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Adoption of Digital Competences in the Ghanaian Banking and Financial Sector for Employability and Competitive Advantage

Adopción de competencias digitales en el sector bancario y financiero de Ghana para la empleabilidad y la ventaja competitiva

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ABSTRACT

Digital competences are essential for the digital transformation of organisations. This study examines the digital competences that employees require in Ghana's banking and financial sector to advance its digital transformation agenda. The qualitative research methodology used for this study engaged a focus

group of human resource executives and recruiters. The research findings revealed that digitalizing banking operations and the COVID-19 pandemic accelerated the adoption of digital competences. Organisations have adopted artificial intelligence for improved decision-making and enhanced customer experience. Most banking firms have implemented digital tools such as the Microsoft Office suite in their operations and expect their prospective entry-level employees to possess basic proficiency. Moreover, banking firms recognise that specialised digital competencies are essential for problem-solving and achieving a competitive advantage. The study recommends that businesses align with academia on digital competences education for undergraduates. Companies should invest in digital competences training of the employees according to their roles to be productive and adapt to emerging software. The research concludes that the foundational digital competencies possessed by job seekers enhance their employability with banking firms. Supervisors and senior management at banks are also expected to enhance their capacity for advanced digital competencies to maintain a competitive advantage. Furthermore, businesses should consider augmented intelligence to improve their competitive advantage. Future research should explore digital competences for employability and competitive advantage in various sectors, evaluate training methods to enhance digital competences and determine the effect of artificial intelligence on employee performance.

Keywords: Digital competences; employability; competitive advantage; artificial intelligence; human resource development; economic history.

JEL Codes: E24, J24, N17

RESUMEN

Las competencias digitales son esenciales para la transformación digital de las organizaciones. Este estudio examina las competencias digitales requeridas por los empleados del sector bancario y financiero de Ghana para impulsar su agenda de transformación digital. La metodología de investigación cualitativa empleada para este estudio contó con la participación de un grupo focal de ejecutivos de recursos humanos y reclutadores. Los resultados de la investigación revelaron que la digitalización de las operaciones bancarias y la pandemia de COVID-19 aceleraron la adopción de competencias digitales. Las organizaciones han adoptado la

inteligencia artificial para mejorar la toma de decisiones y la experiencia del cliente. La mayoría de las entidades bancarias han implementado herramientas digitales como Microsoft Office en sus operaciones y esperan que sus futuros empleados de nivel inicial posean competencias básicas. Además, las empresas bancarias reconocen que las competencias digitales especializadas son esenciales para la resolución de problemas y el logro de una ventaja competitiva. El estudio recomienda que las empresas se alineen con la academia para promover las competencias digitales en los estudiantes universitarios. Las empresas deben invertir en la capacitación de sus empleados en competencias digitales según sus roles para mejorar la productividad y promover la adaptación a los softwares emergentes. La investigación concluye que las competencias digitales fundamentales que deben poseer los solicitantes de empleo aumentan sus posibilidades de empleabilidad en el sector bancario. También se espera que los supervisores y la alta gerencia en los bancos mejoren sus competencias digitales para mantener una ventaja competitiva. Además, las empresas deben considerar la inteligencia aumentada para obtener ventajas competitivas. Las investigaciones futuras deben explorar las competencias digitales en el trabajo y la ventaja competitiva en diversos sectores que les pueden ofrecer, evaluar los métodos de capacitación para mejorar las competencias digitales y determinar el efecto de la inteligencia artificial en el desempeño de los empleados.

Palabras clave: Competencias digitales; empleabilidad; ventaja competitiva; inteligencia artificial; desarrollo de recursos humanos; historia económica.

Códigos JEL: E24, J24, N17

Introduction

Businesses around the world are actively pursuing their digital transformation to gain competitive advantage. The benefits of the digital transformation can be obtained by promoting the work of the human resources departments of organisations and through the transformative power of Information and Communication Technologies (ICTs), in both personal and professional spheres (Kispeter, 2018). The accelerated technological advancements and the culture of digitalisation have made digital competences essential for employability at all levels significantly (Kee et al., 2023). Job seekers and employees need the ability to

proficiently engage with digital technologies for employment and promotions and to succeed in the job market. Therefore, the development of digital competences among human resources is crucial.

Leahy & Wilson (2014) stressed that it is fundamental for organizations to have e-leaders with digital proficiency at all levels, given technology's pervasive influence on societal and business landscapes. Academia must prepare graduates with digital competences for employment. Vuorikari et al. (2022) confirmed that, according to the European Commission's DigComp 2.2 framework, diverse digital competences enhance an individual's employability prospects and adaptability to change. Consequently, companies must improve their employees' digital competences through continuous learning to keep up with technological advancements.

Furthermore, the OECD (2016) found a positive correlation between digital proficiency levels and employment status. Acquiring digital competences can broaden opportunities for job seekers and enhance job stability for employed individuals.

Research Problem

Ghana is pursuing digital transformation across government organisations and private businesses. According to O'Neill (2025) 60.19% of Ghanaians are between the ages of 15 to 64—with a median age of 21 (The Ghana Statistical Service, 2022)—, being the individuals in that age range the ones who need the most to engage with digital technologies for organisational operations and to obtain employment. Asongu & Le Roux (2017) investigated the intersection of ICT penetration and human development in Sub-Saharan Africa, finding that insufficient digital competences hinder the full utilisation of ICT for economic growth. Ghana stands to gain significantly from the digital economy provided its workforce is adequately skilled. The banking and financial sector in Ghana is notable for its advancement in digital channels. Asamoah & Owusu-Agyei (2020) found that reforms in the sector that advanced into a digital banking culture, contributed to the overall expansion of financial services, and promoted financial inclusion in Ghana. However, employees in the sector lack adequate digital competences to optimise digital operations and services. Ofosu-Ampong (2021) found that banks

and their employees struggled to adapt to digitalised operations during the COVID-19 pandemic. His findings indicate a lack of understanding from the banking system regarding the digital competences required and utilised in the sector. That is why this research aimed to address the knowledge deficit by examining the digital competences sought by the Ghanaian banking and financial sector. Specifically, it aimed to understand the digital competences necessary for entry-level positions, career advancement, and competitive advantage.

Method

Study Approach and Participants

A qualitative research approach was adopted to gain a broader understanding from the employers of the essential digital competences required for employability and to effectively understand the underlying reasons for their interest in these competences. Levitt et al. (2017) state that qualitative research, inductive in nature, typically involves the researcher delving into the meanings and insights of a particular circumstance. Gopaldas (2016) shares that the qualitative approach encompasses an array of methodologies for gathering and evaluating data, including purposeful sampling, and semi-structured and unstructured interviews.

The study focused on the banking and financial sector members of the Ghana Employers Association, including those involved in small and medium enterprises and multinational corporations. Four human resources executives and a recruiter from five banking firms were selected using purposive sampling. Maxwell (1996) posited that purposive sampling is a technique whereby specific people are deliberately chosen to provide crucial information that other methods cannot obtain.

Data Collection and Analysis

A focus group discussion was held to delve deeper into the employers' views on digital competences for employability. The focus group discussion allowed the researcher to elicit rich and in-depth data that helped to address the objectives of the study. A focus group guide was also created to help with the collection of the

qualitative data. The guide steered conversations among sector representatives about digital competences for employability. The discussion was held through Zoom, an online group meeting platform. For the Zoom meeting, individual representatives of the sectors interested in this study were contacted and scheduled.

The focus group guide was designed and subjected to review by experts and recruiters to assess its validity and reliability. Content validity assessments were used to ensure that the data collected was credible and consistent. Polit & Beck (2006) suggested that subject matter experts review the template guide to confirm that it includes all relevant questions and prompts, effectively representing the topic under research during content validity. The validity of the qualitative findings was ensured through the comprehensive training and pilot testing of the discussion guide. The researcher has been rigorously trained as a moderator and has assessed on focus group discussion for inter-rater reliability for eight years. The audio recordings of the discussion were transcribed before analysis. The transcribed audios were then grouped into themes using the NVivo analytical tool, a widely recognised software for qualitative data analysis that allows for systematic and efficient data interpretation. The discussion was subjected to thematic analysis. Marks &Yardley (2004) share that thematic analysis allows for a more comprehensive understanding of possibilities on issues under consideration. The thematic analysis helps to connect the numerous thoughts and opinions of the respondents and participants to compare them to the facts obtained in different situations at different periods throughout the project.

Results

Description of Participants

Five participants from the Ghana Employers' Association took part in the focus group discussion: four senior human resource executives and one digital competence recruiter. These participants are key decision-makers in the recruitment and training processes in their banking firms. The participants were allowed to express their understandings and experiences freely, guaranteeing a

comprehensive and unbiased discussion. Table 1 below briefly describes the participants in the focus group discussion.

Table 1. Profile of the FGD participants

#	Participant Code	Profile
1	P214	Human Resource Senior Executive
2	P364	Digital Competence Recruiter at a Bank
3	P721	Human Resource Senior Executive
4	P737	Human Resource Senior Executive
5	P808	Human Resource Senior Executive

Digital Competences for Recruitment and Promotion

The following section presents the results of the discussion themed on the relevance of digital competences for employability during entry-level recruitment as well as promotions to the supervisory level.

Relevance of Digital Competences for Employability

The COVID-19 pandemic further accelerated the shift towards remote work and digital customer engagement. The discussion revealed that having a Customer Relationship Management (CRM) system enhances customer service, manages relationships, and improves customer satisfaction. Some of the following responses from the discussion revealed that companies are now more than ever in need of employees who can navigate digital tools:

> Many companies have actively engaged in digital solutions around services and products over the last seven to eight years. Many companies that used to sell services or products are now using chat boxes or actively engaging on social media, which has become an active alternate channel to sell their services and products. In that same regard, it has made it necessary for the new crop of people joining these companies to understand how to play around with these tools or new systems. Mainly because those (employees) who already exist, for lack of a better word, are yet to grasp on or are used to the traditional way of getting things done. So, it would be best if you had people who are coming from a new school and who understand this space to help propel the organisation forward. So, some of the things that these institutions, through their HR, will be looking at are the people who, on a basic level, understand business analytics, how to pick up customer information, how to make some sense out of that data, and then how to help the company decide as to who to sell to, what to sell to, and how to package the product that needs to be sold. This, among other things, has made it very important for companies to consider the digital ability or competence of recruits before they are onboarded. (P364)

The previous response indicated a clear need for recruits who are proficient in digital tools to help propel organisations forward. Another view expressed that supported such need was that:

> The world of work has changed. The impact of technology has changed the way we feel about work and even how we do it. The last speaker mentioned financial or service industries doing automation. My view is that across almost all organisations, there is some automation or the other, trying to streamline their processes and using self-service tools to make sure that employees or even customers can do things on their own, releasing certain departments, even like HR (Human Resource), to focus on strategic things. So, technology has impacted all departments. The way we approached working in the past was different. Many things that ordinarily somebody talked to you about, now are done on e-learning portals or in short videos that individuals can watch. There are walkthroughs or manuals done in videos, and you can watch them, and then we are able to do that thing that ordinarily somebody did. So, these individuals must understand technology and its use and be able to access this kind of information. For me, that is what we will have to focus on. If you have (employees who can use digital tools independently), fine, but we still have to build

> on it, focus on building (digital competences) to minimise operational issues and focus on strategic issues with these kinds of digital skills in our people. (P808)

The two views emphasised that digitalisation is part of firms' operations, enabling a new way of working, designing new products and services, and marketing them digitally. The participants referred to digital competences as being used for problem-solving, communication, and information searching.

Another respondent attributed the relevance of digital competences to the digitalisation of organisations:

> I also believe that efficiency and productivity are the main reasons. Why? Technology helps employees streamline processes, automate repetitive work or tasks, and increase overall efficiency, productivity towards cost savings and improved performance. (P737)

A fourth respondent supported the earlier views and added that:

> Beyond being technologically savvy, it also helped the organisation remain competitive as much as possible because employees can utilise new tools and platforms. They also become very innovative, develop creative solutions to problems, drive continuous improvement, and so on. So, as the previous speaker said, we all must adapt to it (the need to integrate digital tools among operations). So, digital competences are something we always look for when we are hiring. (P 737)

According to the four discussion participants, digital competences are now considered for employability because technological advancement has changed traditional ways of doing things. Technological advancement is evolving fast, and every organisation that wants to grow and remain in business must continually advance and adapt to the changes. The digitalisation of business operations has caused organisations to employ individuals who are advanced in technological use to contribute to businesses. The demand for digital competences has increased, and manual business processes are losing importance in the working environment.

Digital Competences Considered at Entry-Level Recruitment

During the focus group discussion, the researcher enquired participants whether using the Microsoft Suite was a requirement for entry-level employees or every employee in the organisation. Further, the researcher enquired whether any other digital competences were required for entry-level or specialised groups. A respondent indicated that entry-level employees are expected to have basic competences. However, depending on the role, other relevant intermediate and advanced competences may be required:

> If you are looking to hire an entry-level employee, you should look for someone with Microsoft tools competences, or whatever you call it, someone who can work with the basics. Still, if we are looking for an IT person, we look for other things. You probably look out for something else. IT has various units under it, and you have the systems and network, so you probably look out for people with that particular competence. So, if you are looking for, let us say, somebody who does data analytics, you look out for that proficiency, you know, somebody who is able to analyse the data using the analytic tools and all that. If you are maybe looking for a corporate comms person, you look out for somebody who is able to handle social media platforms. And then, when we are looking for an HR person, a Learning and Development (LND) person, or somebody who can use all their digital learning and all that the digital competences may defer, it depends on which role exactly that person is applying for. At the entry-level, we can say basic Microsoft tools. The person should be technologically savvy. But it depends on the role the person is applying for. Suppose you are looking for a CISO. CISO is an information security officer; you will probably look for a person with cyber security awareness, someone who understands all the best practices. So, it depends on what you are looking for. (P737)

The above responses reveal that employers have increasingly prioritised digital competences in their recruitment processes, especially for roles that require specific technological expertise. However, employers usually require basic competences at all entry levels. The following participant agreed with the previous one and remarked that:

The type of competences you look out for depends on the role you are employing. Because some roles require specific expertise. But for our organisation, for instance, as an entry-level person there are some fundamentals you need to have when it comes to the digital space, like the Microsoft suite. Most of the time, in our entry-level we employ university graduates who have also done their national service. These are some things we know at the university level and even at the secondary school level that they are taught. Because banking is a corporate environment, you should be able to use some of these tools to communicate, because we use them to communicate in the environment. So, it will be expected that you would know how to use some of these tools at an entry level, and when you are being considered for, let us say, I need a network administrator, there are certain technical competences you will look for. We expect the network administrator to do this because when you come in, we will help recruits adapt to the environment and understand the culture. Still, the rules governing network administration might be the same rules that you need to know. So, it varies depending on what role we are recruiting for, and that determines the kind of competences we look for when we are doing our recruitment. (P721)

The last respondent shared the expectation of the Ghanaian education system at both secondary and tertiary levels to develop the basic digital competences of graduates for employment. Based on the earlier responses, the researcher enquired whether entry-level employees are tested on their basic competences or companies proceed to recruit employees to train during orientation. A respondent emphasised that a university graduate is expected to have basic digital competences, such as the use of emails for communication:

During recruitment, we do not look out for competences in using emails because, during the hiring process, we communicate through e-mail, so it is assumed that the recruit has an idea of how to use your Gmails and all that. The use of Gmail is almost the same as that of email in our organisation. Nowadays, organisations hardly communicate with letters to recruits. It is either through your emails, or we would have even done checks on social media. Everybody is now on social media, I will say. So now, communicating is done by email rather than letters or anything like that. So, it is assumed that you have an idea about emails. (P737)

Another respondent corroborated that recruits need to be tested on basic digital competences. However, entry-level employees are given orientation on the use of digital tools in the organisation:

> I want to add that communicating through e-mail to contact recruits is prevalent among organisations. However, organisations spend time teaching entry-level employees to communicate through e-mail. My organisation communicates from Microsoft Outlook to a recruit who will likely use Internet Explorer to access their Gmail and read. So, in my bank, once a person is employed, we give you some orientation on how to use Outlook, which is not only for sending emails. One can do many things with Microsoft Outlook, such as setting out priority issues, setting reminders, and booking appointments. So, we go further and let entry-level employees know that Outlook is not just an e-mail communication tool: an employee can also use Microsoft Outlook to do other things. My bank has Microsoft 365, so almost all the Microsoft elements are signed into one place so that things are interrelated and linked. One can access one's files on Microsoft Teams even though they were sent through email. So, the organisation gives entry-level employees a bit of orientation around that so that at least employees can use the tool as they are supposed to and not just be underutilised. That is the bit I wanted to add to it. (P808)

The researcher probed further on how the competences for remote meetings were factored into recruitment and if there were other views on whether basic competences were tested during recruitment or if entry-level employees were given orientation on digital tools. One respondent reinforced the earlier response that basic digital competences are not tested during recruitment as employees learn on the job:

> From our side, we give people the opportunity to come to learn on the job. We probably do not do a lot of remote activities. However, when it comes to these virtual meetings and all that when one is employed, there is training on how to handle those things during orientation. For employees to engage vendors and all that, an employee has to be able to schedule a meeting virtually or have meetings with these vendors. So, these things (digital competences), when recruited, are learnt on the job. An employee is taught basic digital competences on the job, but we do not look for it at the interview or recruitment stage. (P721)

Another respondent supported earlier assertions that a recruit is expected to have basic digital competences and be familiar with the Microsoft suite:

> So, it is the same with us. Basically, a recruit is expected to be very familiar with Microsoft Suite, which includes PowerPoint, Word, and Excel. At least some basic knowledge there. When a recruit comes into the workspace, you introduced them to the various digital communications tools. E-mail, for instance, we send them out. However, when a recruit is employed in my company, you realise that Microsoft Outlook is a little different from what a recruit is used to and then the various software for the various departments depending on where a recruit will sit in the organisation. So, it is just a basic thing (competence) a recruit needs to know. Once a recruit comes on board, there is an orientation on the required digital competences. (P214)

A respondent shared a varying view that sometimes some essential digital competences are tested and not necessarily on an organisational tool:

> In some instances, through the recruitment process, basic technical or computer skills are being tested or expected to be available. Recruits are expected to manoeuvre their way with any of these solutions used within the organisation. So, for example, someone who knows where the keyboard is, how to turn a laptop, or how to open or close a solution or an application would find it easier to navigate any other application once they are guided through the process. So, the focus is not on testing whether you can use Outlook or be able to send an e-mail or use Google Meet, but instead on your basic computer skills. Once that is confirmed regarding the recruitment question or fundamental questions of how you presented yourself earlier on by your CV or any other medium, you are good to go. (P364)

The researcher referenced an earlier submission on employers using social media to assess job applicants. The respondent explained further on social media assessment being a new requirement for institutions:

Checking the social media timelines of applicants is now a requirement for financial institutions. So, we check the social media handles of applicants to find out exactly if there is nothing on pornography and politics, whether affiliated with a political party or the applicant does not have any violence. We look out for all that before one is hired. Whether you are a national service person, intern or outsourced staff, everybody we verify, so an applicant leaves the social media handles to us, and then we will verify. We will check it out because it is a requirement now. (P737)

According to this respondent, every applicant or employee is assessed on being on social media, as that indicates that the applicant can use digital media to communicate:

It is hard to find such persons nowadays; everybody is there (on social media). Maybe, unless the person did not go to the university. I bet my colleagues will bear me out. Everybody is there. (P737)

Digital Competences Considered for Promotion to Supervisory Level

The researcher enquired whether digital competences influence organisational employee promotion. A participant responded that digital competences are only relevant when they drive the achievement of employee performance targets:

I will say no. Supervisors and subordinates agree on goals or targets at the beginning of the year, which they work towards. So, as and when an employee can meet or exceed the goals or targets, that is when one is promoted. Also, it is not like every year when one meets the targets, one is promoted. We consider other factors, but I do not know whether they will look out for something like that (digital competences) on the IT or digital banking side. However, the main banking side in retail banking, corporate banking, is purely target-based. When an employee meets performance targets, then could be considered for promotion. Anyone with anything else can add on, but on our team, it can be considered on the IT or digital banking side. Why am I saying that? Because organisations are consistently upgrading with all these new trends in IT. So, it may be considered on digital banking or the IT roles, but not the main banking. (P737)

A participant agreed with the submission and added that digital competences have to be considered, among other factors, for employee promotion:

I agree with her. From what I have seen, digital competences are supposed to enhance the way work is done. So ordinarily, if employees are very good at it, it should reflect how it speeds up their high-level performance. If organisations want to look at digital competences, it may help in the conversations as one has to be promoted. However, as a single item to decide whether one with exceptional digital competences will be promoted, no organisation will have it there, not even with IT-related jobs. (P808)

Another participant added that:

Basically, promotion is based on your ability to meet your targets and the existence of a vacancy to which you can be promoted. So, these (digital competences) are like a support system hoping to achieve your targets, but there are other things. Unless you work in a department where you are, for instance, if you are into communications and have to use these tools to do your work and cannot handle them efficiently even after training, it becomes an issue. (P214)

The researcher also enquired whether someone with exceptional digital competences among colleagues on the same grade and doing similar tasks will not have an advantage when it comes to promotion over colleagues. A participant responded that promotions out of colleagues doing similar tasks are guided by other factors apart from exceptional digital competences:

Being a Team Lead encompasses many things. It is not just about you being able to use digital tools; we factor in many things, like your human relations. You need to have that leadership quality because if you are leading people. Even if you are competent enough when it comes to the technical bits, if you cannot put those people together to achieve the results, then being a team leader might not help the organisation. So, we look at other things to decide who the team lead should be. Sometimes, team leads are also determined by grade. In our sector, we have grade systems where the highest person in terms of grade can be appointed as the team lead with some form of training. Also, sometimes, when recruiting, we recruit specifically for

the role for which we are looking for a team lead. But if we are all on the same level and they are looking at pointing their team lead, we do not just look at technical competence but other things before deciding who to appoint as a team lead. (P721)

The findings indicate that while digital competences are essential for recruitment and daily operations, they are part of a broader set of competences required for job performance and career advancement but not a primary requirement for recruitment. Therefore, basic digital competences are necessary for employees, while advanced proficiencies are essential for specific roles. The focus group discussion confirmed that employers increasingly prioritise digital competences for employment and promotions due to technological shifts and competitive advantages.

Digital Competences Training for Employees

The results from the focus group discussion revealed that training or capacity building for employees on digital skills done in the organisation is tailored to the specific needs of roles and departments. Thus, training ensures employees stay updated with new digital tools and features. The approach ensures that employees receive relevant and practical training for their job functions. The researcher referred to the earlier discussed orientation of employees on digital tools and probed on the training as digital tools are usually upgraded or new ones are integrated or replaced. A participant responded that the employees are trained according to the training needs associated with their roles:

Training depends on the role or the department you are in. At the end of the year, we send out a training needs analysis tool, and then we fill it in with the kind of training staff needs. So, we can identify the competence gaps with our subordinates, team, or ourselves. So, we fill it in with the type of training they want, and that will find out that we have a considerable training plan as a financial institution. Then, we have the regulatory and technical aspects, where they will find all these competences. We do communication, specific IT courses, and specific, very, very specific principles for IT. It will all depend on the training you will need, they need you to identify it, and together we can put a plan to say that this year these are the kinds of training we are going to have based on their needs. So, it is not like training on communication or digital

competences for everyone. No, it is sometimes the individual, and sometimes it pertains to the whole department. So, it depends on the gap we have identified as the department head after engaging our employees and our team. Then, the department and the HR may put together a banquet plan, which will factor into the cost implications. Then, HR can run the training plan for the department for the year together. So, it could be training internally or online. Nowadays, most IT courses are online. Sometimes, you go to a banking college. It depends, sometimes Charted Institute of Bankers. It depends on the training you are supposed to take. (P737)

Another participant followed up that there are various platforms and combined types of training for building digital competences of employees:

To add to her response. Yes, we tend to upgrade or update these tools where new features are added somewhere along the line. So, we organise specific departments that use some of these tools and training in various forms for this department. Some are classroom training, where we sit and look at the new features and how we use them. We do some simulations; we create Frequently Asked Questions (FAQs) to self-address challenges when employees encounter upgrades or updates. You must do this when you get here if you create this calendar. We sometimes have some virtual training to demonstrate to people what new features have been added to the applications. So, it depends on the area. Suppose the tool is a bank-wide tool that every employee uses. In that case, we do a detailed plan where we conduct the training in phases for employees through phases for them to understand the new features that have been added to the application, how to use them, and when they have challenges, which they should contact for assistance. (P721)

Drivers of Digital Competences Adoption

During the focus group discussions, the researcher probed whether the organisation consciously recruits individuals with digital competences to gain a competitive advantage or whether the COVID-19 pandemic has compelled organisations to adopt digital competences, hoping they will evolve into competitiveness or align with their current operational needs. The responses indicated that the pursuit of competitive advantage and the COVID-19 pandemic

had influenced the adoption of digital competences as part of recruitment requirements:

> It is both ways. Organisations seeking a competitive advantage and COVID-19 are drivers of using digital competences. As the previous speakers said, COVID-19 brought about automation growth. This automation other institutions have adopted, so for an institution to also play in the same market and meet your expectations from their targets (markets), you would also have to make sure you get the right kind of staff or people with digital competences to work to be able to help the organisation upscale and upgrade yourself to be competitive in the ecosystem in which you find yourself. For instance, as a banking institution, most banks moved to digitalisation during the pandemic and inherent protocols. It is also about something other than growth. Banks had to engage innovators and developers to come up with ideas to reach their customers because it is their business to continue serving their customers whether there is a disaster or no disaster. One way COVID-19 has helped banks in Ghana is by providing automated processes and platforms to facilitate customers' business. So, it is both ways. It cannot just be one-sided. (P721)

Another respondent added that some organisations need to catch up with digitalisation. That is why some digital competences are mentioned in employment announcements:

> Before COVID-19, some organisations had yet to identify the need, so there is now an intentional attempt to recruit persons with digital competences, but post-COVID, such criteria are in there. Depending on the service area or sector that persons with digital competences join, specific digital competences must be mentioned as part of the job requirements. Others expect that some digital competences are basic, and job seekers are expected to have them. For example, being able to use Microsoft Word, Excel or PowerPoint to do presentations, many organisations expect job seekers to know these. They may not enlist as criteria, but surprisingly, there is much more to it than the surface. (P 364)

AI adoption

During the focus group discussion, the researcher referenced an earlier mention of organisations adopting chat boxes and inquired whether employers seek employees familiar with artificial intelligence (AI). The discussion revealed that AI and Machine Learning (ML) are essential to having a competitive edge over peers. The responses suggested that implementing artificial intelligence and machine learning will help to drive innovation, improve decision-making, and enhance customer experiences. Also, incorporating AI and ML into the processes of an organisation opens up new opportunities for innovation and efficiency that were previously unimaginable. A participant responded that AI gives organisations a competitive advantage to address their customers faster as well as being more responsive in their operations:

> There has been a significant shift for many more organisations using AI in how things are done. Because then again, if you are in an ecosystem where you find your competitor doing the same, you will find yourself almost losing out for not doing the same. So, for example, if competitor ABC has rolled out a chat box that enables them to sell services faster to their customers, they will be able to be responsive to the needs and requests of their customers. They will be at a higher advantage than you are. And a lot more justification has been made that AI is making things that easy. For example, it would take somebody using AI as part of their organisational tools to churn out data faster than you, who are still using Excel, probably thinking manually. At the same time, that organisation uses AI to churn out thousands of data in minutes or hours. You will have a team of people with ML delegation who are doing this, and it will take them weeks, months or more to complete. So yes, AI is now becoming an intentional tool to be used once it is coming to create or advance efficiency, and it will also give you faster results. (P364)

The discussion revealed that AI and ML are crucial for achieving a competitive advantage in the banking and financial sector. These emerging technologies have enabled businesses to rapidly meet customer needs and respond more effectively to their operations. Their implementation has enhanced decision-making and improved customer experiences.

Discussion

Digital Competences Relevance

The discussions revealed that while prioritising essential competences beyond digital competences, the banking and financial sector is also adaptable to emerging technologies. Deming (2017) stated that a multifaceted competence set is necessary for effective job performance. In support, Borghans et al. (2014) indicated that hybrid competences enhance employability.

Digital Competences Required at Entry-level Recruitment

The results indicated the importance of foundational competences for all employees alongside advanced role-specific expertise. The distinction between generally expected digital competences, such as proficiency in Microsoft Office Suite, and specialised digital competences, like data analytics and CRM management, is crucial. The ability to use the Microsoft Office Suite is often considered a baseline, whereas other organisational tools increasingly demand specialised competences. The finding that foundational proficiency in Microsoft Office is required for entry-level employees aligns with existing literature. Tetteh et al. (2017) shared that many organisations in Ghana rely heavily on Microsoft Office applications for documentation and communication. Also, Damoah et al. (2021) found that over 80% of businesses in Ghana use Microsoft Office Suite as their primary productivity software.

Some organisations implicitly expect job seekers to possess specific digital competences, like proficiency in essential digital tools, without explicitly listing them in job criteria. On the other hand, specialised digital competences are clearly defined as explicit criteria in job postings. Leu et al. (2015) indicated the relevance of understanding search engines, browsers, and professional email etiquette to workplace competences. Darvas & Wright (2014) found the significance of Internet and email skills for accessing job opportunities, networking, and staying informed about industry trends in the Ghanaian labour market. Amoah & Jibril (2021) found that with the increasing role of digital marketing, understanding social media platforms like Facebook, Twitter, and Instagram is valuable for businesses in Ghana to reach a wider audience. Lee (2020) shared that with the rise in cyber threats and

data breaches, Companies require experts who can safeguard their digital assets and guarantee the security of their online operations.

Digital Competences Required for Promotion

Participants emphasised that superior digital competences are not enough for promotions. In a Team Lead role, the employers require a blend of leadership competences and interpersonal relations to manage a team effectively. Aspiring team leaders need more than technique expertise; they need the leadership to motivate their teams to achieve organisational objectives. The results outlined criteria specific to grades and roles that impact organisational promotion decisions. The sector promotes individuals with balanced competences that include technical proficiency, managerial capabilities, and interpersonal aptitude. While technical and digital competences are vital, leadership promotions require a broader assessment incorporating personal attributes such as effective communication, problem-solving skills, and a collaborative orientation. Selecting a team lead from among same-grade employees engaged in similar tasks calls for a comprehensive perspective that integrates technical prowess with the ability to lead, manage, and communicate effectively within the organisational context.

Digital Competences Training for Employees

Insights from participants provided a thorough understanding of the structured approach to digital competence training. Tetteh et al. described the training as

> the organised and structured use of instruction programs to facilitate learning, which includes the standardised method used to impart information and assist people in acquiring the skills they need to perform the job well (2017).

Aflakpui et al. (2021) highly recommend communicating the purpose of training to maximise readiness. The training environment should be suited to the employees' training needs and conducive to learning facilitation by avoiding noise in the communication process. The results underscored the necessity of

customising employee training to align with departmental and managerial roles. Participants shared that the training processes are closely linked to individual roles. In practice, the annual training needs analysis helps employees and supervisors identify competences gaps and outline the necessary types of training. The personalised approach ensures employees receive focused training to enhance their job performance.

According to Osimo (2008), teachers, who are prime actors in the knowledge transfer of employability skills, have specific digital competences needs in Ghana. After a needs assessment, the study asserted that capacity building for educators must include content like digital skills, learning material development, generating interest among students, methods of teaching, choosing appropriate media, quality teaching in the digital age, and effective use of technology. The findings denote that materials differ for every training and capacity building, and this training should be conducted when the needs of the employees are well understood.

Digital Competences Essential for Competitive Advantage

The focus group discussion indicated that adopting digital competences is driven by pursuing competitive advantage and the challenges posed by the COVID-19 pandemic. The sector seeks individuals with digital competences to remain competitive. This recruitment strategy ensures the organisation can upscale and upgrade to maintain or achieve a competitive position within the industry. Mohamed et al. (2022) suggested that gaining a competitive advantage is challenging due to the counteracting effects of the digital revolution. Even though digitalisation advances the status of businesses, it must be balanced with acquiring the right competences to remain competitive.

Furthermore, since the revolution continues, especially regarding competitive advantages in the digital market, an institution needs to adopt and adapt to the latest innovations to align with its operational activities for competitiveness. Beyond efficiency, participants also noted that digital competences help organisations maintain their competitiveness. Ali &and Anwar (2021) suggested that a strategic approach to competitiveness positively impacts achieving high levels of competitive

advantage, encouraging businesses to improve their digital competences. Employees skilled in using new tools and platforms are more likely to contribute to innovation and develop creative solutions. Before COVID-19, some organisations were slow to recognise the necessity of digital competences. Li & Tian (2023) shared that the COVID-19 pandemic accelerated the digital transformation of firms. The banking and financial sector in Ghana embraced digital solutions for business continuity to ensure customers access services. This drive for improvement and change is central to an organisational culture that is resilient to the effects of change and thrives on opportunity. That pivot evolved into a long-term strategy to enhance customer experience and operational agility. The sector has employed innovators capable of creating digital platforms and processes. Maiti et al. (2022) found that clients in Europe have used finance apps approximately 72% more frequently since the lockdown resulting from the COVID-19 pandemic. These initiatives have been essential for business operations and expansion under the pressures of crises. Integrating digital solutions strengthens digital competences as a lifeline for organisational resilience and agility. Organisations have started to mention digital competences in job listings, recognising that these competences are essential for contemporary business operations.

Managerial Implications and Recommendations

The banking and financial sector expects job seekers to have basic digital proficiency and familiarity with the Microsoft Suite. Consequently, the sector needs to liaise with academia and Microsoft Corporation to develop undergraduates' basic to intermediary digital proficiency. Digital competences complement an employee's ability to achieve performance objectives—the sector practices combining performance metrics and digital proficiencies to determine promotions. Organisations can better understand employees' contributions and developmental needs by fostering a balanced evaluation framework that includes performance outcomes and digital competences. Strategic implications exist for organisations pursuing targeted role-based digital training programs to improve employees' digital capabilities related to various job functions. Customising training programs according to defined departmental and role-specific requirements ensures that employee training improves individual performance and ultimately achieves group objectives for the organisation. Highly focused, competence-based development improves productivity as users gain expertise in the tools and technologies they

leverage in everyday outcomes. Besides, a tailored approach enables efficient resource utilisation with economical training methods. After the needs analysis, organisations can ensure the most pertinent development areas are addressed for training programmes. Training budgets are more efficient when specific needs are identified, and training resources are optimised. Additionally, implementing a tailored digital competences training approach nurtures a culture of continuous learning in organisations. Support for constant professional development and upskilling programmes encourages employees to stay current with productivity software.

The relationship between digital competences and employability has implications for organisations and the workforce. Organisations are encouraged to commit to perennial investment in upskilling employees through digital training programmes to reskill employees whose roles are evolving due to digitalisation. Such investments are crucial for developing a competitive and dynamic workforce and require appropriate training infrastructures that provide continuous learning in digital competences and training in emerging technologies. Additionally, operations automation and human oversight in workflows need to be balanced. AI will likely improve operational efficiency and productivity; however, organisations should function on an augmented intelligence model. This model promotes the idea that AI tools augment human decision-making rather than act as a complete replacement. Implementing strict quality control measures with human verification at the core of the process allows for the optimal use of digital tools while preventing mistakes. Hence, human resource policies are required to be modulated based on the futuristic digital virtual ground. HR processes need to accommodate strategies focusing on continuous learning and adaptability to technology progression. HR policies should incentivise digital literacy and create pathways for upskilling. Additionally, job roles may need to be redesigned so that they integrate into digital tools seamlessly to facilitate the combination of human resources with digital resources in a more agile and better-connected manner that will meet the new needs of an organisation. Therefore, closing the gap between human resource policies and the digital age requirements is essential for organisations to build a digitally competent and adaptable workforce.

Conclusion and Future Studies

Digital competences are needed in modern organisations to achieve higher efficiency, productivity and competitiveness. Digitalisation requires digital competences with consequential changes in hiring and business models. Accordingly, staying relevant to technological progress is necessary to sustain and evolve in the fourth industrial revolution. Organisations must ensure their workforce has the digital capabilities to navigate and excel in the ever-evolving landscape. The study results highlight a bifurcated strategy to gain access to digital competences needs for entry-level staff and specialist functions within the banking and finance sector. Entry-level employees should have basic digital proficiencies to navigate Microsoft Office tools. Specialised roles require corresponding specific digital competences. Digital competences are crucial for achieving performance but are not a well-established factor in promotions within traditional banking roles. However, digital competences influence performance in IT and digital banking positions.

Digital competences must be embedded in performance reviews and targeted training, and continuous learning must be encouraged throughout the organisation. It supports individual and organisational development, helping employees meet performance goals and advance their careers. Digital competences can also improve employment prospects, giving job seekers an advantage in a digitised work environment. Adopting digital technologies like AI does not render human resources redundant. AI requires continued human oversight and intervention to improve its outputs. Organisations should invest in digital competences training to nurture a workforce prepared to tackle the challenges of the digital landscape. As firms increasingly leverage digital technologies, organisations should balance automation with human expertise. Organisations need to push digital competences within recruitment practices for competitive advantages and to cope with any operational challenges a pandemic has posed. With the two converging, there has gradually been a more intentional and explicit spotlight on digital competences in job specifications and talent attraction approaches. The pandemic has accelerated digital transformation. Consequently, digital competences are relevant in a digitalised workplace. In a post-pandemic business environment, organisations must recruit individuals with the digital

competences essential for innovation, automation, and sustaining a competitive advantage.

Future research should be conducted in other sectors of the economy to explore the adoption of digital competences for employability and competitive advantage. Also, subsequent studies should evaluate the training approaches to enhance employees' digital competences. Additionally, research should be undertaken to ascertain whether artificial intelligence improves employee performance or replaces roles.

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