The Role of Information Communication Technologies in Training and Development of Employees in Zambian Organisations: Status Analysis and Workplace E-Learning Prospects in Post Covid-19 Era

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ABSTRACT
Employee capacity development in workplaces is the cornerstone of performance and productivity in organisations. Therefore, organisations need to have training and development functions that support learning. Learning from the COVID-19 pandemic, effective performance of the training and development function requires putting in place approaches, systems, and tools that support e-learning. This entails utilising the capacity of ICTs to drive the training and development activities of an organisation. The study used a mixed research approach with a sample size of 209 respondents. Both quantitative and qualitative data were collected to analyse the Zambia training and development environment from an ICT perspective before and after the Covid-19 crisis. Considering that 57% of respondents indicated that they did not have e-learning platforms and that 77% of respondents indicated that their training and development function was affected by COVID-19, the status analysis has therefore revealed that ICT supported training and development function is yet to mature and facilitate e-learning in workplaces. The paper concludes by recommending measures that can facilitate effective e-learning in workplaces beyond the Covid-19 pandemic.

Keywords: Information communication technologies, Training and Development, COVID-19, Workplace Learning

1. INTRODUCTION

Human learning in all forms has been an integral part of societal progression. Learning has been variously described and it includes concepts such as lifelong learning, formal learning, informal learning, continuous professional development, and in-house learning (Ashton & Sung 2002; Armstrong, 2006). Thus, the role and benefits of learning accrue to both individuals and organisations as well (Overton & Hills 2009). Whereas an individual undertakes learning to gain knowledge for its own sake or indeed for application in desired situations, organisations too, expose their employees to learning to increase their knowledge base, which, when applied to organizational operations, contributes to efficiency, effectiveness, and overall institutional performance (Armstrong, 2006).

Information communication technologies (ICTs) supported learning, commonly known as e-learning (Brack, 2010; Overton& Hills, 2009) has become a feature of contemporary organisations. It is a training and development approach that promotes reduction in training costs and retention of employees (Armstrong, 2006; Haran, 2002). A lot of literature on the adoption of e-learning in workplaces exists, although most of it discusses situations in organisations based in developed nations (Ashton and Sung 2002; Brack 2010). From a developing nation perspective, Zambia is part of the global village interconnected through ICTs. However, the digital divide has negatively impacted its application in organisational operations (Bwalya 2010). To this extent, the utilisation of ICTs in training and development deserved investigation. To this end, two separate studies were conducted in 2012 and in 2020 providing insights into the status of the training and development, and how this function has been impacted by ICTs and the Covid-19 pandemic. Arising from the findings of these studies, this paper uses lessons acquired during the COVID-19 period to recommend suggestions through which Zambian organisations could aptly use ICTs in their training and development functions to ensure that employees have knowledge, skills, competencies, and capabilities that enhance the productivity in workplaces.

1.1 Objectives of the Study

The main objective of this paper is to provide insights into the status of ICTs supported training and development functions before and after the COVID-19 pandemic in Zambian organisations. Using evidence from Zambian organisations, the paper is specifically sought to:

   i.   establishing the existence of training and development functions;
  ii.   establishing the use of ICTs to support training and development activities;
 iii.   assess the impact of Covid-19 on Training and Development functions; and
  iv.   suggest approaches to improve training and development functions beyond COVID-19.

2. LITERATURE REVIEW

In the knowledge economy, organisations world over recognise the value of training and developing their employees to achieve desired performance in operations (Ashton & Sung 2002). The learning to which employees in organisations are usually exposed can be broadly categorised as either academic or professional, sometimes termed continuous professional development (International Labour Organisation, 2021; Ruthanam, 2023). For this reason, workplaces are categorised as formal and informal learning environments (Hamburg, 2021). According to Ashton and Sung (2002), three reasons can be attributed to the growth of learning in workplaces as follows: the growth of the knowledge economy; the impact of the "new economy" and ICTs in improving productivity; and the growing use of high performance working practices (HPWPs) that are transforming how work is organised. This is being facilitated by developments in ICTs.

Information and Communication Technologies have positively impacted every aspect of human life and organisational work practices. Learning supported by ICTs manifests itself as e-learning (Armstrong, 2006; Hamburg 2021; Overton & Hills 2009). Accordingly, Overton and Hills (2009) argue that e-learning has several benefits to both individuals and institutions which include, among others, improving the delivery modes and content for training and development programmes, reducing the cost of training and development activities, improving flexibility and providing access to learning, improving customer satisfaction; portraying a progressive public image of the company and ultimately adding value to the business and the individuals within the business.

Despite the presence of ICTs in these operations, the Covid-19 pandemic brought a reality that both individuals and organisations never imagined (Kaushik & Guleria, 2020; Mikołajczyk, 2021). To survive its impact, organisations devised approaches and practices supported by ICTs for business continuity (AL-Rawahi, 2022; Mikołajczyk, 2021). Specifically, training and development functions also benefited from these approaches and practices (CIPD, 2021).

3.0 METHODOLOGY

A mixed research approach was employed in which both quantitative and qualitative data were collected from organisations in Zambia. Quantitative data from surveys administered to delegates who attended an Annual Convention of the Zambia Institute of Human Resource Management (ZIHRM) in 2012 and a workshop of Human Resource Management (HRM) professionals organised by ZIHRM in 2020 was analysed to deduce the findings of this paper as guided by the objectives. Over 400 delegates attended the annual convention. However, 100 questionnaires were distributed out of which 70 were returned, indicating a response rate of 70%. On the other hand, the training in 2020 was attended by over 109 delegates out of which 94 questionnaires were returned representing a response rate of 86 percent. Qualitative data involving journal articles and reports on the impact of Covid-19 in workplaces and on the training and development function was analysed to inform the discussion and recommendations in this paper.

4.0 PRESENTATION AND DISCUSSION OF FINDINGS

The analyses made in this paper are made from the findings of the studies reported under the methodology above and are presented and discussed in four three main sections: background information on investigated organizations; the availability of training and development function in Zambian organizations; usage of ICTs in training and development activities in the investigated organizations and impact of Covid-19 on training and development function in Zambian organisations. The rationale for this choice of presenting the results in this manner is that while the 2012 survey established the existence and use of ICTs in training and development, the 2020 survey built on that and investigated the impact of COVID-19 on training and development.

4.1 Background Information on Investigated Organizations

Information obtained on the background of investigated organisations included the type of organisations and the industry the organization operating in.

4.1.1 Type of Organisations

There was a total of 164 delegates who responded to both the first and second surveys out of which 62% were from public institutions, while 38% were from private institutions.
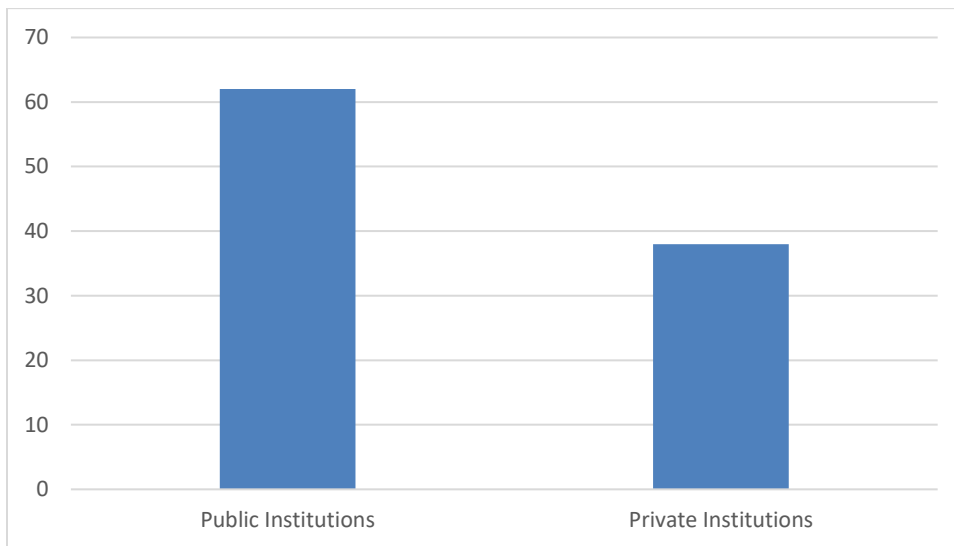

Figure 1: Type of Organisation

4.1.2 Sectors of Organisations

Out of the 164 investigated respondents, 1.4% did not indicate the sector in which their organization belonged. The Banking sector had 1.4% while the Hospitality and Insurance sectors had 2.9% respectively. On the other hand, Mining and Construction had 4.3% respectively while Education was 8.6%, and twenty two (22.9%) were organisations that identified themselves as government. The share of 5.7% of respondents represented organisations that serve as Regulators.
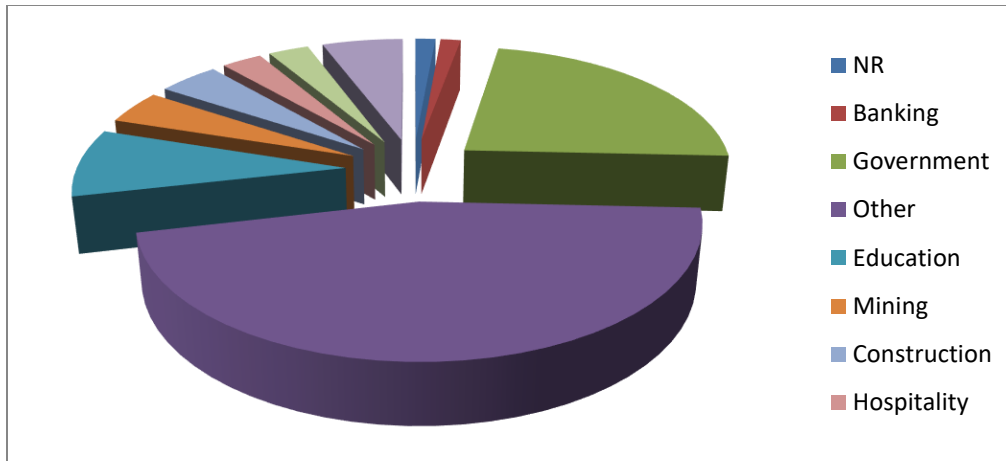
Figure 2: Sector of investigated organizations

The majority, 58.2% of the respondents indicated that they came from other sectors. Figure two (2) below indicates institutions that comprised other the other sectors.
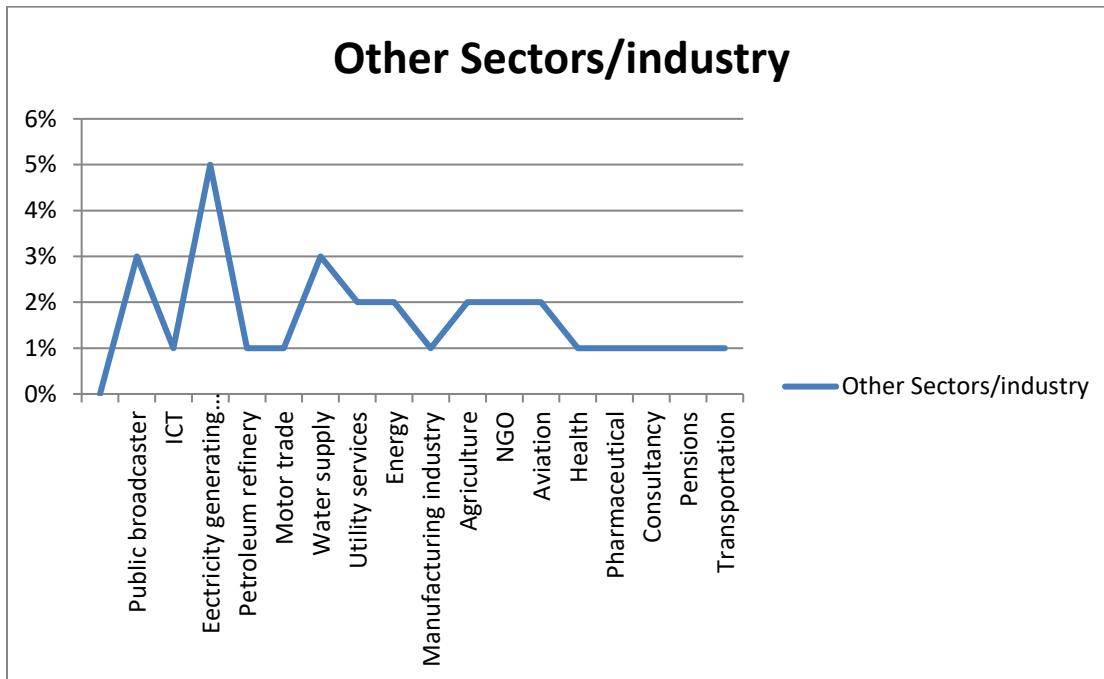

Figure 3: Other Sectors

4.2 Existence of Training and Development Function

Arising from the first survey, table 1 below reveals that many of the investigated organisations had formal departments dedicated to the training and development needs of employees as 84.3% affirmed having such departments while 14.3% indicated that their organisations had no departments for training. Further, there was a 1.4% non-response recorded.

Table 1: Availability of Training and Development Departments

	Frequency	Percent (%)
Non-Response	1	1.4
Yes	59	84.3
No	10	14.3
Total	70	100.0

Source: 2012 HRM survey

4.2.1 Modes of Training and Development Opportunities

Modes of training and development opportunities in organisations appear in the form of short term or long training programmes, internally or outside the organisation. Results for short term training and development were that 90% indicated that they had their employees participate in short term training, 1.4% declined the availability of such training and development opportunities and 8.6 % was non-response to the question. On the other hand, results for long term training and development opportunities were that 85.7% indicated that they had such opportunities, 5.7% declined the availability of such training and development opportunities and 8.6 % was non-response to the question.

Table 2: Availability of Training and Development Opportunities

Training Mode	Response	Frequency	Percent (%)
Long term training opportunities	Yes	63	90.0
	No	1	1.4
	Non-Response	6	8.6
	Total	**70**	**100.0**
Short term training opportunities	Yes	60	85.7
	No	4	5.7
	Non-Response	6	8.6
	Total	**70**	**100.0**

Source: 2012 HRM Survey

4.3 Information and Communication Technologies and Training and Development Activities

Information on the usage of ICTs in training and development activities was obtained through questions on the availability of ICT Departments, the use of ICTs for training and development activities as well as the availability of e-learning platforms.

4.3.1 Information and Communication Technologies Departments in Organizations

On the availability of ICT Departments, 85.7% of the organizations reported having ICT Departments while 11.4% did not have such Departments. 2.9% did not respond. Figure 4 below shows this information.
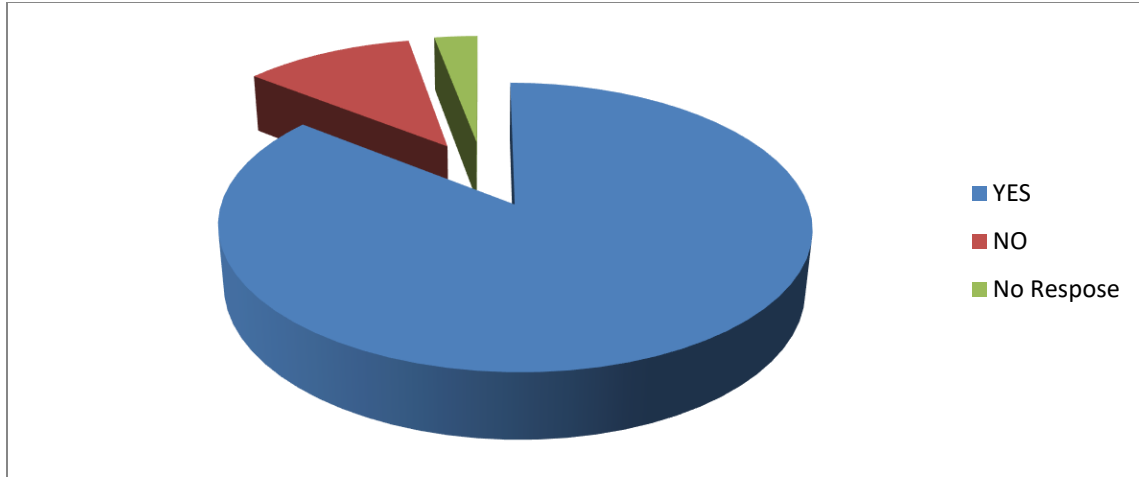
Figure 4: Information and Communication Technologies *Departments in Organisations*

4.3.2 Use of Information and Communication Technologies for Training and Development Activities

Regarding the use of ICTs in training and development activities, 74.3% affirmed the use of ICTs while 18.6% indicated that their organisations were not using ICTs for training and development activities. Further, 7.1% there was a non-response. Figure five below shows these results.
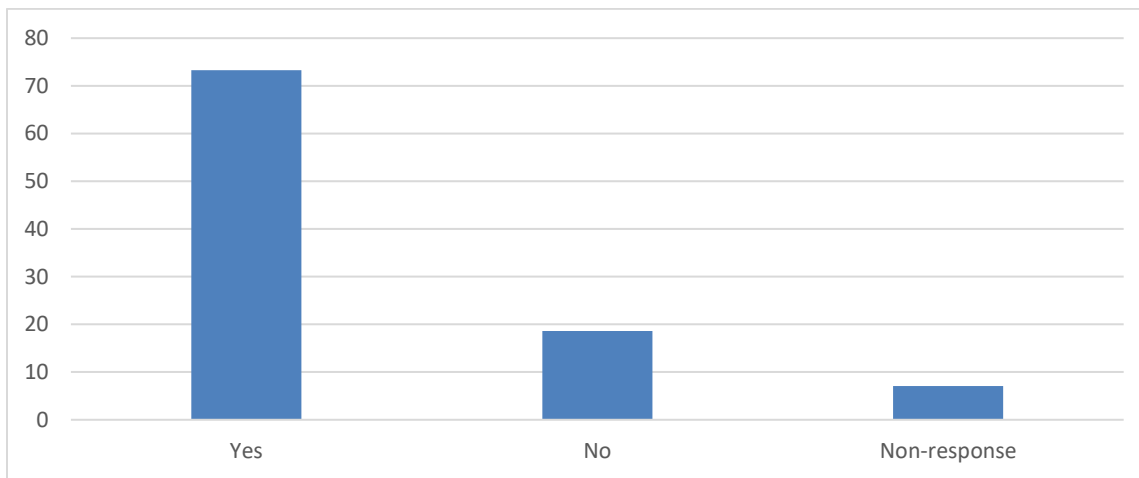

Figure 5: Use of ICTS for Training and Development Activities

5.3.3 Availability on E-learning Platform

On availability of e-learning platforms, 40% indicated that they had e-learning platforms while 57% of respondents indicated that they did not have e-learning platforms. 3% was non-response. Figure six below shows these responses.
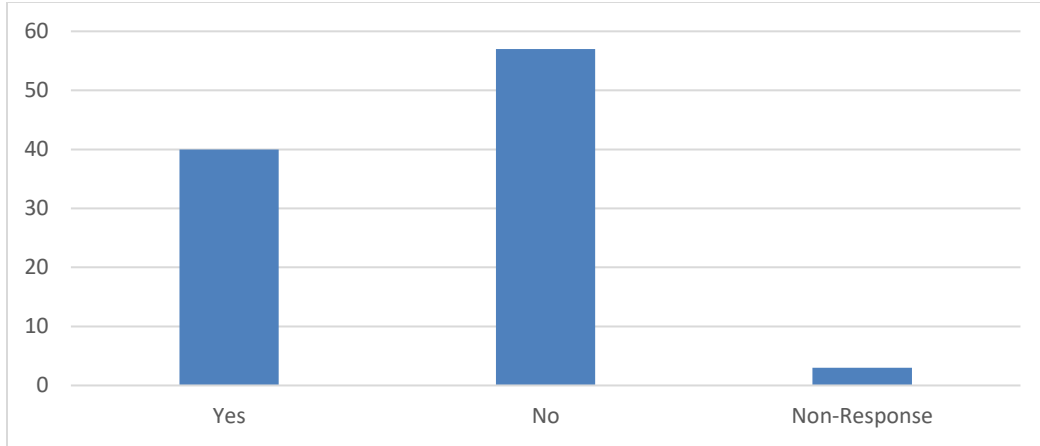
Figure 6: Availability of E-learning Platforms

5.4   Impact of COVID-19 on Training and Development

Midway through the COVID-19 pandemic, a survey on its impact on human resource functions in general and training and development functions in particular was conducted. 77% indicated that Covid-19 had impacted training and development activities in their organisations, while 23% indicated that Covid-19 had not impacted their training and development activities. Figure seven and Table 3 below summarise the main findings regarding the impact and type of COVID-19 on training and development respectively.
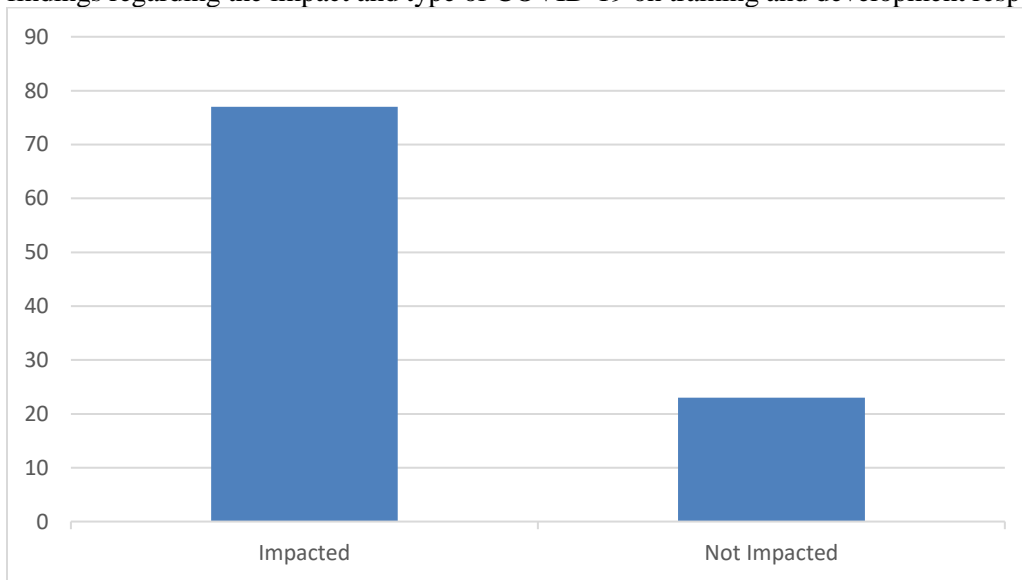

Figure 4: Impact of COVID-19 on Training and Development

In Table 3, organisations highlighted the major disruptions that came with COVID-19 as regards training and development of human resources.

Table 3: *Type of Covid-19 Impact on Training and Development*

Impact of COVID-19 on Training and Development	Frequency
The department closed during Covid-19	1
Staff could not be sent for training	6
Trainings were cancelled/suspended	37
Reduced number of staff sent for capacity building programs	13
Online training is not very effective	1
Planned activities could not be executed	1
In-house training suspended	2
Closure of most learning institutions no access to external training/Difficulty to organise workshops and training gatherings	2
Dwindling income/revenue /financial challenges did not support the T and D Plan	7
Use of It facility/Distance learning	2
General Assembly of attendees	1

5. DISCUSSION OF RESULTS

The analyses of results for the studies presented in this paper have indicated that most organisations in Zambia have well established training and development departments that also support training and development activities for their employees. The results also show that most organisations also have ICT departments with the necessary infrastructure that support e-learning. This entails that most organisations in Zambia are contemporary and conform to the dictates of the knowledge economy in which workplace learning is promoted. On this score, these results show similarities with what obtains in other institutions globally.

However, despite having ICT departments that support ICT enabled training and development activities, the results show that workplace e-learning has not been exploited fully by Zambian organisations. This assertion emanates from the fact that during the COVID-19 period, the training and development function was highly negatively impacted. The negative impact of COVID-19 on training and development entails that Zambian organisations require proactive measures to enable them to cease the benefits of e-learning in workplaces (Bleeker and Crowder2022; Dean and Campbell 2020; CIPD 2021; Hamburg 2021; International Labour Organisation 2021; Kaushik and Guleria 2020; *Kibirige 2022*). Further, these findings correspond to another finding in the study that 57% of the investigated institutions did not have an e-learning platform. These results show that e-learning in most organisations has not matured (CIPD, 2021; Overton and Hills 2009; Serrat 2010). Several factors may account for this immaturity including the fact that the permeation of ICTs in Zambia is very low across all demographics, most training institutions still offer face-to-face training, and ICT tools for workplace learning are still costly to acquire (Bwalya 2010: Policy Monitoring and Research Centre, 2022).

6. CONCLUSION AND RECOMMENDATIONS

In conclusion, this study has established the existence of training and development functions in Zambian organisations. However, the results also have shown that ICT enabled training and development has not yet matured hence the severe impact that COVID-19 has made on training and development activities. Arising from these findings, it is recommended that organisations in Zambia:
  i.   deliberately institute cultures that create and support ICT-based workplace learning environments.
  ii.   strengthen institutional training and development activities supported by ICTs by embedding them in human resource strategies.
  iii. formulate policies that support the use of ICT in workplace learning, and
  iv.   acquire ICT infrastructure and systems that support e-learning in workplaces.

REFERENCES

AL-Rawahi, H., M. (2022). A Research Study on the Impact of Training and Development on Employee Performance during the Covid-19 Pandemic. International Journal of Managerial Studies and Research (IJMSR) *Volume 10, Issue 7, July 2022, PP 1-10*

Armstrong, M. (2006). A Handbook of Human Resource Management Practice. London. Cambridge University Press.

Ashton, N.D and Sung, J. (2002). Supporting Workplace Learning for High Performance Working. Geneva. International Labour Office.

Brack, J. (2010). Unlocking the Potential of on-Demand Learning in the Workplace. Retrieved from https://www.slideshare.net/BusinessEssentials/unlocking-the-potential-of-ondemand-learning-in-the-workplace

Bwalya, T. (2010). Zambia to become an information society by 2015: A reality check. Chinese Librarianship: an International Electronic Journal, 29. Retrieved from http://www.iclc.us/cliej/cl29bwalya.pdf.

Overton, L. & Hills, H. (2009). E-learning maturity in the workplace – the benefits and practices. *Impact: Journal of Applied Research in Workplace E-learning, 1*(1), 113–136.

Bleeker, A. and Crowder, R. (2022). "Selected online learning experiences in the Caribbean during

COVID-19", *Studies and Perspectives series-ECLAC Subregional Headquarters for the Caribbean*, No. 105 (LC/TS.2021/212-LC/CAR/TS.2021/7), Santiago, Economic Commission for Latin America, and the Caribbean (ECLAC), 2022.

CIPD. (2021) Digital Learning in a Post-COVID-19 Economy: A Literature Review. London: Chartered Institute of Personnel and Development.

Dean, A., B. and Campbell, M. (2020). Reshaping Work-integrated Learning in a post-COVID-19 World of Work. International Journal of Work-Integrated Learning, Special Issue, 2020, 21(4), 356-364

Hamburg, I. (2021). Opinions to Adapt Workplace Learning in the Time of Coronavirus and After. Advances in Social Sciences Research Journal – Vol. 8, No. 3.

International Labour Organisation. (2021). Skills Development in the time of COVID-19: Taking stock of the initial responses in Technical and Vocational Education and Training - Key findings. International Labour Office – Geneva: ILO, 2021.

Kaushik, M and Guleria, N. (2020). The Impact of Pandemic COVID-19 in Workplace. European Journal of Business and Management. Vol.12, No.15, 2020

Kibirige, I. (2022). Short Learning Programmes for Skills Development Beyond COVID-19. Changing Societies & Personalities, 2022 Vol. 6, No. 3, pp. 504–523

Mikołajczyk, K. (2021). Changes in the Approach to Employee Development in Organisations as a result of the COVID-19 Pandemic. European Journal of Training and Development. Vol. 46 No. 5/6, 2022 pp. 544-562

Policy Monitoring and Research Centre. (2022). COVID-19 and E-Learning in Zambia: How can the COVID-19-induced Education inequality Gap be Closed? Retrieved from: https://pmrczambia.com/wp-content/uploads/2022/03/COVID-19-and-e-Learning-in-Zambia-How-can-the-COVID-19-induced-Education-Inequality-Gap-be-Closed.pdf

Ruthanam, M. (2023). Facing the Unknown: Managing Work Integrated Learning amid Covid-19. in Makua, M et al. (Eds.): TFC 2022, ASSEHR 732, pp. 99–109, 2023.

Serrat, O. (2010). E-learning and the Workplace. Retrieved from https://www.adb.org/sites/default/files/publication/27859/e-learning-and-workplace.pdf

Servage, L. (2005). Strategising for Workplace E-learning: Some Critical Considerations. *The Journal of Workplace Learning 17(5/6), 304-317*