15.	Clarion University of Pennsylvania	LS 591 Business Reference Sources and Services	Included
16.	Missouri University	Services for Business Communities and Entrepreneurs	Elective
17.	North Carolina Central University	LSIS 5260 - Business Information Resources and Services	Elective
18	Queens college	LBSCI 786. Business Information Sources	Elective
19.	Florida state university	Business Information & Competitive Intelligence	Elective
20.	Catholic University of America	LSC 639: Business Information	Recommended specialty
			course
21.	Dalhousie university	INFO 6513 Business Analytics & Data Visualization	Elective
		INFO 6310.03 Resources for Business Intelligence	Elective
22.	North Texas University	INFO 5646 Information and Access Services in Business	Elective
23.	Indiana University - Bloomington	Business Information	Elective

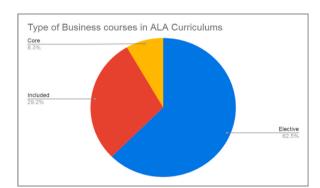


Fig. 3. Type of Business courses proposed by ALA accredited programmes 2022.

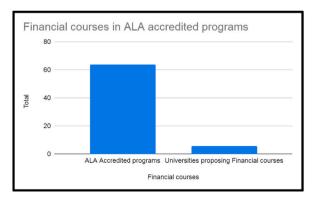


Fig. 4. ALA accredited LIS programmes offering Financial Courses 2022.

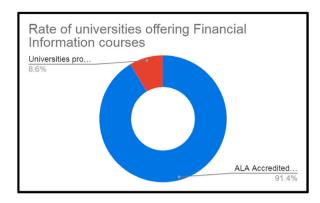


Fig. 5. Rate of ALA accredited LIS programmes offering Financial Information Courses 2022.

Table 3ALA accredited universities and name of marketing courses they are offering.

S/ N	University	Course's Name	Type of course
1.	Dominican University	LIS 707 Leadership, Marketing, and Strategic Communication	Core course
2.	Denver University	Advocacy and Marketing in LIS (3 Credits)	Elective course
3.	University of Wisconsin- Milwaukee	622:Information Marketing	Elective course
4.	British Columbia University	LIBR 570 (3) Marketing in Information Organisations (all)	Secondary Electives
5.	Valdosta State University	Marketing Library Services	Elective course
6.	Florida State University	Marketing of Library and Information Services	Elective course
7.	Arizona University	LIS 559: Marketing of Library and Information Services to Communities	LIS Elective
8.	Indiana University Purdue University Indianapolis	LIS-S 557 Marketing for Libraries	-
9.	San Jose State University	INFO 210: Reference and Information Services — Reference in the Age of Google: Marketing, Outreach, Management, and Evaluation (2 units)	Core competency
		10. INFO 282: Seminar in Library Management — Marketing of Products and Services (1 unit)	Core competency
		11.	Core competency
		INFO 283: Marketing of Information Products and Services	
12.	Southern California University	GSBA 509: Marketing Management	Foundation and Required Courses
13.	Kent State University	LIS 60609 Marketing the Library	Elective Course
14.	Washington, University	LIS 581 Marketing and Planning for Libraries	_
15.	North Carolina at Chapel Hill University	786 Marketing of Information Services	Elective Course
16.	Clarion University of Pennsylvania	LS 580 Library Marketing and the Community	-
17.	Ottawa University	ISI 6352 Marketing and Advocacy for Information Organisations	Elective Course
18.	Missouri University	Marketing and Libraries	Elective Course
19.	St. Catherine University	LIS 7610 Marketing and Public Relations	_
20.	Texas Woman's University	LS 5823. Library Marketing and Advocacy	_
21.	Buffalo University	LIS 531 – Marketing of Information Services	Elective Course
22.	Montréal University	SCI 6318 Marketing des services d'information	Elective Course
23.	North Texas University	INFO 5310 Marketing and Customer Relationships for Information Professionals	Elective Course

it is, mostly, offered as an elective course and not compulsory. From the ALA website, it was observed that the entry criteria for the MA LIS programme never mentioned or recommended the specific prerequisite subjects that one had to have to enrol for the Masters programme, as such this study is of the view that the business courses being offered at the various LIS programme are basic hence made elective.

This was applicable to other subjects like; marketing, and management, for which are also offered by universities as elective courses. Furthermore, there was no unanimous agreement amongst all the universities that offered business courses in the LIS programme, different universities explored different areas of business, for instance, some universities had courses like, business intelligence, business information resources, business community and entrepreneurship, business reference sources etc. A recent study by Ref. [4] allude that the lack of uniformity in courses in various LIS programmes acts as a great hindrance to the LIS profession. Most ALA accredited LIS programmes were biased towards offering marketing courses as opposed to business courses, the same was also noted to other courses like leadership and management. Although the study could not establish the reason behind the preference of

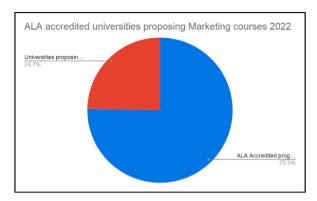


Fig. 6. Number of ALA accredited programmes offering Marketing courses.

such subjects, it can be equated to the fact that libraries are currently being pressured to justify their relevance, and thus, the only way to justify this is through increasing access to libraries through marketing of their services and resources. It was also noted that most universities are excited and overwhelmed to offer ICT courses as opposed to business courses. This was evident from the fact that most ICT courses were compulsory as opposed to business related courses, which according to research studies is calamitous. With the current global economic and financial constraints, all organisations are called upon to be financially literate in management, access and utilization of limited resources, and clearly, libraries are not spared. Hence, libraries and librarians need to be financially literate, and this can only be through having the prerequisite education. In a recent study by Ref. [30] on financial literacy, it was noticeable that libraries find many constraints to fulfil the financial literacy gap due to the lack of funds and financial support; however, the authors proposed solutions that do not require any additional costs for libraries such as; collections development for which "there is no need for significant modifications in the acquisition and processing manner. Only the field of collection should be widened, and some space should be made on the service side of the process – on the shelves –, and new or expanding opportunities should be highlighted in information service and communication" [30]. Additionally, [30]; state that if the audience is well targeted, organizing financial literacy programs would be made easier in the library setting, and which prevent extra cost if well organized. This is also applicable for business information and services that libraries can offer to their patrons. In another study, Kiszl and Fodor (2021:17) note that the faculty where an institute is hosted determines the direction of the programme, according to the authors the LIS programme at Eötvös Loránd University (Budapest, Hungary) is based at the Faculty of Humanities, as such, most LIS students opt to take literature and linguistics as additional fields of studies.

The increased demand for business services not only in libraries but in managing information within organisations creates new opportunities for librarians to expand their working networks if they are in possession of the business and financial expertise to serve in different professional fields and areas [7]. state that LIS education can support economic development by being one of the pillars in the circulation of information, which helps in the growth of small businesses in rural regions and areas. As a way forward, this study implies that, in order to build a coherent and balanced business education for LIS programmes and their students, it is important and necessary to set the key objectives that are needed to achieve the required result, which is to train business librarians that have the expertise and knowledge to assist their communities adequately. Having an able team of experts in LIS accredited programmes requires a clear accreditation programme, a programme that is able to evaluate the education programme from the Bachelor's degree, Master and PhD. The study noted that ALA accreditation only accredits Masters Programmes, which according to this study, represents a great weakness in the accreditation process since at the masters level students usually have already mastered their path and are focussed on advancement. This study, therefore, was of the view that any accreditation programme being implemented should start the accreditation from the certificate, Diploma, Bachelor, and Master's, all the way to PhD level as such, the career development of a programme will be well structured

On the other hand, and from the conducted analyses of the available literature about business education and financial literacy in LIS studies, several challenges have been detected that librarians and library professionals are facing when dealing with business information, management, marketing, and that are as follows;

- Lack of financial and business education and information among LIS educators and Librarians
- Lack of financial experience from librarians and interest in business matters
- Lack of digital and computer skills among library users when dealing with digital financial information
- User's privacy and librarians' ethics when dealing with sensitive information such as financial information of users
- The ethical role of librarians to inform about business matters but not to advise or guide the patrons on taking any financial decisions.
- Lack of continuing education regarding financial matters
- Conflict perceptions regarding the role of libraries (mainly public libraries), which can be considered as a place of leisure that
 allows cultural entertainment of individuals, instead of its perceptions as a place where individuals can acquire business and
 financial information and economic guidance or orientation.

 Limitations in funds and financial support for libraries are one of the several obstacles to offering financial literacy programmes and business education

- The variety and diversity of financial topics and interests that may intrigue patrons, make it harder for library staff and LIS educators to cover them all, hence the necessity of constant follow up and training updates.
- Lack of time to assist one-by-one users

According to Ref. [31]; a good business manager and librarian apply and execute what he was prepared to do (p. 85). Thus, it is necessary, in order to avoid the above challenges and overcome them, to prepare students who are interested in having a business librarianship career and specialization with the required competencies, similar to other specializations such as public, academic, law, and school librarians. On top of this, and as reported by Ref. [30]; to be able to efficiently set business programs that are suitable for students and the targeted audience, it is mandatory to seek external partnerships and collaborations in the specific domains, in order to put forward the knowledge and abilities that are required when providing business and financial information and services.

5.1. Limitations of the study

- This study heavily relied on statistical data that was posted on the ALA website, as such, it was not possible to access the exact course content of each individual LIS programme for the sampled specific Universities. Access to the course content would have added more value to the study, however, access to the specific LIS programme for this study was not practicable.
- The study was equally not able to establish the course subject requirements as entry criteria for the MA students which could have assisted the study to establish the reasons why business courses are not being given more emphasises and be categorized as core courses but left as electives.

6. Conclusion

The findings of the present study indicate that there is an awareness of the importance of Business education in LIS studies, especially, in the ALA accredited programmes; however, there is a clear observation regarding the disunification of the proposed business courses and their structure within the curricula. In order to ascertain that the business and financial information provided in libraries and by librarians are efficient and concise to their patrons, it is obligatory to examine first the education provided to LIS students from the start of their career paths (BA., MA., Ph.D.), up until their professional life, which includes continuous training in Business education. The present study provided an overview of the different Business courses provided in the ALA accredited graduate LIS programmes, with the purpose of evaluating the adequacy of their proposed curricula. It came to note that in an effort to have an appropriate LIS curriculum that proposed business specialization, it is mandatory to set and structure the core competencies that are necessary for business and finance education in the LIS curriculum and to unify the standards for courses and the patterns that can make a LIS student a professional librarian with adequate and competent specialization in business. Moreover, the current study proposes, for further research and study, verification for the teaching methods in business education to LIS students such as peer-to-peer informal education, formal education courses, etc. This can be of great help and assistance in setting a diverse and interesting curriculum in LIS programmes.

From this study, it is evident that the importance of business courses in the LIS programme is a necessity. All Universities in Hungary offering LIS programmes should consider implementing the business course model. Research has shown that most universities are currently trending towards the concept of entrepreneurial universities. However, there is a need for adequate research and benchmarking with various stakeholders, so as to establish an appropriate strategy of implementation for sustainability. This can be noted from the fact business courses in the LIS programme in Hungary is not a new concept. It has been practised since the early 1990s, and way before. However, due to non-sustainability and non-consistency, the programme ceased to operate until recently. As such, it is advisable when considering inculcating a Business education and courses for LIS programmes and students, to find and establish mechanisms for their sustainability in the long run.

6.1. Proposition for further studies

Study (qualitative/quantitative) with a systematic examination of digital financial literacy among the Hungarian academic and public libraries, in order to

- explore the experiences and skills of librarians regarding digital financial literacy (digital payment experiences; advantage and disadvantage of digital financial transactions among LIS professionals;
- Explore the ways to detect the safety methods when making digital transactions;
- Explore the library professionals' knowledge on applying for Grants and funds to support their libraries,
- Enhance their life-long learning within the profession.
- To investigate the preferred methods and applications used by Hungarian librarians;
- To investigate fraudulent sources.

Author contribution statement

All authors listed have significantly contributed to the development and the writing of this article.

Data availability statement

Data included in article/supp. material/referenced in article.

Declaration of interest

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