

# Workplace Self-Directed Learning: Embracing Digital Platforms

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## **Abstract**

*Literature in the African context indicates that digital self-directed learning is more prominent in academic institutions. Studies on how employees embrace digital platforms for self-learning to progress knowledge on work practices are limited. Therefore, this study focused on drivers for employee self-directed learning, adoption of digital platforms, and workplace conditions that support or constrain the use of digital platforms in self-directed learning. A cross-sectional design was used where purposive sampling was employed to select 59 employees from different targeted fields in Dar es Salaam who met specific criteria such as health, management, education, and information communication technology. Descriptive analysis was used to analyze data that was collected using KoBoToolbox. Study findings indicate that working personnel adopted digital platforms such as LinkedIn Learning, SkillShare, Coursera, Udemy, Tutorial Points, Masterclass, Edureka, YouTube, Google, and WhatsApp for convenience and flexibility. Participants indicated that intrinsic motivations for employees to self-learn are the desire for growth, and the need to update skills among others. Extrinsically, participants underscored the need for organizations to facilitate the learning environment particularly the access to digital facilities. Similarly, digital self-directed learning was not necessarily linked to work accomplishment denoting the importance of organizations creating flexible activities related to new knowledge and recognizing certificates offered through self-learning. The study recommends the integration of self-initiated and organizational-driven learning that embraces digital technology. Similarly, organizations must facilitate supportive learning environments to encourage employees to take the initiative to self-learn. Concerning policy, the study informs policymakers and employers to facilitate and re-design work activities that support employee self-directed learning. The study also contributes to the growing literature on self-directed learning in the workplace and the role of technology in closing the skill gap in the workplace.*

**Keywords:** *self-directed learning, workplace, digital platforms*

## 1.0 INTRODUCTION

Globally, organizations are embracing learning to attain competitive advantage. Non-traditional training and learning approaches, including self-directed learning, are gradually emerging to keep up to date with changing workplace needs. Learning is more effective when employees initiate the learning process regarding when, how, and what to learn. Self-directed learning (SDL), which underscores learners' responsibility in different learning situations (Lindeman, 1926; Knowles, 1975), has become a requirement in today's working life (Bell, 2017) because technological changes force employees to develop and learn faster (Harteis, 2017); learning is strongly rooted in daily work (Collin, 2006; Germain & Grenier, 2015; Littlejohn & Margaryan, 2015; Yeo, 2008). The responsibility for work and learning has shifted from organizations to individual employees and teams (Ellinger, 2004; Noe & Ellingson, 2017; Rigby & Ryan, 2018). SDL has mainly been described as a phenomenon enhancing the motivation, creativity, and productivity of the individual and whole organization as employees are expected to take more responsibility for strengthening current skills and adding new ones to meet current job demands, prepare for leadership opportunities, and ensure their employability to move and adapt within and between organizations as needed (Molloy & Noe, 2010). While about 35% of employee learning hours in organizations now occur in the absence of an instructor (ATD, 2016), there has been a focus on informal, unstructured, and innovative methods that stress learner autonomy and learner-driven interaction, such as job crafting, communities of practice, webinars, Massive Open Online Courses (MOOCs), and social media exchange (Barnes, Lescault, & Wright, 2013; McFarland & Ployhart, 2015; Ravenscroft, Schmidt *et al.*, 2012). This kind of learning makes organizations transfer the learning power to individuals to foster flexibility, faster and more effective operations, and professional growth (Rigby and Ryan, 2018). Individual self-directed action seems to be the key to enabling both continuous competence development and creativity (Gijbels *et al.* 2012). In SDL, employees initiate learning, determine needs, set learning goals, select strategies, and evaluate outcomes. At the same time, studies have shown that self-directed learning is increasingly amplified by digitalization (Purcell & Rainie, 2014 & Lanzara, 2016).

Largely, technological advancement, the need to deal with dwindling organizational budgets, and the Covid-19 pandemic are said to have accelerated digital learning in academic institutions and organizations in developed and developing countries, though with a differing pace (Crawford *et al.*, 2020; Roberson *et al.*, 2021). Studies conducted in developed nations confirm that digital learning, which encompasses a range of activities facilitated by digital tools and technologies, can encourage creativity and success and break from

traditional norms (Haleem et al., 2022). The use of digital tools for in-service and continued learning has become essential to support individual and organizational learning needs in response to societal changes and job demands (Hofmeister & Pilz, 2020). In developing countries, Tanzania inclusive, organizations are progressively taking the opportunity of the comparatively slowly growing technology for learning. Several studies show how African countries are using digital platforms for learning. For instance, Jack & Antoinette (2021), in their research on SDL in higher education in Africa, indicated how academic institutions were able to counter the effects of COVID-19. Other scholars in Namibia (Iiyambo & Geduld, 2019), Ethiopia (Shishigu, Michael & Atnafu, 2019) and Nigeria (Abubakar & Arshad, 2015; Fakolade & Adeniyi, 2010; Mbagwu, Chukwuedo & Ogbuanya, 2020; Nottidge & Louw, 2017; Ottu, 2017) have also indicated how these countries have embraced digital platforms in learning predominantly in the academia. In Tanzania, the development of e-learning platforms for secondary schools, such as the Shuledirect initiative and the Halostudy multimedia to enhance content for science and mathematics subjects, is growing rapidly (Shuledirect, 2018 & Halostudy, 2018). At the university level, some universities in Tanzania have taken advantage of ICT to widen access to education via ICT-mediated distance education and to complement campus-based courses with online instructions (Mtebe and Christina, 2018).

Most studies on digital learning in this context have consistently focused on the academic institutions where educational initiatives directed towards ICT integration in teaching and learning at all levels of education have grown exponentially. The use of technology for self-directed learning in the business environment has also been explored extensively; for instance, Lemmetty (2020) underlined the importance of self-directed learning in a business environment and how it can increase an organization's competitiveness and innovation. Most studies underscoring the use of digital platforms for self-directed learning in the workplace have been highly conducted in developed countries. For instance, Caruso (2018) explored the role of Web 2.0 technology in self-directed workplace learning and job performance outcomes. Riddell and Song (2017) indicate that higher levels of knowledge are related to greater use and adoption of technology in the workplace.

Nevertheless, developing countries such as Tanzania indicate limited studies in this area. Therefore, this study explored the use of digital platforms in self-directed learning in the workplace. Specifically, this study focused on drivers for employee self-directed learning, adoption of digital platforms, *and* workplace conditions that support or constrain the use of digital platforms in self-directed

learning. This knowledge gap is critical considering the shortage of skill capacity of personnel in developing countries. In Tanzania, studies have indicated that there is a considerable divergence between the kind of graduate's employers expect in both the public and private sectors and those produced by colleges and universities (Mwita, 2018; World Bank, 2016). This study contributes to the growing literature on self-directed learning in the workplace and the role of technology in closing the skill gap in the workplace. Globalization and the advancement of technology are gradually increasing in developing countries, presenting the opportunity to address the skill gap. Besides, budget shortages for training in most organizations call for the intensive utilization of digital platforms. This study, therefore, provides valuable insights into how technology-enabled employees can use learning devices and platforms to support self-directed learning to improve productivity and efficiency in the workplace. Concerning policy, the study informs policymakers and employers to facilitate and re-design work activities that support employee self-directed learning.

## **2.0 REVIEW OF RELATED LITERATURE**

A significant approach to workplace learning and in-service training is self-directed learning. Self-directed learning is a process where individuals, with or without others' assistance, take the initiative to diagnose their learning needs, formulate learning goals, identify resources for learning, choose and implement appropriate learning strategies, and evaluate learning outcomes (Loeng, 2020.) Scholars posit that learners utilize the technological resources taught by teachers during class for SDL beyond the classroom (Lai, 2015b; Lai & Gu, 2011). Self-directed learning enables learners to select appropriate learning strategies and actively engage in the learning process depending on the context in which they are learning (Geng, et al., 2019). Self-directed learners are motivated by various factors such as curiosity, desire for success, job requirements, self-esteem, and self-efficacy (Wang, 2017; Boyer et al., 2014). The effectiveness of SDL depends on the individual motivation to self-learn and organizational support, such as creating an environment conducive to supporting learner autonomy, access to relevant resources, and encouragement of collaboration and information exchange between employees (Lemmetty, 2020). On the other hand, successful implementation can be hampered by heavy workloads (Lloyd et al. (2014), loss of focus (Randall et al., 2021), and lack of resources and time (Song & Bonk (2016).

While there is a growing number of opportunities that exist to take advantage of the potential of new tools and technologies and improve the efficacy of self-directed learning, the digital uptake is still constrained in the developing countries, Tanzania inclusive. Major challenges are related to Low levels of ICT

infrastructure (lower penetration of electronic devices and the internet among the population), limited resources to afford internet-based platforms, awareness of available platforms for learning, and people-related challenges.

Digital workplace learning can be defined as learning supported by digital technology to enhance learning and job performance. Through the affordance of a wide range of tools and equipment, digital technology has allowed learners to personalize their learning space, gain extended access to learning opportunities, enhance individual and group learning experiences by participating in learning communities, and gain just-in-time performance support through knowledge sharing in real-time. Employees are encouraged to use technology to share knowledge and learn through best practices (Harris, 2015) because digital platforms accord employees flexibility for preferences for better outcomes (Dunn and colleagues, 1995; Felder and Silverman, 1998; Fleming, 2001). Digital technology can extend information access by introducing additional resources beyond organizational boundaries while simplifying employees' access to knowledge content through a personalized learning space. Bates (2019) categorizes software resources for learning to include, but not be limited to, learning management systems (LMSs) (Moodle, Canvas), software packages (Microsoft Office 365), internet browsers (Firefox, Chrome), and social media sites (Twitter, Facebook). This evolution of powerful open courses (Moodle, Blackboard, etc.) and social networking sites (WhatsApp, Facebook, Twitter, LinkedIn, Instagram, Snapchat, Pinterest, Reddit, TikTok) has transformed digital learning and SDL.

## **2.1 Theoretical orientation**

This study is anchored on the self-directed learning theory (SDLT) advocated by Knowles in the 1980s. This theory is associated closely with the research objectives of this study which aimed to explore the use of digital platforms in self-directed learning in the workplace focusing on drivers for employee self-directed learning, adoption of digital platforms in self-directed learning, and workplace conditions that support or constrain the use of digital platforms in self-directed learning. The theory highlights the influence of motivational factors on employees' engagement in learning activities and provides a possible explanation for their engagement in self-directed learning using technology tools and resources. Accordingly, it posits that self-directed learning stimulates a spirit of self-reliance and a sense of responsibility for own learning. According to Knowles (1975), SDL assumes that (a) the human being grows in capacity and needs to be self-directing as an essential component of maturing. This capacity should be nurtured to develop as rapidly as possible. In this study, organizations, through their human resource officers, have the central role of linking learning to

individual tasks at work. More so, they need creative ways to make employees take the initiative to learn and create career pathways. (b) Learning experiences should be organized as task accomplishments or problem-solving learning projects, and (c) learners are motivated by internal incentives, such as the need for self-esteem, the desire to achieve, the urge to grow, the satisfaction of accomplishment, the need to know something specific, and curiosity. Concerning this study, employees' self-directed learning renders employees a purpose and self-actualization. Based on Knowles' (1975) assumptions of SDL, the definition of SDL involves a process in which individuals take the initiative, with or without the help of others, to diagnose their learning needs, formulate learning goals, identify resources for learning, select and implement learning strategies, and evaluate learning outcomes Knowles (1980). Broadbent (2017) argues that SDL complements technological readiness and drives employees' learning behavior, as well as their learning experience and perceptions, towards digital platforms. Thus, employees' agility for self-directed learning leads to the effective use of available digital platforms. According to the theory and other proponents of self-directed learning, such as Taylor and Hamdy (2013), the motivation to learn is intrinsic and emanates from the learner. However, extrinsically, organizations must provide conducive environments to facilitate the adoption of digital platforms for self-directed learning at the workplace.

In conclusion, the literature and theoretical reviews show that the use of digital platforms in self-directed learning in developing countries is still limited. Both internal and external factors drive SDL. The role of the employer is also paramount in supporting the adoption of digital platforms to self-learn. Nevertheless, it is important to recognize challenges that face employees engaging in SDL that may hinder its successful implementation, such as limited resources, access, and lack of interest.

### **3.0 METHODOLOGY**

#### **3.1 Research approach**

The study adopted a cross-sectional study where quantitative data were collected once for all. The design allows for the estimation of the intended variables is cost-effective in terms of time and other resources while assuring good quality of data (Kothari and Gauran, 2019). This cross-sectional quantitative study is multifaceted and hence deals with the nature of the phenomenon, which is the use of digital platforms is self-directed learning at the workplace. Both closed and open-ended questionnaires permitted the employees to describe and determine the usage of digital platforms for self-learning at the workplace.

### **3.2 Sampling**

The study employed non-probability purposive sampling to select employees in the public and private sectors in Dar es Salaam. Dar es Salaam region was purposively chosen for convenience because it is one of the cities where ICT use is massive. The city has the potential to provide in-depth insights into the phenomenon under investigation. Purposive sampling was used to identify and select employees with access to digital devices. Participants who engaged in self-directed learning using technology in their work were specifically sought. This criterion was crucial to ensure that participants possessed relevant experiences and perspectives related to the research topic. The participants were purposefully selected based on their expertise and diversity in terms of job field, age, and gender to provide a representative understanding of self-directed learning and technology in the workplace. According to Cresswell and Plano Clark's (2018) definition, purposeful sampling involves the deliberate selection of individuals or groups with significant expertise or experience related to the phenomenon under investigation (in this context, use of digital in SDL). To address bias in purposeful sampling, the researcher selected participants from different targeted fields who met the set specific criteria such as health, management, education, and ICT.

### **3.3 Data collection methods and instruments**

Data were collected using an online, self-completion survey that was distributed to employees working in different sectors. The survey was completed using Kobotoolbox (<https://www.kobotoolbox.org>). Kobocollect facilitates preparing questionnaires/forms, collecting data, and downloading and presenting data. KoBoCollect made data collection/recording during the survey more concise and reduced the cost of doubling the questionnaire paper, cutting the cost of data tabulation, and minimizing recording errors. It can also make a setting to show or not show questions relevant to the respondent's answers to the previous questions. If the question did not have to be displayed when the respondent answered choices that were not required, then the question does not appear on the respondent's screen. With this setting, respondents work effectively and efficiently when answering the questionnaire by focusing only on the questions displayed on the screen that are relevant to them. The researcher, therefore, created both open and closed-ended questionnaires and shared the form links with respondents in different organizations. Specifically, data was collected on drivers for self-directed learning, the use of digital platforms at the workplace, conditions, and challenges of using digital platforms to self-learn.

### **3.4 Validation of data**

To validate the instruments and ensure their usefulness in the field, the

instruments were piloted to colleagues where the questionnaires were distributed to check for the relevance of the questions, and appropriateness of the instruments with the study. The researcher accepted and modified the suggested question(s) to capture the intended meaning. The researcher also deleted all irrelevant questions after piloting the instruments and found them redundant.

### 3.5 Data analysis

The data collection results using KoBoCollect were instantly available in the KoBoToolbox server. The results were downloaded into CSV format and imported into Statistical Package for Social Sciences (SPSS) version 20 and Microsoft Excel. The data were analyzed using descriptive techniques. The analyzed data was presented using tables, figures, and graphs with some narratives from open-ended questionnaires.

## 4.0 RESULTS

Using KoBoToolbox, closed and open-ended questionnaires were conducted with 59 participants from different professional groups (health, education, management, and ICT). Most of the respondents were male (n=35, 59.3%), while 40.7% (n=24) were female. Most participants were from the government (n=41, 69.5%), while 30.5% (n=18) were from the private sector. This categorization was important to determine which sector of employee learning embraces digital platforms to self-learn. Various responses emerged regarding drivers for employee self-directed learning, adoption of digital platforms in self-directed learning, and workplace conditions that support or constrain SDL at the workplace.

Initially, respondents were asked whether they have initiated any self-directed learning programs offered by digital platforms, where a majority (n=53, 89%) of respondents agreed. Results also indicate many employees from the private sector engage in SDL to upgrade their profession. While some respondents did not understand the concept of self-directed learning, some have taken the initiative to take online programs to refine their professional skills without the organization's guidance. As quoted from the open-ended questionnaire,

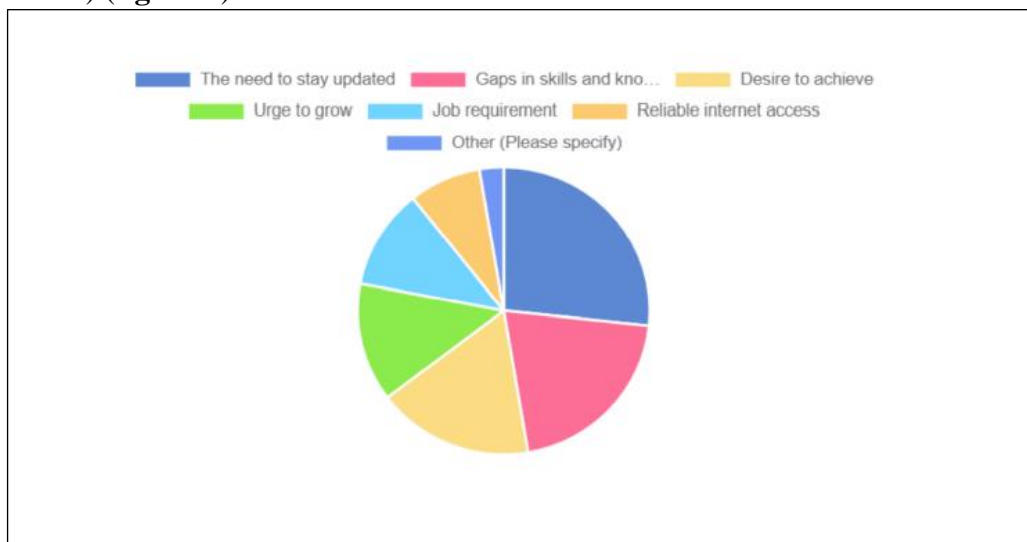
*Self-directed learning entails taking the initiative to get access and comprehend the intended meaning for appropriate application in my career (respondent I).*

However, other respondents viewed self-directed learning as self-initiated learning that is not necessarily related to work activities.

*To undertake training offered, whether relevant or not relevant to my profession, on my initiative (Respondent II).*



Drivers for undertaking SDL were expressed as being of a work-related nature and the available access to the internet (e.g., the need to stay updated, gaps in skills and knowledge, the desire to grow, job requirements, and reliable internet access) (**figure 1**).



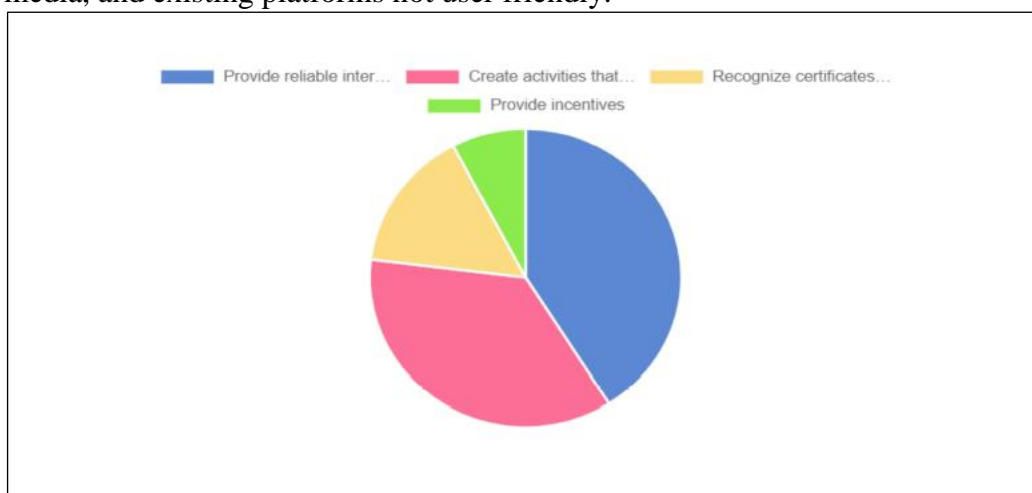
**Figure 1: Drivers for self-directed learning**

Respondents mentioned various reasons for using digital platforms compared to conventional face-to-face training, such as flexibility with working schedules and places, accessibility, convenience, and ease of use. Most respondents echoed its flexibility as follows;

*It is more convenient with working schedules as one does not need to ask for permission... network with others in my profession. You can easily learn what you want while undertaking other work-related and family activities. (Respondent III).*

Many of the respondents reported the use of a variety of digital technologies for self-directed learning. The more common digital resources adopted include LinkedIn Learning, skillshare, Coursera, Udemy, Tutorial Points, Masterclass, and Edureka). Others search for specific topics only using YouTube and Google, among others. Similarly, respondents reported using social media platforms to self-learn work-related and out-of-work skills. Respondents specified different WhatsApp groups to get knowledge and connect with colleagues and relatives (e.g., family maarifa, professional teachers, law forums, women in business, Tanzania Ph.D. network, women leaders' group, etc.).

Participants in this study who have consistently engaged in SDL indicated conditions that facilitated the initiative to self-learn, such as creating activities that promote self-learning related to employees' daily activities, recognition of certificates offered through self-learning, provision of reliable internet access, and incentives (**figure 2**). Regarding the adoption of digital platforms, the study shows that the ease of use is determined by the availability of live courses, easy-to-access, free and affordable content, relevance with the field of interest, security, and credibility of the content. At the same time, respondents described a variety of barriers to using digital platforms and apps in self-directed learning as follows: lack of interest, inaccessibility, lack of recognition from employers, lack of awareness to access available platforms, lack of credibility of social media, and existing platforms not user friendly.



**Figure 2: Workplace conditions that support the use of digital platforms in SDL**

#### 4.1 Discussions

This discussion revolves around four specific objectives: drivers for employee self-directed learning, adoption of digital platforms in self-directed learning, workplace conditions that support using digital platforms in SDL, and barriers. Findings reveal that self-directed learning is widely described as an individual responsibility to further one's professional growth and the need to stay updated given the changes in technology. Study findings also indicate that SDL is not necessarily linked to work accomplishment. These findings denote the importance of organizations creating flexible activities related to new knowledge from SDL. At the same time, the study argues that employees' initiative to learn is also triggered by intrinsic motivation, which entails the personal willingness to improve and acquire new competencies. Motivation reflects the perceived

value and anticipated success of learning goals when learning is initiated and mediates between context and responsibility during the learning process.

The findings corroborate the self-directed learning theory which underscores intrinsic motivators in self-directed learning. Maphalala et al. (2019) support these findings that SDL requires learners to have the confidence to pursue and engage in learning activities all influenced by intrinsic motivation. Fisher & Frey (2017) add that having a goal is essential for the self-directed learner. Regarding extrinsic motivation, organizations must create supportive conditions that will motivate employees to take the initiative and responsibility to learn. These findings are in line with (Yusuf, 2023) where participants mentioned extrinsic motivational factors, such as organizational support they receive and access to resources to engage in SDL. The study further indicates that employees in the private sector mostly engage in SDL more than those in the public sector, probably due to the nature of work where time away from the place of work is limited and the motivation to self-learn facilitated by access to digital platforms. Findings from this study suggest that employees mainly use common digital resources and popular search engines such as Google and social media in self-directed learning. In other studies, such as Yusuf, (2023) digital platforms such as Coursera, Udemy, edX, YouTube, and online communities were mostly used by employees for SDL. However, social platforms seemed to be discredited by most respondents, categorizing them as informal learning that is not necessarily linked to work activities. These findings resonate with Boyd et al. (2018) study, which indicates that social platforms were rarely used in self-directed e-learning for professional development. For convenience, the working personnel mainly adopted digital platforms for flexibility which gives the learner control over time, content, and location to learn.

Regarding workplace conditions that support the adoption of digital platforms to self-learn, such as the creation of activities that promote self-learning that is related to employees' daily activities, recognition of certificates offered through self-learning, provision of reliable internet access and incentives, these findings are in line with Parker (2017) who demonstrated that job design features such as control, autonomy, and the social and relational aspects play a role in the extent to which employees can initiate learning activities. Nevertheless, Reinhardt et al. (2011) argued that the current development changes driven by technology and time constraints associated with the need for new competencies demand creative thinking and problem-solving strategies aided by SDL to complete non-routine and unpredictable work tasks.

Therefore, the adoption of digital platforms is a function of the availability of live courses, easy-to-access, free and affordable content, relevance with the field of interest, and security and credibility of the content. Correspondingly, participants showed varied constraints relating to the adoption of digital learning, such as credibility of social media platforms, price of platforms or membership fee, lack of certificates of accomplishment, lack of smartphone with enough capacity, limited internet access, and lack of self-interest to use digital platforms for work-related skills. Similar findings were found in the studies of Song & Bonk (2016), which show that lack of time, website membership fees, technology or service, and lack of quality resources are barriers to adopting digital platforms for Self-directed learning. (Yosuf, 2023) contends that infrastructure-related problems, like poor internet connectivity and power outages, are obstacles to self-directed learning in Nigeria. This study argues that the challenges faced by employees in accessing reliable internet connectivity and consistent power supply are more common in developing countries. Therefore, the need for businesses to ensure that employees have access to reliable internet connectivity and sufficient power supplies, both of which are essential for using technology-enhanced learning environments and online sources is of paramount importance. Mpungose (2020) and Khoza (2019) added the role of modern physical resources (computers, mobile phones, i.e. smartphones, and others) for effective online teaching and learning.

Apparently, and as reported elsewhere in this study, many employees who take the initiative to self-learn are from the private sector. It is worth noting that employees are only likely to invest in improving their knowledge and skills usable by their potential employers. These findings are helpful to other organizations, particularly the government sector, to re-design jobs that provide more autonomy and knowledge about available work-related learning platforms. In addition to the traditional way of promoting and rewarding knowledge and skills after conventional training, recognizing, and rewarding new skills obtained from self-initiated learning is also imperative to motivate employees to self-learn. Given the constrained budgets, time, and obligatory competencies to solve global socio-economic issues, including COVID-19, adopting digital technologies to self-learn is becoming more paramount. Akhmetshin et al. (2021) argue that the transition to online learning is the only option out of the pandemic predicament. By integrating a diverse range of technological tools and resources, organizations can enhance the autonomy, motivation, and engagement of employees in self-directed learning. The development and use of technology demonstrate the potential for leveraging technology to support SDL among employees to keep them updated and close the skill gap as indicated in the literature review (Mwita, 2018; World Bank, 2016).

## **5.0 CONCLUSIONS**

Generally, this study highlights the motivations, barriers, and digital technologies used by employees for SDL. The study argues that, while employees are intrinsically motivated to self-learn, organizations can better manage human capital by leveraging how employees proactively develop themselves as a strategic supplement to formal training by facilitating the learning environment. The findings of this study resonate with the previous literature and the theory on motivational factors. Self-directed learning theory posits that self-directed learners are motivated intrinsically by curiosity, self-esteem, job requirements, the desire to achieve, and satisfaction with accomplishment (Wang, 2017). These internal motivations mentioned are reflected in the intrinsic factors identified in this study, such as personal conviction, desire to stay updated, personal growth, and desire to achieve. Besides intrinsic motivators, the current study findings complement these aspects by underscoring the significance of external facilitation whereby organizations are required to facilitate supportive learning environments by providing access to digital platforms, recognizing competencies from digital platforms, and developing SDL activities for employees to achieve common organizational goals. Given current global challenges, the study recommends the integration of self-initiated and organizational-driven learning that embraces digital technology. This supports previous literature, which indicates that the successful implementation of self-directed learning in the workplace depends on the use of available/accessible digital platforms, which can support self-directed learning among employees.

### **5.1 Study Limitations and further research**

This study explored the use of digital platforms in self-directed learning at the workplace, specifically, drivers for employee self-directed learning, adoption of digital platforms in self-directed learning, and workplace conditions that support/constrain the use of digital platforms in self-directed learning. While this study provides valuable insights into the use of digital platforms for self-directed learning, certain limitations need to be recognized. Firstly, the finding may not be generalized to all employees particularly, due to the methodology used. Purposive sampling has inherent biases for the generalization of findings. Again, the Kobo toolbox can only be used on devices supported by internet-limiting coverage. Multiple sources of data collected would have enhanced the validity of the findings.

Therefore, further research could employ random sampling or a mix of to enhance validation of findings. Other than kobotoolbox, further research could focus on data collected instruments that do not require internet connections. The literature review indicates that the availability and accessibility of digital

platforms are likely to be used for personal needs other than learning that is related to organizational requirements. Therefore, future research could venture into how to mitigate the negative consequences of digital platforms in workplaces.

## 5.2 Policy/practical/knowledge contributions

The study informs policymakers and employers to facilitate and re-design work activities that support employee self-directed learning. The study also contributes to the growing literature on self-directed learning in the workplace by underscoring the need for organizations to create an environment that promotes SDL by enabling ease of digital use and removal of barriers that demotivate self-learning.

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