Considering the Significance of Digital Competences on Social Sciences Graduates' Employability: Views From Young Professionals on Board

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ABSTRACT

Purpose

The aim of this paper is to identify and discuss the significant of digital competency needed for employability, on young professional in Malaysia. What is expected by the employer when they enter the labor market? **Design/methodology/approach** – The study used qualitative design. Focus group discussions were used to collect data from young graduates who able to secure job right or within 6 months after graduate. Data collected were analysed using thematic categorization. Results were presented using descriptive and narrative form. An inductive approach used to understand and analyse the ability of being employed. Round-table talk are the primary sources for this paper. **Findings** –. The study identifies key digital competencies that contribute to the employability of young professionals in Malaysia. These include digital academic knowledge, digital communication, digital problem-solving, and digital work experience. Among these, digital work experience appears to be of higher priority, playing a critical role in the successful employment of Social Sciences graduates in Malaysia. **Practical implications** – The findings of this study provide valuable insights for higher education institutions in developing professional development plans aimed at equipping students with the necessary digital skills. The study underscores the importance of adopting the right competencies within university curricula to align with industry demands. Furthermore, it highlights the need for the redesign of relevant courses to enhance graduates' performance and maintain their competitiveness in the labor market. **Originality/value** – This paper is to identify the comprehensive of digital competency expectations of young professionals of Social Sciences in Malaysia. At the same time, it identifies differences in the competency expectations by the employer and competency possessed by the young professionals. **Research limitations/implications** – The empirical part of the study was limited to the Social Sciences young professionals in Malaysia. A similar study covering all sectors of the national economy will offer a complete on the skills needs for various field and its preparedness to contribute in the emerging digital economy. **Novelty:-** This study provides original insights into how young professionals perceive and apply digital competencies within their early career experiences. It contributes to the ongoing discussion on digital employability by presenting qualitative evidence from Malaysian Social Sciences graduate.

Keywords: Digital competency, Knowledge, Attributes, young professionals, business graduates, graduates.

INTRODUCTION

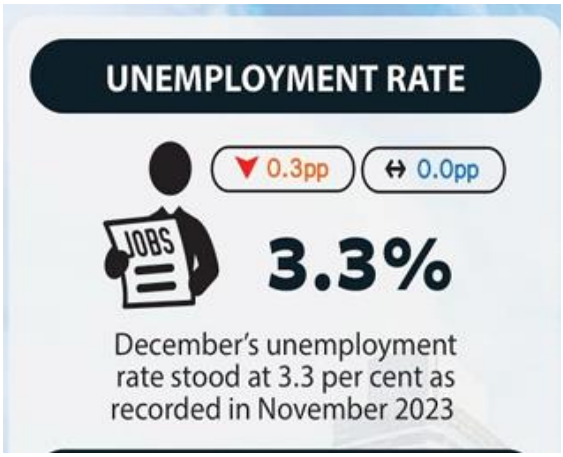
The Fourth Industrial Revolution (Industry 4.0) and the accelerating pace of digital transformation continue to reshape industries worldwide. Driven by technological innovation, this revolution has fundamentally changed how individuals live, learn, and work. It has also created growing expectations for a digitally competent workforce capable of adapting to dynamic and technology-driven environments. As organizations increasingly depend on digital solutions for efficiency and productivity, employees are expected to possess strong digital competencies that support performance in hybrid and flexible work settings (Aroles et al., 2021; Vyas, 2022).

In developing countries such as Malaysia, the expansion of professional education has been vital in supporting the knowledge-based economy. However, while higher education institutions have produced a large number of graduates, many employers continue to report a lack of essential digital and employability skills among new entrants to the workforce (Pitan, 2016; Senior & Cubbidge, 2010). The mismatch between the competencies developed at universities and those required by industries has raised serious concerns about graduate readiness for employment.

Previous studies highlight that the lack of employability skills, particularly digital and transferable competencies, has affected graduates' ability to compete in a saturated job market (Cheong, Hill, Leong, & Zhang, 2018; Razak, Yusof, Syazana, Jaafar, & Talib, 2014). Employers expect young professionals not only to demonstrate disciplinary knowledge but also to apply digital tools effectively to problem-solving, communication, and collaboration. As Tomlinson (2017) argues, universities must take greater responsibility for ensuring students develop both discipline-specific and generic skills aligned with labour market expectations.

In Malaysia, graduate unemployment remains a persistent issue. Data from the Ministry of Higher Education (2023) shows that many graduates struggle to find employment within six months after graduation, with Social Sciences graduates representing a significant portion of the unemployed cohort. According to the Ministry of Economy and the Department of Statistics Malaysia (2023), the national unemployment rate remained at 3.3%, with the Social Sciences field recording the highest proportion of unemployed graduates. This trend reflects an urgent need to strengthen digital and professional competencies among these graduates.

Figure 1. Percentage of unemployment rate, Nov2023

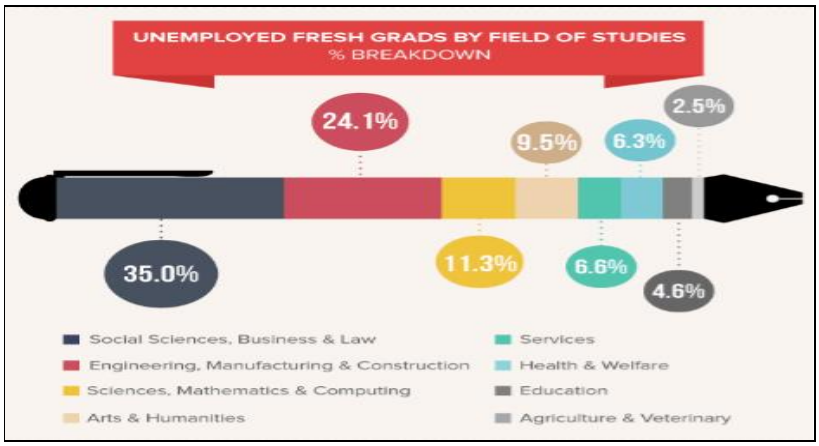


Note: Adapted from Ministry of Economy, DOSM

Statistic showed the highest percentage of unemployment according to the field of studies in Malaysia for the year 2019, are those form Social Sciences field with 35%, Engineering field with 24%, Sciences field with 11.3% and the remaining percentage on other fields (see Figure 2). Agreed with Perianez-Canadillas et. al (2019) where there is unclear classification of what kind of competences these social sciences field should be acquired for employability. Thus the robustness of definition on digital competency is mixed-up with other field.

Industry leaders have emphasized that many graduates, while knowledgeable in their academic disciplines, lack the practical digital competencies required to navigate modern workplaces (Mazlan, Manaf, Ahmad, & Zawawi, 2017). Potential employers often select from a large pool of candidates, prioritizing those who demonstrate strong digital readiness and workplace adaptability (Ministry of Higher Education Malaysia, 2019). Consequently, graduates are expected to equip themselves not only with subject matter knowledge but also with the digital fluency and work experience necessary to remain competitive.

Figure 2. Percentage of unemployed graduates by field.



Note: Adapted from Ministry of Higher Education Malaysia, Graduate Tracers Study

Digital Professional as having domain knowledge, work place, business, and digital skills. Yet despite the industry calls that universities should deliver well-qualified digitally literate graduates, studies to date narrowly define employability for specific disciplinary jobs, overlooking the need for digital career competencies (Fossatti et al., 2023; Rˆ ego et al., 2023). Those are the relevant skills and required by current 21st century.

This study therefore aims to analyze how digital competencies influence employability among young professionals from the Social Sciences field in Malaysia. It explores the digital skills and attributes that enable graduates to secure employment and identifies the competencies most valued by employers. By focusing on graduates who successfully transitioned into employment, this paper offers insights into the specific digital competencies that support employability and highlights implications for curriculum improvement in higher education institutions.

LITERATURE REVIEW

Knowledge, Skills, and Attributes of Young Professionals

Employability has long been linked to the possession of relevant knowledge, skills, and personal attributes that enable individuals to secure and sustain employment. Graduates entering the workforce are expected not only to apply their disciplinary knowledge but also to demonstrate critical thinking, communication, and problem-solving skills — qualities that are increasingly shaped by digital tools and technologies (Gałan, 2022; Saputra et al., 2021).

According to Karacay (2017), the modern workplace demands employees who can collaborate and communicate effectively in digital environments. Employers today generally express satisfaction with graduates' technical or subject-specific knowledge but often report deficiencies in transferable or soft skills, including teamwork, creativity, and self-management (Perianez-Canadillas, Charterina, & Pando-García, 2019). These gaps emphasize the importance of developing holistic graduates who possess not only academic qualifications but also the ability to adapt to technology-mediated work settings.

Figure 3 summarizes the most frequently cited employability skills and attributes from prior studies. These include analytical ability, research competence, computer literacy, technological adaptability, problem-solving, communication, and professionalism (Belwal, Priyadarshi, & Al Fazari, 2017; Finch et al., 2016; Jayasingam

et al., 2018; Knight & Yorke, 2003). Such attributes constitute the foundation of graduate employability across disciplines and are particularly vital for Social Sciences graduates whose work contexts often require interpersonal, analytical, and digital collaboration skills.

Figure 3. Skill/Characteristics on employability.

Characteristics / Skills		Author(s)
Analytical skills	Verbal skills	(Galan 2022, Cheong et al., 2018; Education and Training, 2017; Finch et al., 2016; Jayasingam et al., 2018; Knight & Yorke, 2003; Mazlan et al., 2017; Md Razak, Yusof, Syazana, Jaafar, & Talib, 2014; Pool & Sewell, 2007; Yusof & Jamaluddin, 2015)
Research skills	Written skills	
Computer skills	Teamwork skills	
Technological skills	Professionalism	
Interpersonal skills	Management skills	
Problem solving skills	ICT skills	
Creative skills	Critical thinking	
Innovative skills	Intellectual skills	
Communication skills	Lifelong skills	

Overall, employability skills represent a combination of hard and soft capabilities that enable graduates to function effectively in both academic and professional environments. These competencies are integral not only to obtaining employment but also to sustaining career development in an evolving digital economy.

Digital Competence and Employability

The global shift toward a digital economy has redefined employability by embedding technology within nearly all work processes. Graduates are increasingly required to possess digital literacy — the ability to effectively use information and communication technologies (ICT) to manage information, communicate, solve problems, and innovate (Goulart et al., 2022; Kipper et al., 2021).

Digital competence, therefore, extends beyond basic technical skills. It encompasses the capacity to apply technology critically and creatively to achieve work-related goals (Singh, Chawla, Agarwal, & Desai, 2017; Thien, Abd Razak, & Ramayah, 2014). In the Social Sciences context, digital competence is distinct from that in technical fields such as engineering or IT. It often involves skills related to e-learning, data analysis, online communication, and the ethical use of digital resources (Hu, Lee, Yen, & Tsai, 2009; Tsohou & Holtkamp, 2018).

Martin (2008) describes digital competence as a key dimension of employability, representing the foundational ability to use technology for learning, communication, and work. In Malaysia, digital competence has been identified as an important determinant of graduate employability (Cheong et al., 2018; Yusof & Zakiyah, 2017). Employers now expect graduates to demonstrate digital fluency — the capacity to integrate digital tools in decision-making, collaboration, and problem-solving.

Moreover, graduates with strong digital competencies tend to display higher adaptability, productivity, and marketability in the workplace (Murawski & Bick, 2017; Bokek-Cohen, 2018). While previous research has largely focused on digital competencies among students and educators, less attention has been given to the professional development of graduates after entering the workforce. This study addresses this gap by exploring how Social Sciences graduates apply digital skills in their early careers and how these competencies influence their employability outcomes.

RESEARCH METHODOLOGY

This study adopted a **qualitative research design** to explore the perceptions of young professionals regarding the digital competencies required for employability. The qualitative approach was chosen to allow participants to share in-depth insights into their lived experiences and reflections on how digital skills influence their transition from university to the workplace.

Research Design and Rationale

A focus group discussion (FGD) method was used to gather data. This approach was appropriate because it encourages open dialogue among participants, allowing them to collectively identify, interpret, and discuss issues related to employability (Sekaran & Bougie, 2010). The focus group method also enables the researcher to capture shared meanings and variations in perception among individuals with similar educational backgrounds and professional experiences.

Participants and Sampling Procedure

Participants were young professionals in Malaysia who graduated from Social Sciences programs and were either employed immediately or within six months after graduation. A total of 20 participants were purposively selected based on the following inclusion criteria:

1. Graduates of Malaysian higher education institutions (public or private).
2. Degree holders in Social Sciences fields such as business, communication, or management.
3. Individuals who have entered the workforce within the past two years.

Two separate focus group sessions were conducted, one with participants who were employed within six months after graduation and another with those who took more than six months to secure employment. Each group consisted of 10 participants, aligning with Collis and Hussey's (2014) recommendation that a focus group should include between five and ten members to ensure balanced participation and manageability.

Data Collection Procedure

The focus group sessions were conducted face-to-face at Universiti Teknologi MARA (UiTM), Shah Alam, in October 2019. Each discussion lasted approximately 90 minutes to two hours. Sessions were moderated by the researcher, who facilitated the discussion using a semi-structured question guide. The guide covered topics such as:

- graduates' perceptions of digital competencies acquired during university,
- employers' expectations of digital skills,
- challenges faced in applying digital knowledge at work, and
- reflections on how digital competence contributes to employability.

All sessions were audio- and video-recorded with participant consent. The recordings were subsequently transcribed verbatim and cross-checked for accuracy. Participants were assured of confidentiality, and pseudonyms were used in transcripts to protect their identities.

Data Analysis

The data were analyzed using thematic analysis, following the inductive approach proposed by Braun and Clarke (2006). The process involved several stages:

1. Familiarization – reviewing the transcripts repeatedly to identify patterns of meaning.
2. Initial coding – generating descriptive codes to capture relevant features of the data.
3. Theme development – grouping related codes into broader categories representing aspects of digital competence.

4. Reviewing and refining themes – checking coherence within themes and relevance to the research objectives.
5. Defining and naming themes – formulating clear conceptual categories such as digital academic knowledge, digital communication, digital problem-solving, and digital work experience.

These steps ensured transparency and consistency in the analytical process. The analysis focused on identifying how participants described their digital skill development, how these skills were applied in professional contexts, and how they influenced employability outcomes.

Trustworthiness and Credibility

To enhance credibility, triangulation was achieved through multiple data sources (two focus groups) and researcher debriefing after each session. Member checking was also conducted by sharing summary notes with participants to validate interpretations. The study maintained an audit trail documenting decisions during data collection and analysis.

Findings

Demographic profile

The demographic profile of respondents as presented in Figure 4. The two groups are divided into "employability within 6 months after graduate" and "employability more than 6 months after graduate".

Figure 4. Profiling the respondents.

Gender	Information	Within 6 months (Frequency)	Percentage %	More than 6 months (Frequency)	Percentage %
Gender	Female	6	60%	4	40%
	Male	4	40%	6	60%
Types of Institutions	IPTA	8	80%	5	50%
	IPTS	2	20%	5	50%
Age	21-22yrs	0	0%	2	40%
	23-24yrs	6	50%	5	50%
	25-26yrs	6	50%	3	30%
Education	Diploma	2	20%	5	50%
	Degree	8	80%	5	50%
	Master	0	0%	0	0%

Income	<RM2000		0%	2	20%
	≤RM2000≥	8	80%	4	40%
	RM3000>	2	20%	4	40%

From the demographics profiles, it seems female has higher chances compared to male in securing their first job. Industry chose IPTA as their first option in selecting new people on board. (Bustamam, Mutalib, & Yusof, 2015).

FINDING AND DISCUSSION

The findings from the focus group discussions revealed that both hard and soft digital skills play a crucial role in shaping the employability of Social Sciences graduates. Thematic analysis identified four key dimensions of digital competence that participants perceived as vital for securing and sustaining employment:

1. Digital Academic Knowledge
2. Digital Communication
3. Digital Work Experience
4. Digital Problem-Solving

These themes are discussed in detail below, supported by examples from participant insights and related literature.

Digital Academic Knowledge

Participants emphasized that academic digital knowledge, encompassing information search, data organization, and use of academic software, was foundational to their employability. Graduates who could efficiently use digital tools for research, information management, and data visualization were seen as more competitive and adaptable in the workplace.

“The digital skills I learned in university helped me adapt faster at work. I already knew how to handle data and reports using digital tools, which my employer valued.” (Participant 3)

This finding aligns with Kee et al. (2023), who noted that the ability to identify, analyze, and ethically manage digital information reflects an individual’s readiness for digital workplaces. Employers view such academic-based digital literacy as a strong indicator of adaptability and professionalism.

Therefore, universities play a critical role in embedding digital literacy into course design. Digital academic knowledge acquired during higher education enhances graduates’ analytical thinking, strengthens problem-solving capacity, and improves their employability in an increasingly data-driven economy.

Digital Communication

Digital communication emerged as the second major theme. Participants highlighted the importance of using digital platforms to communicate, collaborate, and engage across organizational and cultural boundaries.

“Most of our communication now happens through digital platforms, emails, Teams, Zoom, or Slack. Employers expect us to manage information and communicate professionally online.” (Participant 8)

Effective digital communication supports both internal collaboration and external engagement, enabling faster decision-making and team coordination. This finding is consistent with Karacay (2017), who emphasized that digital communication skills underpin teamwork and productivity in Industry 4.0 environments.

The ability to communicate confidently through digital tools was perceived as a major differentiator among job applicants. Graduates lacking these competencies often experienced challenges in remote or hybrid work settings. Hence, integrating digital communication modules into Social Sciences programs can enhance employability by preparing students for diverse digital workplace interactions.

Digital Work Experience

Among the four themes, digital work experience was identified as the most influential factor in securing employment. Participants with internship or part-time experience involving digital systems, data management software, or social media analytics were more likely to be recruited.

"Having digital work experience during my internship made a big difference. I learned how companies actually use digital tools for operations, not just theory." (Participant 12)

This observation echoes Bridgstock et al. (2019) and Finch et al. (2016), who reported that employers value hands-on exposure to digital tools as it reduces the training gap and increases immediate work readiness.

Digital work experience not only reinforces technical capability but also fosters confidence, collaboration, and self-efficacy. Universities should therefore collaborate with industries to design internship programs that emphasize practical digital skills, allowing students to translate classroom knowledge into workplace performance.

Digital Problem-Solving

Participants viewed digital problem-solving as a higher-order skill that integrates analytical reasoning with the effective use of digital tools. It involves identifying digital needs, evaluating alternative tools, and applying appropriate technologies to resolve challenges.

"At work, I often need to troubleshoot or find better digital methods to complete tasks. Knowing how to select the right tool saves time and improves accuracy." (Participant 17)

This theme supports the perspective of Kee et al. (2023) and Ahmad Tajuddin et al. (2022), who described digital problem-solving as essential for innovation and decision-making. Graduates capable of leveraging technology to design efficient solutions were perceived by employers as proactive and adaptable, key traits for long-term employability.

Digital problem-solving also encompasses the ability to learn new technologies independently. Such self-directed learning is critical for maintaining relevance in rapidly evolving work environments, further reinforcing the link between lifelong learning and employability.

Summary of Key Findings

The focus group findings affirm that digital competencies are multidimensional, interlinking

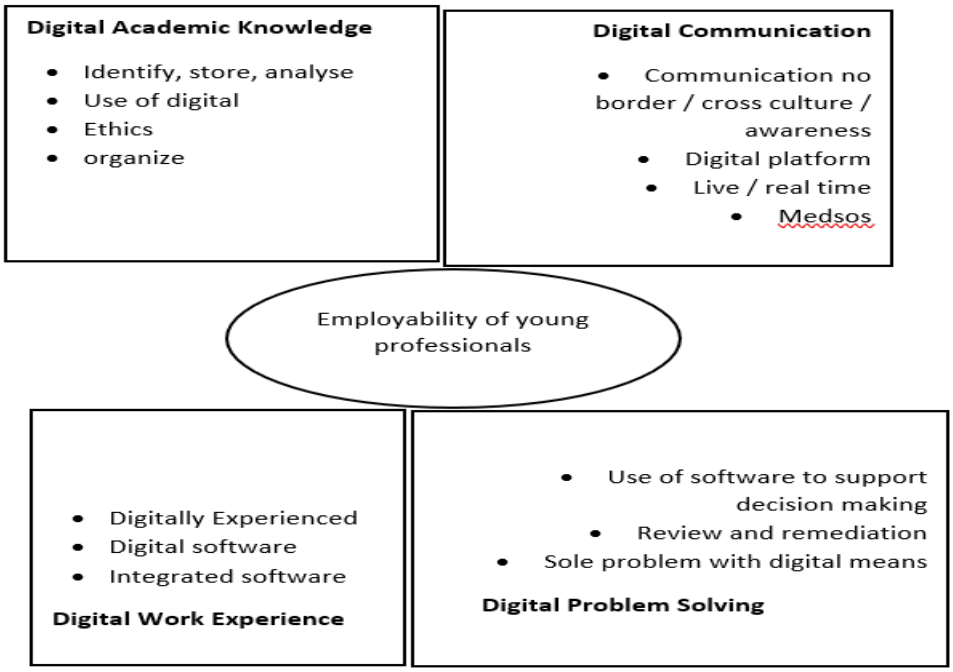
technical, communicative, and experiential skills. Figure 5 presents a summary of the relationships between the identified themes and their influence on employability outcomes among Social Sciences graduates.

- Digital Academic Knowledge → strengthens analytical and information management capabilities.
- Digital Communication → enhances collaboration and remote work efficiency.
- Digital Work Experience → builds professional confidence and practical know-how.
- Digital Problem-Solving → enables adaptability and innovation in the workplace.

Collectively, these dimensions demonstrate that digital competence extends beyond technical proficiency, it is a critical employability asset that determines how graduates integrate, perform, and progress within the workforce.

Above all, the graduates must be adaptive to all the latest technologies and skill sets required by the job and the changing employment scenario. Result by Pitan (2017), on employer's expectations in Nigeria, there were 99.5% respondents from management staff, proof that problem solving is a must have criteria for graduates students when entering a real work. Therefore, with the help of digital aid, it will make easier for them to solve digitally. Such skills not only make them competent and valuable but also guarantee them in sustainable career as expected.

Figure 5: Views on importance employability criteria of social sciences young professionals



CONCLUSION

Young professionals from Social Sciences fields in Malaysia continue to face strong competition upon entering the labour market. As highlighted in previous studies, when graduates' competencies improve, their employability correspondingly increases (Cheong et al., 2018; Razak et al., 2014; Sharmila & Sowmiyaa, 2013a). However, Social Sciences graduates are often at a disadvantage compared to those from technical or scientific disciplines, as they must compete not only within their own field but also across sectors that increasingly demand advanced digital skills.

This study reinforces the importance of digital competencies as a determinant of employability. The four key dimensions identified, digital academic knowledge, digital communication, digital work experience, and digital problem-solving, represent the essential skills that should be prioritized in higher education. These findings are consistent with Colomer et al. (2018), who emphasized that academic studies on digital competencies are expanding across different professional fields. Similarly, Hack-Polay (2020) suggested that closer partnerships between universities and industry stakeholders can enhance graduate readiness by integrating real-world expectations into curriculum design.

The results indicate that digital work experience is the most critical factor influencing employability. Graduates with practical exposure to workplace technologies demonstrate higher adaptability and confidence, enabling them to perform effectively in the digital economy. This supports Adeyinka-ojo, Lee, and Teo (2019), who noted that digital technology provides opportunities for more active learning and individualized adaptation, ultimately improving employability outcomes. Likewise, Cotet, Balgiu, and Negrea (2017) and

Maskun, Musa, and Saidon (2018) found that digital competencies are integral to the development of skills and knowledge required for future employment.

In line with these findings, higher education institutions must ensure that their curricula respond effectively to evolving digital demands. Collaborative partnerships with industry will enable the inclusion of digital literacy, data management, and technology-based communication modules that align with workforce expectations (Perianez-Canadillas et al., 2019). Such initiatives will not only strengthen graduates' employability but also help bridge the persistent mismatch between educational outcomes and labour market needs.

Moreover, this study supports Kee et al. (2023), who emphasized that digital literacy has become a fundamental requirement for most white-collar professions, underscoring the necessity of technological proficiency for workforce entry. Policymakers can therefore play an essential role by advancing digital education initiatives and investing in programs that foster digital skills among both students and educators.

In conclusion, the study demonstrates that enhancing digital competencies, through academic learning, practical training, and workplace experience is vital for graduates' long-term employability. By embedding digital elements across curricula, universities can ensure that graduates are better equipped for the realities of the Fourth Industrial Revolution. As a result, Malaysia's higher education institutions will not only produce digitally capable graduates but also contribute to the nation's broader agenda of developing a sustainable, technology-driven workforce.

RECOMMENDATIONS, LIMITATIONS AND FUTURE RESEARCH

Based on the findings, several recommendations are proposed to strengthen digital competency development and enhance the employability of Social Sciences graduates in Malaysia. Higher education institutions should embed digital competency training as an essential component of the curriculum. This can be achieved through:

- integrating digital literacy and communication modules across academic programs.
- collaborating with industry partners to provide hands-on digital work experiences; and
- encouraging problem-based learning and projects that cultivate digital problem-solving skills.

These efforts will help bridge the gap between classroom learning and workplace expectations, ensuring graduates are more responsive to the demands of the Fourth Industrial Revolution. Policymakers are also encouraged to invest in digital education initiatives and to establish national frameworks that standardize digital competency benchmarks across disciplines.

This study has two main limitations. First, as it employed a qualitative focus group design involving a small number of Social Sciences graduates, the results may not be generalized across all disciplines or institutions. Future studies could expand the participant base or adopt a mixed methods design to verify and extend these findings.

Second, the study focused on graduates' perspectives without including employers or policymakers. Incorporating these stakeholders in future research would provide a more holistic understanding of how digital competencies influence employability and curriculum development.

Future research should also explore how different sectors define and apply digital competence, as well as how universities can measure digital readiness among students prior to graduation. Comparative studies across institutions or countries could further strengthen understanding of how educational practices align with global digital workforce trends.

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