

Bridging the Gap: Digital Communication Competencies as Social Capital for Accounting Graduates

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ABSTRACT

The Fourth Industrial Revolution (4IR) has fundamentally transformed the accounting profession, automating transactional compliance and shifting the role of accountants to strategic, data-driven business advisors. Traditional accounting education has relied on Human Capital Theory (HCT) to emphasise individual technical proficiencies. However, this perspective overlooks the relational and network-based resources that graduates must activate to translate their expertise into employability outcomes. Hence, this study addresses this gap by proposing that digital communication competencies function as a critical form of social capital or enabling resources that promote access to relational networks in a virtual professional environment. Drawing on Social Capital Theory (SCT), we outline the theoretical mechanisms by which digital communication skills enhance the three interrelated dimensions of social capital, namely structural, relational, and cognitive. We present a conceptual framework with three testable propositions to guide future empirical research, arguing that the current accountant's employability and career development depend not solely on human capital, but on how effectively they mobilise their expertise through digitally mediated social relationships.

Keywords: Accounting Employability, Digital Communication, Social Capital Theory, 4IR

INTRODUCTION

The accounting profession is undergoing an unprecedented digital transformation. The influence of the Fourth Industrial Revolution (4IR), such as robotic process automation, blockchain, cloud systems and big data analytics, has automated routine transactional activities and financial bookkeeping (Busulwa et al., 2026; Tsiligiris & Bowyer, 2021). Consequently, the contemporary accountant's role has shifted from passive record-keeping to a forward-looking business advisor (Yassin & Toumeh, 2024). This structural shift has exacerbated the expectation-performance gap in accounting education, with employers consistently reporting that graduates have sufficient technical knowledge but lack the non-technical competencies needed to thrive in professional practice (Nie & Mastor, 2024; Tan et al., 2022).

Historically, both academic curricula and employability models have been anchored in Human Capital Theory (HCT), which conceptualises education as an investment that enhances an individual's technical capabilities and cognitive productivity (Gold et al., 2026). However, HCT assumes that technical proficiency automatically translates into career entry and professional success (Gold et al., 2026; Mhlongo, 2020). In a digitally mediated and networked business environment, this individualistic and contextual view is insufficient to ensure graduate readiness (Nahapiet & Ghoshal, 1998; Sondakh & Morasa, 2026). Graduates will encounter a highly complex, network-driven labour market in which the ability to project competence, establish relationships, and collaborate virtually across diverse organisations is paramount (Steenkamp et al., 2024). To bridge this gap, this study proposes digital communication competencies as social capital-enabling resources. Grounded in Social Capital Theory (SCT), this study argues that digital communication competencies are not merely

isolated soft skills or technical capabilities. It provides the primary mechanism through which accounting graduates build structural network ties, generate relational trust, and establish cognitive alignment in a technology-driven environment. It reflects social capital, which comprises resources embedded in, available through, and derived from networks of relationships (Nahapiet & Ghoshal, 1998). By conceptualising digital communication as the driver of social capital generation, this study moves beyond HCT, offering a holistic, multidimensional framework for understanding and enhancing the employability of accounting graduates.

LITERATURE REVIEW

Accounting Graduate Competencies and Employability

Current issues in accounting graduate employability have increasingly focused on the gap between technical training and market expectations (Nie & Mastor, 2024). Employer demand has moved beyond basic mathematical calculations to a combination of digital fluency and transversal skills (Suarta et al., 2023). Previous studies identify several distinct categories of digital competencies required of modern graduates, including spreadsheets, database querying, business intelligence tools and data analytics (Guo, 2026; Mohd Zain, Muhamad, et al., 2026). However, technical digital literacy represents only part of the employability requirement. As professional services are increasingly delivered via hybrid or fully virtual platforms, graduates must be able to communicate technical insights clearly and adaptively across multi-channel digital formats (Busulwa et al., 2026). Without these skills, graduates face challenges to professional entry and long-term career progression, highlighting the need for holistic curriculum interventions that blend technical skills with professional interaction (Zotorvie et al., 2024).

Social Capital

Social capital theory emphasises that the structure and quality of social relationships can provide significant benefits for individuals and organisations (Tsounis & Xanthopoulou, 2026). Scholars generally agree that social capital is a multidimensional resource generated through interpersonal interactions. It encompasses both network ties and shared values, such as trust and reciprocity, which facilitate cooperation and collective action (Tsounis & Xanthopoulou, 2026). The distinguished framework is Nahapiet and Ghoshal's (1998) three-dimensional model, which categorises social capital into structural, relational and cognitive social capital. Based on their study, structural social capital represents the impersonal configuration of linkages between "who you reach and how you reach them". Relational social capital is created and leveraged through relationships, focusing on mutual trust, norms and reciprocity (Tsai & Ghoshal, 1998). Meanwhile, cognitive social capital refers to shared representations, interpretations, and systems of meaning, including shared language, codes, and narratives (Nahapiet & Ghoshal, 1998). These three dimensions are highly interrelated, with structural interaction acting as a precursor to relational trust and cognitive alignment (Tsai & Ghoshal, 1998; Tsounis & Xanthopoulou, 2026). A systematic review of quantitative assessments in higher education confirms that researchers have widely used social capital to examine key student outcomes, including persistence, academic satisfaction, and well-being (Gentry et al., 2025).

Digital Communication Competencies

In this study, digital communication competencies are defined as a graduate's capability to express, interpret, and co-create information across various digital mediums, platforms, and collaborative spaces (Busulwa et al., 2026; Gulko et al., 2026). Rather than representing basic technical operations such as drafting an email, these competencies encompass the strategic translation of complex technical data into accessible visual narratives (Yassin & Toumeh, 2024), professional self-presentation in online networks (Steenkamp et al., 2024), and collaborative virtual teamwork (Gulko et al., 2026; Jaffar et al., 2025). Accounting educators have attempted to cultivate these pervasive skills through various innovative pedagogies. These include virtual exchange models such as Collaborative Online International Learning (COIL), which foster intercultural communication and virtual collaboration (Gulko et al., 2026), gamified mobile technologies that enhance online engagement (Wylie, 2026), and active, simulation-based experiential learning that mimics real-world professional decision-

making (Jaffar et al., 2025). These pedagogical approaches demonstrate that digital communication is inherently collaborative and relational.

Digital Communication and Social Capital

The convergence of digital communications and SCT has gained significant attention due to the shift toward online learning and remote work. Alshurafat et al. (2021) demonstrated that during the COVID-19 pandemic, social capital acted as a significant enabler of online accounting education, influencing students’ technology acceptance, ease of use, and behavioural intentions. Furthermore, digital communication platforms have redefined how professional networks are constructed. Rather than relying solely on physical interaction, graduates utilise digital signalling tools, such as professional online networks and digital badges, to showcase their employability skills to prospective employers (Steenkamp et al., 2024). In this digital environment, communication competencies serve as the active mechanism through which social capital is generated, maintained, and mobilised.

DISCUSSION

This study proposes that digital communication competencies serve as a key resource that enhances graduate employability and career development. Figure 1 shows the proposed conceptual pathway from digital communication competencies to accounting graduate employability. Each phase of the pathway is mediated by the graduate’s ability to communicate effectively in a digital environment. To operationalise this pathway, we examine how digital communication competencies drive three dimensions of SCT.

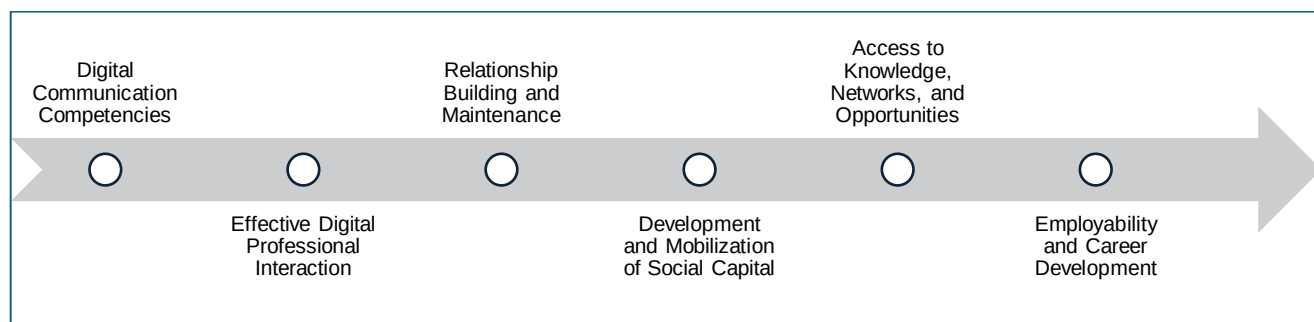


Figure 1 Conceptual Pathway from Digital Communication Competencies to Accounting Graduate Employability

Structural Social Capital

Structural social capital refers to network configuration and the presence or absence of ties among actors (Nahapiet & Ghoshal, 1998). For accounting graduates, the main challenge is the transition to employment by establishing “weak ties” with industry experts, potential employers, and alumni who can provide insights into job prospects (Gentry et al., 2025). Digital communication competencies enable graduates to overcome geographic boundaries and actively build these ties using professional networking platforms. A key digital communication mechanism is the use of digital badges, verified electronic credentials that represent specific employability skills (Steenkamp et al., 2024). To acquire and effectively display these badges, students must engage in digital self-branding and communication. For example, graduates may earn digital badges that provide verifiable evidence of specific skills, such as an IBM digital badge in data analytics, and display these credentials on professional networking platforms such as LinkedIn. The strategic display of digital badges in online spaces serves as a highly visible signal to potential recruiters or employers, thereby expanding the graduate’s structural network. In addition, models like COIL facilitate international virtual exchange, allowing students to establish diverse, cross-border network ties (Gulko et al., 2026). Graduates who communicate effectively in these collaborative digital settings are more likely to be positioned centrally within peer-to-peer and professional networks. Therefore, digital communication competencies provide the operational means to cultivate structural network ties.

Proposition 1: Accounting graduates’ digital communication competencies significantly enhance their structural social capital by enabling the strategic establishment and maintenance of bridging ties within professional online networks.

Relational Social Capital

Relational social capital exists within the quality of relationships and is characterised by assets such as mutual trust, respect, and reciprocity (Tsai & Ghoshal, 1998). In accounting, trust serves as the fundamental currency, while professionals need to build credibility, maintain objectivity, and ensure confidentiality with both clients and regulators (Alshurafat et al., 2021). When graduates transition to remote or hybrid workplaces, building trust is complicated by physical distance and virtual anonymity. In current digital environments, trust must be established through communicative competence. Graduates must demonstrate clarity, responsiveness, and ethical alignment in their digital correspondence (Busulwa et al., 2026). Digital reciprocity is fostered when graduates actively engage with online professional communities, share knowledge, participate in collaborative forums, and support peers (Tsounis & Xanthopoulou, 2026). Through transparent and empathetic digital interaction, graduates build exceptional assets and relational trust with potential employers and recruiters, bridging the labour market’s geographical gaps.

Proposition 2: The deployment of digital communication competencies in virtual professional environments fosters relational social capital, thereby mitigating the structural barriers of geographic distance and interpersonal anonymity in the graduate labour market.

Cognitive Social Capital

Cognitive social capital refers to the shared values, interpretations and systems of meaning that allow parties to exchange and combine knowledge (Nahapiet & Ghoshal, 1998). Historically, the “shared understanding” of accounting is limited to double-entry bookkeeping and standard financial statements. In the 4IR era, the shared code of business has expanded. Organisations operate within complex digital ecosystems that rely on data analytics, business intelligence (BI) systems, and enterprise resource planning (ERP) (Yassin & Toumeh, 2024). Digital communication competencies allow accounting graduates to act as translators within these ecosystems. Rather than merely performing technical analytics, competent graduates use BI dashboards such as Power BI and Tableau to design visual narratives (Mohd Zain, Wan Abdullah, et al., 2026). They translate complex, multi-dimensional datasets into strategic corporate narratives that non-accounting business units can easily understand. By aligning technical financial data with broader business objectives, graduates foster a shared system of meaning across different organisational departments, directly strengthening cognitive social capital.

Proposition 3: Digital communication competencies serve as the enabler of cognitive social capital, allowing accounting graduates to synthesise data analytics into shared organisational narratives and codes that facilitate strategic decision-making.

Conceptual Framework

The relationships discussed above are integrated into a conceptual model as shown in Figure 2, designed to guide future empirical research. In this model, digital communication competencies are positioned as an independent construct. Rather than leading directly to employability, these competencies exert a significant indirect effect mediated by the three dimensions of social capital.

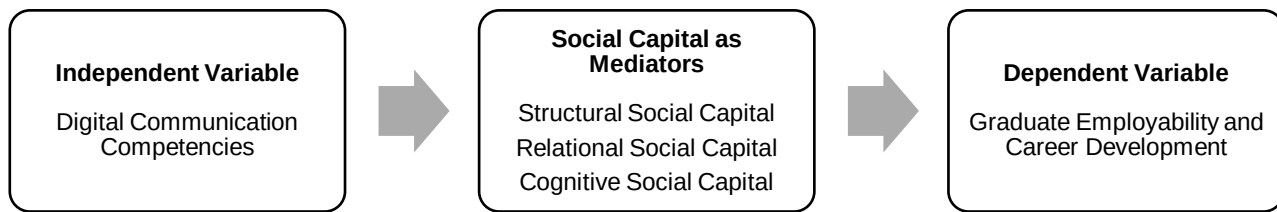


Figure 2: Conceptual Framework of Digital Communication Competencies as Social Capital

As illustrated in Figure 2, the framework outlines how digital communication competencies catalyse structural, relational, and cognitive capital. Together, these social capitals provide graduates with access to critical knowledge, industry resources, and professional opportunities, ultimately enhancing their employability and career development (Nie & Mastor, 2024; Zotorvie et al., 2024). Table 1 synthesises the proposed constructs and conceptual definitions.

Table 1: Proposed Constructs and Conceptual Definition

Construct	Conceptual Definition
Digital Communication Competencies	A graduate’s capability to express, interpret, and co-create information across various digital mediums, platforms, and collaborative spaces (Busulwa et al., 2026; Gulko et al., 2026).
Structural Social Capital	The impersonal configuration of linkages between actors, essentially who you reach and how you reach them (Nahapiet & Ghoshal, 1998).
Relational Social Capital	The assets created and leveraged through relationships, focusing on mutual trust, norms, and reciprocity (Tsai & Ghoshal, 1998).
Cognitive Social Capital	The shared representations, interpretations, and systems of meaning, which include shared languages, codes, and narratives (Nahapiet & Ghoshal, 1998).
Employability & Career Outcomes	The capacity of a graduate to secure, maintain, and progress in professional employment in a changing market (Nie & Mastor, 2024).

CONCLUSION

This study contributes to the accounting education and graduate employability literature by theoretically integrating digital communication competencies and SCT. Moving beyond the traditional HCT perspective, which tends to emphasise individual technical skills and knowledge, this study argues that graduate employability in contemporary accounting is fundamentally relational. Career development and professional success increasingly depend on graduates’ social capital, particularly their ability to develop professional networks, establish trust, communicate effectively, and co-create shared systems of meaning within digitally mediated environments.

As a result, accounting education should move beyond passive, textbook-oriented approaches toward more active and collaborative learning environments that enable students to develop both technical and relational competencies. For example, experiential accounting simulations (Jaffar et al., 2025) and gamified serious games (Wylie, 2026) provide collaborative opportunities that strengthen students’ communication self-efficacy and teamwork, while structured coding scaffolding (Guo, 2026) builds individual confidence and technical problem-solving skills. These pedagogical approaches can help develop graduates who are not only technically competent but also able to engage effectively with colleagues, clients, and other professional stakeholders.

Accounting programmes should also provide greater opportunities for students to develop global and intercultural communication competencies. Integrating initiatives such as COIL can expose students to cross-cultural interactions and help them build international professional networks. Such experiences may facilitate

the development of structural bridging social capital by connecting students with individuals and communities beyond their immediate academic and geographical environments (Gulko et al., 2026). In addition, accounting curricula that incorporate data analytics should place greater emphasis on communicating and interpreting analytical outputs rather than on technical data-processing capabilities alone. By training students to use business intelligence and data visualisation tools to communicate insights and construct shared business narratives (Mohd Zain, Wan Abdullah, et al., 2026; Yassin & Toumeh, 2024), accounting education can directly foster the shared codes and systems of meaning that constitute cognitive social capital (Nahapiet & Ghoshal, 1998).

Digital signals and micro-credentials also help accounting graduates communicate their competencies to external stakeholders. Accounting departments could incorporate digital badging into their curricula to enable students to document, verify, and communicate their skills to prospective employers and professional networks. These mechanisms may strengthen graduates' structural social capital (Nahapiet & Ghoshal, 1998) by increasing the visibility of their competencies and facilitating connections with the external labour market (Steenkamp et al., 2024). Professional networking platforms such as LinkedIn may further complement these mechanisms by providing graduates with digital spaces to showcase their qualifications, professional experiences, skills, and verified credentials to potential employers and wider professional communities.

THEORETICAL AND PRACTICAL IMPLICATIONS

The conceptual frameworks presented in this study offer several theoretical contributions to the accounting education and graduate employability literature. First, this study bridges the human and social capital paradigms by offering an alternative to the highly individualistic and contextual assumptions that historically dominated the past literature. While traditional employability models based on HCT view education as an isolated investment in an individual's technical and cognitive productivity, this study's framework positions digital communication competencies as the social-capital-enabling mechanism that allows graduates to signal and mobilise their individual human capital within complex, technology-mediated networks. Second, this study contextualises and extends Nahapiet and Ghoshal's (1998) three-dimensional social capital framework to the digital realities of the 4IR. This study shows how structural social capital is configured through virtual signalling mechanisms like digital badges, how relational social capital is cultivated via ethical and responsive communication that generates trust in remote or hybrid settings, and how cognitive social capital is facilitated by data analytics and BI visual narratives that establish shared values across diverse organisational departments. This integration addresses the conceptual fragmentation identified in recent higher education reviews, offering a theoretically cohesive process model that maps the direct and indirect pathways from digital interactions to graduate career transitions.

From a practical perspective, this study provides a clear roadmap for higher education institutions and professional accounting bodies navigating the curriculum design dilemmas of the 4IR. First, accounting departments in higher education institutions must implement systematic curricula that shift from passive, lecture-centred instruction toward social-constructivist and collaborative pedagogies. Educators should deliberately design experiential simulations that encourage students to negotiate complex professional tasks under pressure, which directly enhances their communication self-efficacy, teamwork, and relational trust. Higher education institutions should adopt secure, self-verifying digital badging and e-portfolio platforms to make students' competencies visible. This enables graduates to showcase verified, discrete achievements on professional social networks like LinkedIn, facilitating direct matches with external recruiters.

LIMITATIONS AND FUTURE RESEARCH AGENDA

Despite its contributions, this study has several limitations that outline a clear path for future empirical inquiry. First, as a purely conceptual study, the proposed relationships and cascading pathways within the proposed framework remain untested hypotheses. The three conceptual propositions formulated herein have not been empirically validated. Since this study is conceptual, this study does not prescribe or validate specific empirical measurement scales for the proposed constructs. While this preserves the theoretical flexibility of our framework, it represents a limitation that requires future researchers to select, adapt, and validate operational

measures that best align with their specific methodological and institutional contexts. Such research would provide empirical evidence on whether and how social capital mediates the relationship between graduates’ digital communication competencies and their career outcomes.

Next, the proposed study focuses primarily on the positive elements of social capital and may underestimate its negative consequences. Strong bonding capital and tight internal network cohesion can create localised groupthink, limit access to diverse external information, and restrict the objective scepticism that is fundamental to the auditing profession. In addition, this study does not address the substantial institutional, financial, and capability barriers universities face when implementing these advanced pedagogical reforms. Many higher education institutions face severe budget constraints, limited access to specialised software, and a lack of specialised faculty training in data analytics and programming. Despite these limitations, this study helps strengthen the theoretical connection between accounting education, digital competencies, social capital, and professional employability in the context of the 4IR.

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