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**NEEDED COMPETITIVE EXPERIMENTS FOR THE PROFESSIONALS
AND PRACTITIONERS IN LIBRARY AND INFORMATION SCIENCE TO
MARKET THEIR KNOWLEDGE IN THE INTELLECTUAL DOMAIN:
LIS KNOWLEDGE REQUIREMENTS PERCEPTION**

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ABSTRACT

No doubt that the perceptions of employers in the academic domain of Library and Information Sciences (LIS) have been changed nowadays very significantly. One of the reasons is for that the competitive knowledge market with digital knowledge commodities. Therefore, the academic domain of LIS has to critically associate with ongoing changes of subject's knowledge as well as knowledge commodities in the job market. It is understandable that initiatives have to be taken by LIS professionals and practitioners to study ongoing changes, as well as challenges, are happening in the knowledge competitive society. Therefore, there is a huge demand to understand current employment trends that are required for young graduates in Library and Information Sciences. This paper has been insight knowledge and skills that required for the young graduates in LIS to serve the expanding and changing digital knowledge market world. On that purpose, the research has conducted based on online content analysis of LIS market demands for three years (2014-2017). Based on that research process, it finds out that not only subject specialties but also skills, knowledge and experiences of LIS are drastically challenging. As a result, the researcher has suggested those findings the status quo of core requirements for the young graduates in LIS are needed to comprehend to cope with the digital knowledge society.

Keywords: *library science, information science, lis profession, knowledge market, job advertisements, employment trends*

INTRODUCTION

It has been reflected that on the present atmosphere of Digital Economy (DE) and Information Marketing (IM) with the robust innovations of Digital Information and Communication Technologies (DICTs) the young graduates in Library and Information Science (LIS) experience enormous challenges. It can be seen that these various challenges may happen because of ICTs, but due to the gigantic consumption of digital information and knowledge commodities. As a result, job profiles of young graduates start to tremble with demanding skills and knowledge to cater those knowledge asymmetry consumers and customers. With these changes, the professionals in ICTs, fortunately, have to work with LIS professionals' expertise in data, information and knowledge in various perspectives. As a result, professionals in LIS have to expand their skills and knowledge not merely in cataloguing and classifications of library materials, but other new subjects' areas to assist the professionals in ICTs to show expertise in information gathering, collating, analyzing and sharing to meet expectations of consumers and customers. And also, the young graduates have to obtain other qualifications beyond accredited university degree in LIS. This phenomenon is very significant due to the extensive availability of jobs in the digital knowledge market. Therefore, these kind of developments in ICTs have direct influences on the young graduates in LIS who have to work purely most of the time for digital atmosphere. As a result, roles and responsibilities of professionals in LIS may change in enormous ways to link with competitive market both ICTs and LIS effectively. Accordingly, one thing is obviously clear that employers have various demands on complex perspectives, therefore knowledge competency has to be considered comprehensively.

Nowadays knowledge competency in various perspectives continues to evolve into LIS professions drastically. It has indicated that scholarly discussions are not sufficient enough to bridging the gap between required skills, Knowledge and expertise cater to employment trends in the digital market. But, it has seen that the young graduates in LIS have been faced huge competitions in the digital job market with other graduates because graduates in LIS are not the first choice of employing. The new breed of graduates from other disciplines will meet their requirements with needed competencies. As a result, similarly, graduates in LIS have to gain skills and knowledge in the variety of other disciplines such as Science, Business and Management, Computer Science, Mass Communication, Languages, Law and Tourism and Hospitality Management for job hunting. It has reflected on job advertisements on the Internet that pure knowledge and skills only in LIS do not make any sense for them to have opportunities for hunting of employers' interest. This

change is continuous with growing demands in forming of electronic LIS professions *alias* e-LIS professionals with digital knowledge commodities. These changes in LIS professions have to critically debate to cater digital job market while excelling skills and knowledge. Establishing sustainable career options as well as the path with relevant skills and knowledge that required for the digital knowledge society is the must. One of the significant reasons to highlight that competencies are looking for very far from what LIS graduates learned from the curriculums as well as from their projects in research and developments.

Therefore, understanding of marketing trends in the atmosphere of digital knowledge market one of the tiring target is to be to find out and to analyze the areas of expertise are needed for the young graduates of LIS. Therefore, this research has been critically scrutinized job announcements in LIS posted on the Internet for three years (2014-2017) to identify skills, knowledge and expertise are projected by employers. Also, it has similarly aimed that to positioned announcements to use as the groundwork for tabling the exponential growth of LIS demands on the digital knowledge marketing world. Therefore, a list of new but demanded jobs have been picked to serve challenges and changes to highlight in the LIS profession for professions to create a synergy between the LIS syllabus and the digital knowledge market. Objectives of the study are;

- a. to scrutinize job announcements in LIS to identify new trends and opportunities in the digital knowledge market;
- b. to identify specific expertise in LIS seek by potential employers;
- c. to inform professionals in LIS to prepare LIS graduates to cater the needs of the digital market.

LITERATURE REVIEW

With the boom in digital knowledge market, the publishing of job announcements on the Internet has been expanding rapidly. Therefore, most of the employers are given more concerns on the online an emerging job publishing channels to grab the best job seekers from the Internet that runs totally in the digital environment. The influences of the Internet and the digital knowledge market for the job hunters as (Dawn, 2016) and (De Vaus, 2002)highlighted that job careers in the next decade so competitive for the graduates in most of the fields. It has clearly reflected the young graduates in LIS have to face these challenges broadly because sometimes their learning profiles may not qualify for current jobs. One of the significant facts that many job advertisements that have appeared on the Internet have

strongly indicated that employers are looking for expertise in communication, service orientation, collaboration, and teamwork etc., instances of purely having an accredited degree. Qualifying for the young graduates to the require jobs of LIS has revealed that having personal traits to adopt new digital environments, achieve competitive tasks independently with deadlines, innovative skills and leadership initiatives. Therefore, it has seen that as (DCMS, 2000) mentioned graduates in LIS have to enhance comprehensive skills in technology, business communication and marketing because those skills are demanding in the fields of LIS very much today than the yesterday. In addition, changing patterns of employment in the digital marketing world new graduates has to acquire adequate professional resources to meet employers' needs. Sometimes, employers' desire is to be young graduates to deploy in remote destinations, but connect digitally via sophisticated technology. This kind of flourish working environment (Hillage and Pollard, 1998) explained as the capability to understand self-sufficiency in the labor markets while realizing the potential for the digital market. Therefore, young graduates in LIS should understand that the individual employability depends on their knowledge, skills and attitudes. So, employers may critically look at the graduates as the valuable assets for them to meet demanding challenges to the digital market whilst face changes in the marketing of goods and services with digital commodities.

Therefore, higher educational institutions have to revamp the courses and modules of teaching and learning in LIS. Similarly, the academic staff has to encourage the young graduates in LIS are just not ready to find a job after their university graduation but to improve the higher level of competencies. It would trace the long-term employability throughout the career span. So, the importance of university degrees with the real marketing values of them as (Lees, 2002) urged that university degree programs have to incorporate to enhance team developments, gain work experiences, and promote work-based projects. As a result, (Rehman, and Ansari, 2005) explained that the young graduates' knowledge and skills should reflect having strong capabilities grab the jobs and can satisfactorily compete with demands on the digital markets. It is very obvious that jobs of the digital markets are leading towards to knowledge base industries, therefore, Knowledge Agencies (KAs) and Knowledge Industries (KIs) have to play key roles. Digital marketers without any hesitations need flexible and multi-skills young graduates in LIS with an excellent management, marketing and communication know-how attributes. It has seen very openly that they are continuously hunting young graduates in LIS with strong technical, business and marketing skills because the changing digital job markets that

require adequate professionals as well as resource persons to establish sustainable economies in the world while creating competitive job opportunities for expertise. This ever-changing and challenging phenomenon has to be accommodating very positively by LIS professionals because of it is vital for the present business and marketing environment of the library field. As (Jackson et.al, 1994) elaborated the creative KAs and KIs are significantly have to link with multi-activities jobs that basically can be full-time or part-time as well as online or remotely. The importance of multi-talented the young graduates with capacities to cope with multi-activities as (Aharony, 2008) explained that many graduates in LIS do not have skills and knowledge what the knowledge economy wants. Also, most of the university courses of LIS do not teach and explain the available potentials have for LIS graduates. Therefore, many young graduates in LIS may not have opportunities to contribute economic and societal developments in many economies of the world.

It has evidence that most of the employers in the digital market are consistently looking for young graduates in LIS with job-related as well as other transferable skills to complete the assigned tasks effectively and efficiently. Therefore, employers of the digital market are eagerly looking for the young graduates with excellent skills in communication, teamwork spirits, sophisticated skills and knowledge in ICTs, experiences in Research and Development, and skills in critical thinking and problem-solving. And also, advanced knowledge in technical know-how because technical friendly is one of the facts to subsist or disappear the LIS jobs of the digital technology. It has seen that many jobs of LIS are still scrutinizing due to lack of awareness and knowledge of professionals in the digital market and not using of its advantages in fully with self-motivation to cope with challenges.

However, it seems to be that expertise of LIS graduates in knowledge and skills are still shortage to meet the current demands. Sometimes this has been reflected on very broadly with other graduates because they are far ahead than LIS graduates. Therefore, those shortages are still similar and validate even for today, because most of the young graduates in LIS are looking for long-established professions. They are so fearful of new competencies in ICTs and the components of the digital knowledge economies.

However, it has very importantly reflected that some of the skills and expertise are most frequently demanded by employers may be difficult to teach in classroom settings. Those areas may be customer services that involve attributes like interpersonal skills, user-centric, personal characteristics and so on. But, one of the key responsibilities of the teaching panel is to prepare graduates with demanded skills,

knowledge and expertise than just encouraging them to obtain a degree or become a degree holder with photocopied lecture notes. Further, lots of changes in digital knowledge in teaching and learning in LIS are being happened. So, as (Epure, Vasilescu and Mihaes, 2015) documented that professionals and academicians have to crucially re-think new way of teaching the subject knowledge. So, it might be the best way to introduce e-learning systems instead of the traditional teaching and learning systems. In additionally, as (the Economist, 2014) and (World Economic Forum Report, 2016) pointed out that the young graduates should encourage to consume assets of digital knowledge heavily because without that experiences and knowledge they are unable to perform their duties well. It seems that nowadays just being the technology novice is a huge disadvantage. Therefore, as (the Association of Graduate Recruiters, 2003; Skills Dialogues, 2002 and LMI Briefing, 2001) urged that graduates job hunting may be a massive demand of the future of new jobs title and very specific targets. So, most important and practical ways in which bring students from the classroom to digital teaching and learning environments with enhancing of needed skills, knowledge and expertise in technologically know-how and let proactively engage with digital job market before students offer degrees.

METHOD

This study was carried by analyzing of 1986 online job announcements in LIS field which were Technology Orientated jobs (1233), Communication Orientated Jobs (513) and Research & Development Oriented Jobs (240) based on content analysis to identify what kind of factors potential employers are considering to recruit the young graduates in LIS. Therefore, the study has collected, collated and analysed the results of 1986 job announcements of LIS have been posted by the digital markets in the Internet during three years. The study has included all the job announcements in the LIS profession considering of the tasks and roles, responsibilities, qualifications, experiences, but without the location of the job availability.

FINDINGS

Nowadays most of the jobs including in the field of LIS have been facing tremendous challenges due to influences of advancement of Information and Communication Technology. Further, digital knowledge market and the competitive advantage create more opportunities for young graduates who have intuitive skills and knowledge to engage with digital knowledge market. Therefore, most of the employs especially who engage with digital knowledge market and economy look for young graduates who have knowledge and skills in ICTs including professional

qualifications and experiences. As a result, this study has found key areas of skills and knowledge that young graduates in LIS have to gain to find well-paid and satisfactory jobs in the digital knowledge market.

One of the significant and noticeable fact found from the audited online job announcements are most of the digital marketers demanded a first degree in LIS from the accredited university or institution. At the same time, the young graduates that have completed post-graduates qualifications are given priority to recruit. Also, graduates with PhDs in LIS are most welcomed. Apart from the basic and post-graduate degrees, most of the employers have demanded communication skills mainly in the English Language. Similarly, some are demanded any other European Languages with the Chinese Language. So, communication skills are concerned that professionals in LIS have to consider to introduce newly thriving languages from the booming economies of the world to the new graduates in LIS. One of the very identical languages is the Chinese Language because it is shaking the entire service sectors in the world by playing as the business communication language.

A part from communication skills including languages, this study has found three areas of expertise that digital marketers are demanding from the young graduates in LIS. So, based on the analyzed data those areas are presented in three heading as shown in table 1.1. Further, it can be understanding that those set of specific skills, knowledge and expertise are inter-related and cannot demand and request as individual attributes. Therefore, graduates in LIS have to excel in ICTs skills including web developments and related domain, communication skills including languages and general skills but key areas in teaching, research and development domains.

Table 1.
Domains and Excel Skills

Domains	excel skills	know how
Technological Domain	Web language	troubleshooting, maintaining, upgrading, creating
		webpage, graphic interface, digital marketing, digital
Communication Domain	interpersonal skills, foreign language/s, negotiating skills,	communication skills, on teamwork, outreach solving
Research & Development Domain	analytical skills, teaching skills, comprehensive literacy skills,	negotiation, distance teaching and learning services, positive and proactive customer service skills.

So, the young graduates in LIS have to critically consider to excel their competences in below domains as the digital job marketers demanding those skills and knowledge nowadays.

To understand the holistic view of the domains and the excel skills, the researcher has manually calculated the position introduced terms and based on that occurrence ranked the position number one to three as in table 2.

Table 2.
Positions Rate

Positions	No of position	Proportion
Technology Orientated	1233	62 %
Communication Orientated	513	25 %
Research & Development Orientated	240	13 %
Total	1986	100 %

It has reflected on the job announcements that graduate of skills and knowledge in information and communication technology and familiar with their services have more opportunities to meet the terms of the job requirement because it has shown those skills more required that is 1233 (62%) s. Further, it has denoted that new graduates must furnish with ICT skills and their robust developments to face challenges to emerging digital job market. Therefore, digital and web-related skills and language are also in high demand ever before, because most roles and tasks in digital marketing are taken place in online environments. Most of the job announcements hinder that one of the requirements is working experience and knowledge in programming languages are extra value added because it assists in numerous ways to carry out technology-oriented tasks to excellent customer satisfaction. As a result, job announcements are very clearly indicated that graduates that have ample experience, as well as knowledge in web related tasks, have huge demands on the digital job market. Therefore, the young graduates that are holding only the degree qualifications in LIS have fewer demands because looking for only that qualifications have appeared only in two job announcements.

Communication-oriented positions which 513 (25%) is the second highest demanded jobs because it has shown that new graduates have to work with selling, promoting and distributing of goods and services. Therefore, having skills and knowledge in designing and delivering of new digital products and services online are values added for the degree. Also, some employers especially look for teamwork skills to carry out collaborative tasks with graduates in other subject areas to support lifelong learning. Simultaneously, most of the job announcements ask for foreign language' skills with advanced capabilities both in oral and written. It is significant

that some job announcements (812 in number) seek graduates that good at the Chinese Language. It has evidenced that those employers look those graduates, especially in instruction skills.

So, the results gigantically have shown that most of the employers' interested in graduates that capable of skills and knowledge in technology and communication skills that almost 87%. However, most of the degree programs in LIS seem to be given less priority to ICTs and to enhance other skills such as interpersonal skills, communication skills, foreign language/s skills, negotiating skills, problem-solving skills, and analytical skills etc.

However, most of the job announcements have shown that employers' perceptions of graduates have changed from the various perspective as the result of influences of the digital knowledge economy. It has indicated that what new digital job market requires from the young graduates in LIS cannot totally fulfil those demands on the LIS degree programs. As a result, least importance is given for the research and development domain because it reflected that those areas of expertise can obtain from other young graduates. Therefore, the said domain is just 240 (13%) in number and all the job announcements are same and asked very common skills and knowledge. So, jobs in the open position are hiring by employers for teaching and/or teaching assistance tasks which are directly involved with a classroom. But, a very few occasions it saw that for knowledge enhancements of the time of this study.

CONCLUSION

The digital knowledge economy has already buzzed with industries that are already joined with digital products to operate in robust digital environments. But, the educational institutes that producing of new and young graduates in LIS is far behind to cater to the digital job market of the economies. However, that is critically questionable what are the behind key problems of graduates in LIS are not preparing to meet job demands in the world? That evokes not to prosper economies in the world as well as the employment prospects for various perspectives. Therefore, the existing curricula and teaching and learning methods in LIS seem to do not fully cater to emerging digital job market. Therefore, instead of stay-at-home jobs in LIS, the study found expertise has to be excel without further delay. It is very significant that young graduates have to excel knowledge and skills in communications, service orientation, teamwork, innovation, and creativity. Therefore, this study is highly recommended that the continuous curriculum revisions are needed with high participation and collaboration with potential employers. That will scrutinize the environment for them to prepare themselves for the demands on the digital job market.

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