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Developing and Managing Skills and Competencies for Digital Business in Africa

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12.1 Introduction

The impact of digitalisation across the globe cannot be over-emphasised (World Economic Forum, 2020). Currently, there is a digital revolution globally, and businesses cannot afford to be left behind (Tahvanainen & Luoma, 2018). Digital innovation has transformed the operations and strategies of industries, including telecommunication, banking, health-care, education, and manufacturing sectors (Nadeem et al., 2018). Through digital innovations, businesses are forced to change their mode of operations to remain relevant. To this end, businesses must ensure they have the internal resources to fit into the digital business space. Internal

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resources such as staff with the right skills and competencies are needed to respond to the requirements of the digital market audience (Andriole, 2018; Royle, & Laing, 2014). Electronic platforms are taking the place of traditional stores and malls, while the resultant effect is a change in marketing strategy and the skills of the workforce (Belleflamme, & Peitz, 2019; Hagberg et al., 2016; Ludike, 2018; Van Kerrebroeck et al., 2017). Marketing of products and services in the digital age for effective customer engagement will require that businesses equip their staff with the right digital competencies to meet the digital needs of the market. Additionally, job seekers who do not have the right digital skills might not fit into the labour market.

In this digital era, industries and organisations must strategically evolve if they desire to be relevant in the digital space (Royle & Laing, 2014; Tumbas et al., 2017). Though digitalisation comes with its disruptions and challenges, it is the new trajectory of the market space (Koski et al., 2016; Parviainen et al., 2017; Skog et al., 2018). Opportunities also abound in the digital space, but they will be accessible only to individuals and business organisations with the right digital skillset (Hoberg et al., 2017; Van Deursen & Van Dijk, 2014). Business organisations, often times, do not need to look outward for rare and inimitable talents to remain competitive in the digital world. The option of developing and managing these skills for organisational goals is worth adopting. Organisations can develop their workforce's skill set through the vestibule and on-the-job training to equip their staffers with adequate skills and abilities rather than recruiting new hands, thereby saving cost.

There is a growing need for digital skills in Africa with half of the jobs requiring digital skills and competencies (Fuchs & Horak, 2008; International Finance Corporation, 2019; Jenkin & Naude, 2019; Makoe, 2012). The adoption of digitisation and automation in agriculture, manufacturing, and service sectors in sub-Saharan Africa has increased the demand for digital skills and competencies among personnel (International Finance Corporation, 2019). Therefore, the demand for digital skills in the sub-Saharan region is expected to grow faster than in other regions in Africa. However, there is an observed skill gap in Africa and mostly in sub-Saharan Africa than other parts of the region in the availability of digitally skilled personnel (International Finance Corporation,

2019). Hence, it is important to increase the availability of digitally skilled personnel in the region and the rest of Africa if the continent's economy would not falter.

The implication of a digital skill gap is that businesses without the requisite Knowledge, Skills, and Abilities (KSA) might lack the capability to compete in the new business environment. Organisations must, therefore, upgrade the skill set of their workforce through training or recruitment. To do this, they must understand the workforce skills and competencies needed in this digital age. Therefore, the chapter identifies digital skills and competencies businesses should look out for in the labour market and equip their staff members with these skills. This chapter provides critical skills and competencies that organisations should equip their workforce with to add value and compete in the digital market space.

In addition, the chapter identifies how business organisations can develop digital skills required for staff members and how to manage these skills effectively for the desired outcome. The next section will focus on digital business in Africa, followed by sections on skills and competencies for digital business in Africa which are anchored on the firm's resource-based theory. The last three sections focus on how organisations can manage digital skills and competencies in Africa, recommendations, and conclusion.

12.2 Digital Businesses in Africa

Information and Communications Technology (ICT) offers enterprise management, growth, and development opportunities for businesses that necessitate the adoption of these technologies for operation (Mutula & Van Brakel, 2007). Through ICT, businesses can remove geographical barriers that limit their product/service market while also building customer engagement (Ziemba et al., 2020). Digital businesses are replacing brick-and-mortar enterprises while creating values and opportunities missing in the latter (Mahadevan, 2000; Mustafa & Beaumont,

2004). Small- and medium-sized enterprises are leveraging the opportunities in digital innovation by adopting digital practices and techniques to create a niche for their businesses in the market (Demirkan et al., 2016; Scuotto et al., 2017). Businesses with digital practices are increasing in developing countries, though not at the same rate as digital businesses in developed countries (Ngoasong, 2018). Beyond the current growth rate of digital businesses in Africa, there is a nascent market that businesses in Africa can tap from in order to take their enterprise activities to the next level (Ngoasong, 2018). Enterprises in Africa, going digital in their practices, must understand the context-specific opportunities in Africa, which they strategically want to access. They must understand the digital landscape appropriate for their target audience and implement strategies to respond to their market needs.

Digital businesses are described in different contexts depending on the perspective of the user. It has been defined from the perspective of marketing, finance, and even operations management. To Lee and Whang (2001), a digital business is the adoption of internet-based computing and communications to execute both front-end and back-end business processes. This definition construes “digital businesses” as a system utilised to achieve business goals. For Scott (2000), digital businesses are an enterprise with a technological fusion of business processes and organisational structure needed to create value and achieve business goals. These authors suggest that digital businesses can be seen as applications and models. On the one hand, digital business is seen as an application in terms of tools and technological facilities used by an organisation to carry out its daily activities towards achieving its business goals. To Wall et al. (2007), digital business is an application when it uses information and communications technology to facilitate faster business transactions.

On the other hand, digital business is argued to be a model as it redefines the traditional business practice and strategically adopts technology to maximise customer value and profits. In the context of this chapter, we approach digital business from a holistic perspective, which positions it as an application and a model. Through technological application, organisations can strategically innovate their business process to achieve

the desired outcome. The desired outcomes, in this case, are customer satisfaction, business growth, and profit maximisation.

In Africa, small-, medium-sized, and multinational organisations are utilising digital innovations to drive their business goals despite the challenges in their operating environment (Bolat & Taura, 2019). For instance, in Ghana and Nigeria, the agricultural sector is evolving through digital innovations. Agri-tech organisations in Ghana such as Farmerline, Farmable, and Esoko are reviewing traditional business models to fit into current realities by providing communication, crowd-funding, and pricing data (Bolat & Taura, 2019) while also bridging the gap between the market and the farmers. A similar result was obtained in the Nigerian agricultural sector with Prime Wave, an engineering company supplying equipment to aid rice processing. Prime Wave is also partnering with Al Wabel Trading Company—a rice miller, to invent technological solutions that will engender rice processing in Nigeria (Bolat & Taura, 2019). Such innovations are driven by the availability of technological resources and can spur the process of production, sales, and marketing of goods and services. Opportunities such as the abovementioned abound in Africa for businesses therein to take their enterprise activities to another level.

Specifically, the arts, media, and entertainment industries in Nigeria and Kenya have embedded digital technologies in carrying out their activities. Digital businesses are increasing in Africa, but digital skills to drive the next phase of business innovations are largely missing (Madden & Kanos, 2020). The current focus is on Industry 4.0, which emphasises the utilisation of smart technology and other modern technological tools in the manufacturing process, service delivery, and customer engagement (Hecklau et al., 2016). These authors recounted that sub-Saharan Africa has a skill gap for twenty-first-century business. Madden and Kanos emphasised that sub-Saharan Africa ranked lowest among other world regions on the percentage of the labour force on LinkedIn and digital skills availability. Though Kenya, Nigeria, and South Africa has a higher level of digital skills than the rest of sub-Saharan Africa's total average, there is evidence that digital skills and competencies are needed in Africa for the development of businesses and the actualisation of goals (Madden & Kanos, 2020).

12.3 Skills and Competencies for Digital Businesses in Africa

Technological innovation is the game-changer for entrepreneurs and enterprises globally as it provides opportunities to meet the need of the market and enhance business success. Technological innovations have changed the face of businesses by transforming the processes of productions and service delivery (Craffert et al., 2014). These changes are not limited to organisational structures; people must also upskill to create the needed market value. As digital businesses increase in Africa, the continent must have a labour force with the right digital skills to compete globally. Competency and skills are closely related, with minor differences. Competency is a broader categorisation of skills. Therefore, a skill is limited in the application, while competencies cover what a skill is and extends the definition. Cedefop (2008) defines a skill as the ability to perform tasks, solve problems, while competence is the adequate application of learning outcomes within a defined context. According to Ananiadou and Claro (2009), skills and competencies in the twenty-first century are different from the requirement of the nineteenth century; for this purpose, organisations must be aware of the primary digital skills and competencies required in their contemporary business space.

Digital skills and competencies are described in this chapter as the primary technological knowledge, skills, and abilities applied to the work process to achieve the desired outcomes. Staff members are expected to possess the skills and competencies the organisation needs to survive and create a niche in the digital market. Digital transformation is an essential aspect of today's business strategy, and technological skills rank among the top skills businesses seek from the labour market (Hoberg et al., 2017). Different roles are evolving, requiring digital skills and competencies that will influence an organisation's structural and cultural changes. In a survey conducted by Hoberg et al. (2017), 14 digital skills and competencies required for digital business transformation were identified, as shown in Table 12.1.

The skills are ranked in their order of importance and priority. It is essential that as businesses adopt digital practices, they must emphasise digital security strategies to protect their data and businesses. For

Table 12.1 Skills needed for digital businesses transformation

S/N	Skills	Percentage showing ranking (%)
1	Digital Security	88
2	Mobile Technologies	87
3	Business Change Management	84
4	Big Data Analytics	84
5	Cloud Computing	76
6	Internet of Things	75
7	Business Networks	71
8	Product/Service Integration	66
9	In-Memory Databases	6
10	Entrepreneurship	65
11	Social Media	63
12	Artificial Intelligence	56
13	Novel Interfaces	50
14	Blockchain	36

Source Hoberg et al. (2017)

instance, organisations providing electronic payment services in this digital age must invest in digital security to protect their customers' financial data. As businesses have more online visibility, there is also an increase in online threats. Michota (2013) examined digital security concerns and threats facing women entrepreneurs in developing nations and identified issues such as security, privacy, social networking worms, digital threats, digital leaks, impersonation, and trust issues as key threats and concerns for women entrepreneurs seeking to put their business on the digital space. The availability of personnel with digital security skills will, if not solve, reduce the threats to digital insecurity and fears. Personnel with digital security skills are, therefore, crucial to the performance of today's digital business.

Mobile technologies provide countless opportunities for businesses, goods, and services to be offered to individuals wherever they are. Studies have shown that convenience and comfort are key factors that attract consumers' patronage (Collier & Kimes, 2013; Spake et al., 2003). Organisations must make services or products available on mobile technologies to enhance business growth. Business change management is also an important skill and competence needed in an organisation willing

to adopt digital innovation. Going digital will have its structural disruption in the organisation, and it will take managers with the requisite change management skills to coordinate the process and manage the effects on workers and the organisation. Therefore, businesses must ensure that those at the managerial level are groomed on change management strategies because the adoption of digital innovations will bring structural and product/service changes to the organisation. Developing an intent to have your business in the digital space is not sufficient as all related business activities must be aligned to digital procedures. The corporate strategy which other business activities lean on should be premised on innovative approaches which will require innovative skills and competencies. Also, digital skills and competencies are expected of operational staff and those at the helms of business management. Staff with innovative skills will be needed from top to bottom.

Big data analytics is also an important skill and competency needed for digital business in this era. Businesses are driven by information, and it is important that accurate information is used to predict the market, understand the current need of the market, and what the direction would be in the next few years. With big data, organisations can make precise and accurate decisions that will drive business growth (Hoberg et al., 2017). Therefore, big data analytics is a crucial personnel skill and competency needed by businesses in this era. Cloud computing and the Internet of Things (IoT) offer businesses the opportunity to collect important data in real-time about how, when, and where a consumer uses a product or service (Hoberg et al., 2017). It allows organisations to store, process, and make logical sense from data towards making and implementing customer-centred decisions. IoT is an essential aspect of technological revolution, which allows technological tools to communicate through the internet. It consists of physical and virtual “things”, with identities, physical attributes, and virtual personalities (Psannis et al., 2014). IoT is crucial in computing information and communication systems, which describe a world of digital elements where everything is interconnected. In business, it can be utilised to develop new products and services that meet the needs of the African market. To achieve this, the organisation will surely need personnel with such skill. Cloud computing is a technological revolution that businesses need to leverage on with skilled

personnel. Cloud computing engenders communication between organisations with the potential to provide financial and operational benefits to small businesses (Attaran & Woods, 2019).

Businesses require personnel with business network skills, such as building relationships, and leveraging influential connections in today's business space. Product/service integration competency and in-memory database skills were also identified. Furthermore, entrepreneurship, social media, artificial intelligence, novel interfaces, and blockchain skills are sacrosanct to the growth and development of businesses in this era. A key observation from the identified skillset is that despite the emphasis on digitalisation, skills such as entrepreneurship and business networks are still needed in the digital business space because it takes an employee with an entrepreneurial mindset to create something unique from the digital tools (Scheepers, 2008). Without appropriate business networking skills, the business may have a limited market share. As businesses in Africa tap into the opportunities in the digital space, appropriate digital hard and soft skills must be developed.

12.4 Developing Digital Skills and Competencies in Africa: A Resource-Based Perspective

The Resource-Based Theory (RBT) of the firm by Barney (1991) contends that for businesses to enhance their competitive advantage and remain relevant in their sector, they must possess rare, valuable, difficult to imitate non-substitutable resources. There are numerous resources in the organisation, which range from cash, technology, buildings, etc. The resources we are most concerned with here are the human resources in the organisation. Given Barney's position on the business resource as her primary strength for creating a niche in the market, and rightly positioning itself for business performance. We propose that businesses in Africa can develop the digital skills and competencies of their workforce through recruitment, personnel training, and retention.

Evidence shows a substantial digital skill gap in Africa that businesses need to compete in the digital market (James, 2019; Mutula & Van Brakel, 2007). From the perspective of the resource-based theory, to create digital business values that will be rare, non-substitutable, and inimitable, the businesses in Africa must develop their internal human digital capacities to fit the demands of their market. To achieve this, businesses in Africa should either train or recruit personnel with these digital skills. Sousa and Rocha (2019) observed that digital learning through an organisation is the right step in the right direction towards bridging the gap between the current market skill need and what the employees possess.

We propose in this chapter that: organisations must first identify the digital skills needed in their sector; examine the current stock of manpower available; access the resource base of the business; and decide on the training of internal employees or recruit new hands. We discuss this argument further.

a. Top Management Support

Transforming a business into a digital space is not just about adopting technology and recruiting personnel with digital skills into the organisation. It requires the understanding and support of top management to address the change within their business space and respond quickly with competitive solutions (Baculard, 2017). The management must be working with a strategic blueprint that might inform decisions such as creating new departments, empowering workers, or developing new products or services. The current trend of the market would determine the actions and steps to be taken by the organisation. There must be a clear focus on digital opportunities, which will require top management support. Companies should have “holistic view of digital threats and opportunities facing key parts of the business and develop a strategy to harness the opportunities and manage the threats”. Management support for digital business innovation in Africa must not be contingent on submitting to market pressure but filling a gap and meeting consumers’ needs. Besides providing financial and human resources for going digital, the management must have the strategic willpower and vision to respond

to the need of the society. The top management must be passionate about going digital (El-Haddadeh, 2020; Smith & Tushman, 2005).

b. Evaluate Manpower Skill Inventory

Top management support provides the needed environment for the adoption and implementation of strategies geared towards digital business innovation. To have the required stock of manpower with the right digital skill, the management must do a manpower skill inventory to analyse the current workforce skill. Managers must provide answers to questions such as “what is the quantitative and qualitative nature of the human resource in the organisation”? Do they have the needed skill to compete in this sector? Do we need to recruit or train our workforce with the needed skills to compete in this sector? To arrive at the right answer, the organisation might conduct a workforce skill inventory analysis to evaluate if their current workforce skills meet their sectorial market needs.

c. Identify the Digital Skill Requirement in Your Sector

The next step is to identify the specific digital skills relevant in the sector in which the business operates as different sectors have digital skills peculiar to them. An organisation must understand the digital skill and competency required to meet customers’ needs before they can effectively develop the digital skills and competencies of their workforce. For instance, Ngoasong (2018), from an entrepreneur perspective, examined how the digital competencies of entrepreneur’s can be developed in Africa. Ngoasong suggests that there must be policy intervention for the development of information and communications technology infrastructure, transport, local distribution, and training opportunities to develop an entrepreneur’s digital competencies. Royle and Laing (2014) conducted a study to understand the digital marketing skill gap and observed that focusing on evaluation metrics, guidance on best practices, future-proofing, and strategic integration are skills needed for the communication industry. Similarly, Baro et al. (2019) examined digital literacy skills and knowledge-based competencies among librarians in

Africa and observed that librarians in Africa require digital skills such as uploading documents to online platforms, search skills, sending and receiving e-mails skill, and usage of different social media. Baro et al. added that digital library development skills, applying new technologies into library services, ability to create separate file formats, and usage of open-source software skills were also required. Library website development skills were discovered as the most in-demand skills among librarians.

Generally, three core competencies were reported by AON'S Assessment Solutions (ASN) (2020) for organisations trying to create a niche for their business in the digital space. The first is Learnability: an individual's desire to develop and improve; Agility: an individual's capability to adapt quickly and effectively; and Curiosity: having an inquisitive and enthusiastic approach and open to change. AON'S proposed that when employees score low on these core competencies, they are likely to be uncomfortable and less effective in a digital space. It is important for organisations to assess the digital readiness of the workforce before instituting a digital innovation in a unit, department, or the whole business. Besides, these three core competencies are needed in businesses irrespective of organisation, region, or nation. Other personnel skills that are also important, according to AON'S (2018), are:

- i. Drive to succeed: This is taking initiatives and following the path to achieving objectives
- ii. Handling data: This involves analysing information and evaluating the situation and making decisions utilising data.
- iii. Strategic solution: This is providing creative solutions to stakeholder's problems
- iv. Business acumen: This is understanding the need of the consumers and creating, developing business opportunities through them.
- v. Virtual collaboration: Individuals in a contemporary organisation should have this ability, especially in the light of the covid-19¹ pandemic. It is the ability to interact with others remotely while working together to achieve common goals.

¹ <https://africacdc.org/covid-19/>.

- vi. Digital communication: It is the ability to communicate and interact with others via technological application. This is highly crucial in today's organisation considering the changes Covid-19 has brought forth.
- vii. Mental endurance: Individuals must have the mental resilience and ability to cope with pressure and setbacks
- viii. Coaching mindset: Supporting the development of one another is an important factor for feedbacks and engagement

Identifying a digital need is important before making any other decision on digital transformation. It is a crucial step towards creating a niche in the digital space.

d. Make a decision

At this stage, the organisation decides to either train the workers or recruit new workers, taking into consideration the cost implication. The two options have both advantages and disadvantages. Training the workforce at the expense of recruiting has its advantage and disadvantages. The choice of training allows the organisation to retain its workforce and continue to work with individuals who understand the nature and process of work in the organisation. Bringing in a new employee might mean the organisation will incur the cost of recruitment and the new staff orientation process on the job, which might cost time and money (Tapia & Kvasny, 2004). On the other hand, the organisation will benefit from recruiting a new employee that will offer fresh ideas and proffer new methodologies to how things are done within the organisation. The organisation has to decide which of the two options harnesses its comparative advantage and, thereafter, make a decision.

Training or recruiting staff with digital skills and competencies needed in an organisation to create value for businesses in Africa should not be the end to the quest for digital innovation that meets consumer needs. Therefore, the training process, goals, and methodologies must be designed to fit the organisation's market needs. Recruitment and training will require a financial investment which the business must ensure they

can fund. The financial demand must be compared to the proposed value benefits in the investment; this is crucial in making a decision.

Effective training helps to bridge the gap between the skills and competencies an individual has for a job and the requirement of the job (Chetty, Aneja et al., 2018a; Chetty, Qigui et al., 2018b). The organisation must design training goals and objectives in line with the training need of the job. This would inform the training methods and conduct. For instance, The International Finance Corporation (2019) suggested that short courses between 3 and 12 months are ideal, with the integration of instructional methods which are centred on practical learning than theoretical knowledge, is crucial to bridging the digital skill gap among employees in sub-Saharan Africa. Digital skills are more concerned with practical knowledge than theories; organisations must, therefore, ensure that the training method is practical. Off the job training should be adopted so that the individual can spend time learning the skill practically.

g. Assess progress and evaluate competencies

The management must constantly evaluate the success and otherwise of the decision made to provide interventions where needed. The organisation must determine if they have been able to achieve their goal of having a stock of manpower with the needed digital skills. Evaluating the progress made will help make informed decisions on how to sustain the success achieved or initiate a new strategy towards achieving the desired goals. Initiating a new direction or managing the current trajectory will be determined by the management.

12.5 Managing Digital Skills and Competencies in Africa

Developing digital skills and competencies among staff is important, but managing these skills and competencies is crucial. This is because poor management of the investment in digital skills of employees will

waste resources and time without achieving the intended value proposition. Hence, businesses in Africa must manage their investment in digital skills appropriately. Figure 12.2 provides recommended steps that can be adopted to manage digital skills and competencies by organisations in Africa.

- i. **Avoid a person-job fit gap:** To ensure that human capacity is adequately put to use, businesses must avoid a gap between the person (personality, skills and competencies) and the job (task, responsibilities and roles). A gap in the person-job occurs when there is no fit between the job and the person. When the digital skill an individual has is not channeled towards the right job, and the individual performs below capacity, a person-job fit gap has occurred. Also, when an employee is digitally unskilled and placed on a job that requires digital savvy, a gap has occurred in the person and the

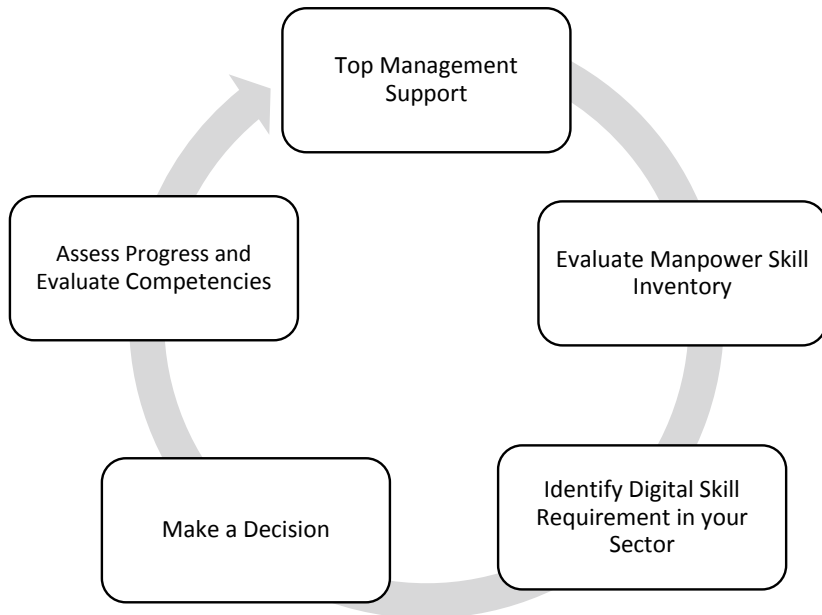


Fig. 12.1 Process of developing digital skills and competencies (Source Authors)

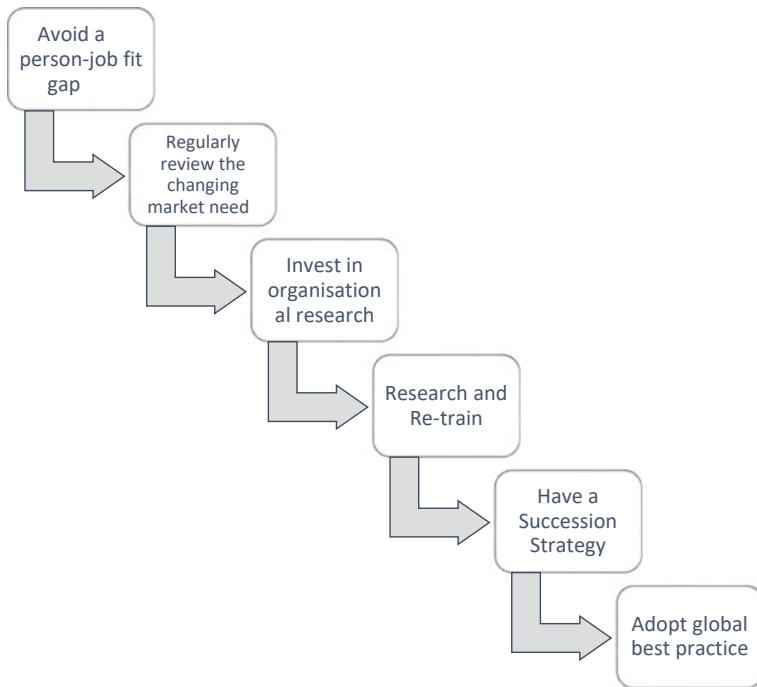


Fig. 12.2 Steps to managing digital skills and competencies in Africa (Source Authors)

job. Organisations must prevent such occurrences to avoid workplace redundancy and wastage of human resources.

- ii. **Regularly review the changing market need:** Organisations must also constantly review the market changes to understand the market direction, new products, and services required, and how the organisation fits in. Businesses in Africa must be able to project the skills and competencies required of the market and make an appropriate plan not to be caught off guard. This is crucial because the market in Africa is vulnerable to changing market dynamics, which can alter consumer demand. For instance, International Finance Corporation (2019), a World Bank Group, conducted a study in sub-Saharan Africa to explore the digital skills needed in the region now and in the coming years and discovered that skills such as web research,

basic software use, digital marketing, and artificial intelligence are in high demand in sub-Saharan Africa. Therefore, organisations must continuously review the changing market need to be abreast and ensure they are not left behind in the digital revolution.

- iii. **Invest in organisational research:** For an organisation to be abreast of the changing market trends, it must invest in market research. Market research is vital as it provides businesses with the needed market information and insights needed to make the right decisions. Investment in research will update the management of the current enterprise skills required for market performance as consumer demand changes. Therefore, to manage available skills and competencies within the organisation to ensure that the business has rare, inimitable, and non-substitutable skills and competencies needed to drive and sustain business performance, organisations in Africa must invest in market research.
- iv. **Research and Re-train:** Assess and upgrade competencies in line with the changing trends in the digital world to avoid being left behind in the development of innovative products or services. The organisation should be able to identify the consumers' future needs within its market and begin to put in place an appropriate structure, attract the needed skill, and initiate the expected innovation to be ahead of the consumers. Investment in market research will give information on the market's current situation and the necessary steps the organisation should take to remain competitive. A notice of a skill gap, showing a need in the market with a lack of human capacity to respond to this change, should result in the re-training of the concerned department and staff. Training is a continuous process, and the organisation cannot rely on its workforce skillset for a long time. There will always be a change in taste, product, and service desirability of the consumers in a market. For this reason, the organisation must continuously research, orientate, train, and re-train its workforce on the new skill required for product and service delivery.
- v. **Have a succession strategy:** Having a sustainable pipeline of human capital with digital skills is vital for managing skills and competencies in an organisation. Businesses in Africa must ensure a talent succession pipeline that does not allow the organisation to be deficient in

having the right person doing the right job at the right time. In an era where digital skills are scarce and rare in Africa, businesses must ensure that they have a system that mentors young employees, ensuring the transfer of knowledge, skills, and abilities from the older workers to the younger ones. By doing this, the business will not be deficient in a digitally trained workforce ready for the current and future needs of the market.

- vi. **Adopt global best practice:** Businesses in Africa must ensure that their practice is in line with global best practices because this is important for business competition. Questions such as: does our mode of operation conform to global best practice in this sector? Does our product/service meet up with the global standard? How can we improve our business process and outcome? These questions are important for the organisation to continually evolve and not be left behind in their sector or industry. It is important that businesses in Africa realise that they are competing in a global business space that is engendered by digital technology. Hence, the need for a constant review of their business practices in line with global standards.

12.6 Recommendations for Government and Businesses in Africa

The digital skill gap in Africa is of great concern as this might slow the digital business transformation drive agenda in Africa. However, the government and business organisations in Africa can respond to this challenge and turn the table in her favour.

First, businesses in Africa must understand the market's product and service needs before deciding on the digital innovation that fits their businesses type. This is vital as the digital transformation endeavour of the businesses must be driven by the need of the consumers in the market; digital innovation not focused on meeting the need of the consumers will not achieve the desired business outcomes. Businesses in Africa must ensure that the digital design they seek to adopt meets the need or responds to consumers' need in the market.

Second, there are generic and specific digital skills. Generic digital skills are contingent on the essentials of digital skills, which allow the citizens to harness the opportunities in technology. However, there are professional skills which this chapter has focused mostly on that are specific to occupations and professions that employees must be empowered with. The digital skills and competencies required in the banking sector are not the same as in the agricultural sector, and it also differs from the requirements in the educational sector. Businesses in Africa must understand the kind and nature of skills and competencies needed in their sector to enhance and sustain business performance and competitive advantage. What works in business “A” rendering logistic service is not necessary the digital innovation required for the farmer trying to predict rainfall and harvest seasons correctly. Businesses should understand their sector’s skill and competency and adopt necessary steps identified in this chapter to meet them.

Third, the opportunities are there for businesses in Africa to tap into the market created through digital innovation; however, businesses must ensure they rightly position themselves with the right skills and competencies to attract and retain customers and enjoy a competitive advantage. Businesses must also understand that to create a rare, non-substitutable, and inimitable workforce with the right skills and competencies, they should train their internal workforce to fit into their digital needs or recruit expatriates. However, appropriate management of human resource capitals is key to remaining relevant and competitive in the African market.

Lastly, the government has a role to play in bridging the digital literacy gap among its citizenry and improving the digital skills and competencies needed for business performance. The government must make a conscientious effort to include essential digital skills in schools’ curriculum from primary, secondary, and tertiary institutions. Formal education provides a good platform for embedding digital skills in the citizens. Universities will have to revisit their curriculum and make necessary changes. Otherwise, many graduates in Africa will not fit into the labour market need. The privately owned businesses in Africa must begin to take measures to develop and maintain digital skills in their human capital.

12.7 Conclusion

Digital business has come to stay, and Africa must prepare its human capital for the current and future business needs. The best approach to developing digital skills and competencies in an organisation is contingent on the financial and human resources available to the organisation and the consumers' needs. Organisations will only create a rare, inimitable, and non-substitutable workforce with the right digital skills when the organisation aligns its resources to the need of the market. Digital business is not just about the people but also the structure and process of the organisation. The government and private-owned organisations have a role to play in ensuring that the demand and supply of digitally skilled personnel are at equilibrium.

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