Learning and Development's Role in The VUCA World

for Sustainable Organization

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Abstract

VUCA world has brought several changes and challenges to management for decades. However, in the recent VUCA world are more obvious, tangible and paced faster than before. Three key factors currently are the COVID-19 pandemic, technology, and diversity of workforce. Consequently, organizations have to confront a variety of changes and issues such as hybrid work, upskilling and reskilling, as well as multigenerational workforce. To be sustainable, organizations are required to find ways to cope with these realities. In organizations, Learning and Development (L&D) has been viewed as a key to current and future success and sustainability. Given that, roles played and responsibilities performed by L&D in an increasingly VUCA world is a significant and consequential consideration for organizations today. However, few present studies focus on this field which consequently creates a knowledge gap for current and future researches. This paper provides a conceptual framework for L&D's role in VUCA world through a comprehensive literature review. Six roles have been established which can be divided into three groups, traditional roles, evolving roles, and emerging roles. In this study, responsibilities and implications such as digital learning have been clarified. The findings might have the potential to fill a knowledge gap in the literature. Additionally, a clear map to

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organizations on L&D function is also provided. It is our hope that this paper can contribute to establishing guidelines for organizations to better assess their current works and equip L&D to meet and exceed sustainability objectives in the future.

Keywords: Learning and Development, VUCA World, Sustainable Organization, Human Resource Development

Introduction

"The only thing we know about the future is that it will be different." (Drucker, 1986, p. 36). This quote is still true today. Today we are experiencing many collective changes in our lives, VUCA world is what we call our living world today. The VUCA world is characterized by four different types of challenges; volatility (unstable and unexpected external environment), uncertainty (more difficulty predicting trends), complexity (overwhelming with many interconnected parts), and ambiguity (unclear causes and effects with many unknowns) (Chartered Institute of Personnel and Development [CIPD], 2014). These challenges make our vision for the future quite complicated. A number of recent events including the COVID-19 pandemic increases the impact of VUCA world in every aspect of modern life and commerce (Maini et al., 2020). Consequently, this pandemic has required industry leaders and managers to develop and apply new approaches and methods to operations, management and a variety of other roles within organizations (McKinsey, 2020).

Due to the effect of VUCA on the business world throughout the first two decades of the 21st century (Nowacka & Rzemieniak, 2022), organizations are learning new ways to gain knowledge and adapt to the dynamics of the VUCA world (Swain-Oropeza & Renteria-Salcedo, 2019). To meet the VUCA challenges in the working environment, organizations need to develop the vital ability to adapt to and manage change simultaneously by balancing their operations and learning to identify and leverage new opportunities (CIPD, 2014). Therefore, organizational learning is important and reasonable for every member within an organization. Declaring an organization as a learning organization is the right direction to take to assure that every employee is part of developing a dynamic ecosystem of learning, updating knowledge management, applying new training and development, and implementing mentoring processes (Antonacopoulou et al., 2019). For this direction of development to galvanize, organizations must involve people throughout the decision-making process, which requires a qualified managerial staff with specific skills and competencies (Nowacka & Rzemieniak, 2022).

Given the fact that employee development is a key objective for organizations, Learning and Development (L&D) plays an important role in supporting an organization by developing programs with suitable knowledge and skills to empower employees (CIPD, 2014). As rapid changes occur in a VUCA world, a dynamic approach to learning, effective communication, and quick decision-making are essential concerns for L&D within an organization. Nevertheless,

VUCA places pressure on L&D by decreasing resources while simultaneously demanding increased productivity. A curiosity mindset can be developed within an organization through reinforcing employee inquisitiveness, creativity, openness, and disruption tolerance which can contribute to more focused learning and development (Horstmeyer, 2019). Therefore, organizations that desire to survive and sustain themselves in a VUCA world are required to implement and pay close attention to different types of L&D such as intercultural training (to understand different perspectives and behaviors which may improve adaptability, creativity, and innovation), individual training (to identify potential and develop new levels of personal success for employees through more targeted and personalized training), and communication and soft skills training (to help employees to share their goals, expectations, progress with strong communication and soft skills) (Pialat, 2022).

VUCA world poses unprecedented challenges which demand coordination and collaboration from employees across a variety of roles at each level of an organization. Volatility, uncertainty, complexity, and ambiguity can be managed through the development of new organizational structures that take into account diversity within a workforce with respect to mindsets, values, norms, and standards. Furthermore, to be consistent with sustainable development goals (SDGs) in promoting sustained, full, and productive employment, and lifelong learning opportunities for all employees (United Nations [UN], 2015), organizations need to enhance their employees' efficiency in performing to their full potential. L&D can help to transmit the values and skills necessary to make informed choices and shape a more sustainable future for organizations.

To lead change in the VUCA world, organizations need to communicate their desired vision (keep employees informed along the way without overloading them with information), demonstrate a sense of urgency (work fast and show how easy and positive change can really be), create a dedicated team for change (create a strength of belief from employee level), and allow the action to be taken (eliminate all obstacles and make change easier to implement) (Pialat, 2022). Moreover, technological advancements also play an important role in increasing the quality and effectiveness of L&D in organizations. Ultimately, there is convincing evidence to suggest that encouraging and supporting employees to develop their potential by implementing suitable and personalized L&D programs with technology can lead to improved performance across a variety of metrics which can produce increased sustainability within an organization.

Finally, as L&D is a key to the success and sustainability of the organization, especially in the VUCA world, this article aims to provide explicit knowledge and conceptual frameworks for L&D's role in the VUCA world which would be beneficial for organizations to enhance their understanding of the dynamic environment that organizations are facing and how to implement L&D successfully for organizations' sustainability. This knowledge and frameworks are valued in leading organizations to a clearer direction when planning for L&D and bridging a knowledge gap in the literature. The significance of this article is to emphasize the importance of organizational change in the VUCA world leading to the new roles of L&D within the organizations and highlight the new ways of L&D expectantly that organizations can gain knowledge and adapt to the dynamics of the VUCA world for sustainable organizations.

The Important of Organizational Change in the VUCA World

Facing a VUCA environment, organizations have to confront the key drivers of change from the external environment which directly and indirectly impact their operations and objectives. The expected and unexpected changes in the past, present and future affect organizations and how organizations adapt and respond to these forces. CIPD (2014) identifies three key external changes that impact organizations in VUCA which are social and cultural change, science and technology, and economic development. Generational changes and diversity of the workplace have a dramatic impact on organizations (Cetron & Davies 2010). Millennials, born in the 1980s to 2000s, are promptly become main employees in many organizations (Bartz et al., 2017). This generation brings new dynamics to their organizations. Therefore, organizations need to be ready to implement appropriate design of the workplace environment and opportunities for intercultural experiences to assure that all employees across generations perform their work effectively and successfully together (Otieno & Nyambegera, 2019).

As technology offers new and better approaches to managing and operating organizations, it equips employees with more efficient and convenient ways of working across various contexts. Technology also basically changes the operations of organizations and brings many opportunities and advanced tools for employees to develop their skills, which can lead the way for organizations to successfully achieve their goals (CIPD, 2014). Therefore, organizations need to be ready for challenges associated with implementing new technologies. For example, now that the world economy has been severely impacted by COVID-19, organizations face many challenges.

Organizations have to quickly respond with crisis management plans (Mikusova & Horvathova, 2019) and create new work conditions to protect their employees and business under these unforeseen circumstances (Gunn et al., 2020). By exploring the new modes, demands and roles of work, organizations can continue running and maintaining their businesses as we continue to navigate and move beyond this economic crisis (Baker, 2021).

The changes in the external environment during VUCA seriously impact a variety of internal realities and processes within organizations. Organizations need to quickly respond to these forces by changing their strategy and organization, careers and work, and as well as individual employee capabilities and competencies (CIPD, 2014). By facilitating these changes, organizations have to adopt new organizational strategies and structures. Ultimately, organizations are required to establish a network and connection strategy by having and increasing relationships with other organizations at all levels (Economist Intelligence Unit [EIU], 2014). Organizations are now not only the workplace for employees to perform their daily work, but also places where everyone can socialize and engage with each other, create new ideas, motivate and encourage effective performance, provide training, and develop careers (Gill, 2019). These considerations provide directions for future organizational strategy.

Austin (2010) anticipated that work in the VUCA environment would be more on-demand, collective, flexible, specialized, yet less routine. These predictions are quite salient given the contemporary realities associated with the impact of COVID-19. Besides, a happy workplace is what employees and organizations aim for when designing and implementing models for future work environments (Hart, 2019). Moreover, organizations are moving towards transforming themselves into learning organizations where every employee is encouraged to take responsibility for their own learning with the organizations serving as facilitators by providing support and technology for their employees. Besides, employees need to adjust to the new ways of work and increase their ability in social and cultural intelligence to meet the needs of global organizations (Davies et al., 2011). However, challenges posed by the VUCA environment create conditions where newly acquired skills may become out-of-date quickly. Therefore, learning how to learn and developing an orientation towards lifelong learning is important for organizations, as well as individual employees to more effectively monitor their internal resources, capabilities and competencies (CIPD, 2014).

To confront external and internal challenges in the VUCA world, the ability of organizations to adapt to and manage change is essential. Workplace change occurs in organizations quickly and this has been observable on a grand scale over the past two years due to the impact of the COVID-19 pandemic (Ancillo et al., 2021). For these reasons, organizations must attempt to be agile (flexible

and fast in integrating new ways of working), ambidextrous (develop new capabilities and competencies at the same time), and adaptive (conform to the new environment by using the ability to comply with the change) (CIPD, 2014). For the managerial competences, the direct correspondence to answer each word of the VUCA is vision (make it possible to determine a certain trend and target description), understanding (open for informative communication to determine quick decisions), clarity (create procedures and process descriptions that are understandable to employees), agility (clear and accurate identification of situations) (Breen, 2017). Therefore, in the VUCA world, organizations have to operate together as a whole with the visions and actions using their full efficiency to achieve organizational change (Antonacopoulou et al., 2019).

The Roles of Learning and Development in the VUCA world

VUCA world, as mentioned above, stands for volatility, uncertainty, complexity, and ambiguity. This term was coined after the Cold War and used in military to describe a new emerged warfare in the 1990s (Codreanu, 2016; Heritage & Center, 2018). Regarding the adoption of the concept in management, it has been discussed and employed since 2002 in order to navigate the complex internal and external environment encountered by organizations and ultimately find impactful solutions (Brown & Stiehm, 2003). Given that, obviously there is nothing new about the evolution of this term (Bruce, 2019). However, why has it been discussed and researched frequently in the recent a couple of years? It might be because the constant evolution of it tends to move faster and more tangible and obvious due to the changes including COVID-19 pandemic (Hamouche, 2020), technology (Vey et al., 2017), and diversity of workforce (Bruce, 2019; Hamouche, 2021) (shown by figure 3.1) happened currently. To respond to this reality, organizations have to confront the issues and challenges resulted from those changes discuss above and prepare solutions so as to seek opportunities to be sustainable (Hamouche, 2020; Hamouche, 2021).

As Figure 3.1 shows, due to the pandemic hybrid working and remote work have been used by a few organizations to try to protect their employees and get performance (AM et al., 2020; Kaufman et al., 2020). In addition, the issue of employee skillset including up-skill and re-skill in the workplace has been aggravated by the pandemic and the development of technology (Przytuła et al., 2020). Artificial Intelligence and robotics are increasingly adopted by organizations (Lind et al., 2021; Vey et al., 2017). On the one hand, a number of people are losing their job due to the implications of high technology (Vey et al., 2017). On the other hand, jobs are being created quickly

(Vey et al., 2017). Those challenges happened in workplace in coupled with other issues such as the health-related issue of employees (Hamouche, 2020) and the diversity of workforce have and will have a significant impact on the organizations' sustainability (Korhani, 2021; Sahrash, 2020). In a word, to cope with this situation organization need to create and nurture a culture and provide related programs inside to enable employee to develop a growing mindset and suitable skillset to cope with this complex environment in order to be sustainable with organizations together (Bruce, 2019; Korhani, 2021; Sahrash, 2020). This is where L&D has a critical role to play literally as L&D as one of functions of HRD is the process of enabling and empowering employees through L&D strategies and tactics to drive better performance with the focus on business performance, employee satisfaction, employer branding, and individual self-actualization (BasuMallick, 2020; Bruce, 2019; O'Toole, 2010).

With respect to the role of L&D in organizations, it has evolved over time due to the internal and external environments faced by organizations. According to Davies et al. (2004), key roles played by HRD included learning strategist, business partner, project manager, and professional specialist. Meanwhile, key roles of L&D are trainer and order taker who are responsible for responding to the needs of organizations reactively (Modern Workplace, 2022). However, according to Werner and DeSimone (2012) these roles have been in flux as organizations have to adjust to environmental challenges. During this age, L&D tends to response proactively with roles including facilitator, designer, and assessor (CIPD, n.d.). Today, due to the characteristics of VUCA world L&D's roles have to change and evolve naturally otherwise organizations will die, let alone achieve sustainability (CIPD, n.d.; Tratar, 2022).
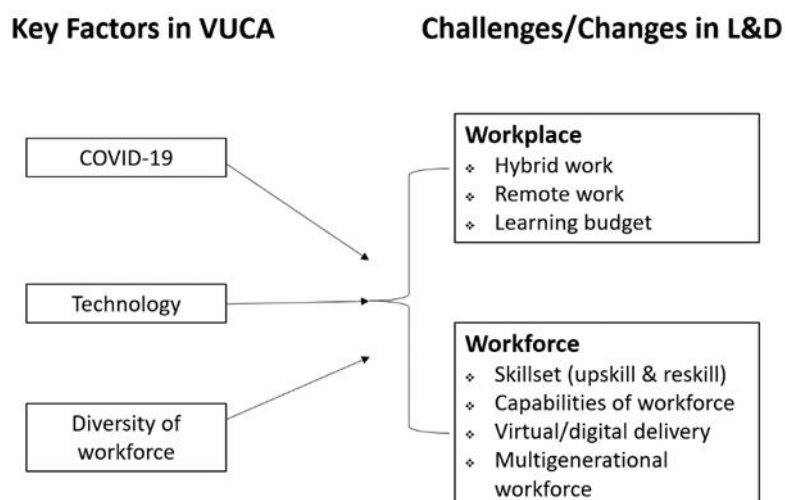
Figure 3.1: Factors encountered by L&D in VUCA world

Roles L&D play in VUCA world must be proactive rather than reactive, more strategic and agile, both versatile and ubiquitous to foster agility and innovation in organizations to achieve increased sustainability eventually. The role of L&D can be divided into three groups (see figure 3.2 and figure 3.3). First, roles, which VUCA world enhances their significance rather than change them, include the strategic role of L&D and organizational change agent (Betterworks, 2022; CIPD, n.d.; Finch, 2019). Second, a couple of roles which consist of culture transmitter and HR business partner (HRBP) have evolved to be culture shaper and L&D business partner (L&D BP) in order to cope with the environment and be sustainable (Finch, 2019; Learning and Performance Institute, n.d.). Finally, along with the development of technology, new roles have also been emerging (Lind et al., 2021; Vey et al., 2017). They are digital content developer and learning analyst (CIPD, n.d.; Finch, 2019; Learning and Performance Institute, n.d.). Each of them will be clarified as below.

L&D as a Strategic Role

L&D as a strategic role in organizations has been talked about for decades based on Werner and DeSimone (2012). The main responsibility is to advise and consult management on business strategy and performance goals. However, a report by McKinsey showed that only 40% of organizations claimed that their L&D played this role internally which means there is a huge role gap within organizations for L&D practitioners (Brassey et al., 2019). Today, as mentioned previously factors in VUCA world have given rise to a notable challenge to organizational management (Hamouche, 2020). The COVID-19 pandemic has essentially changed the way people work, learn, and collaborate (Betterworks, 2022; CIPD, n.d.; Hamouche, 2020; Learning and Performance Institute, n.d.). Hybrid work and remote work (AM et al., 2020; CIPD, n.d.; Finch, 2019; Kaufman et al., 2020), upskill and reskill (Przytuła et al., 2020), the application of high technology, and four different generations working together (Lind et al., 2021; Vey et al., 2017) call for L&D to play a strategic role in driving organizations to be sustainable today and in the future (Brassey et al., 2019; Learning and Performance Institute, n.d.). In addition to attending to crafting business strategy and performance goals with management as an advisor, L&D's role on strategic should also ensure the alignment between learning strategy and business strategy (Deloitte, 2021; Finch, 2019), as well as focus

on the employability, culture, employer brand, and employee engagement of organizations (BasuMallick, 2020; Deloitte, 2021).

L&D as an Organization Change Agent

Generally, the role of change agent is to help organizations prepare workplaces and workforces for the future (Loon, 2016; Werner & DeSimone, 2012). To respond to unprecedented changes happening in VUCA world, L&D should be savvy, agile, and versatile to confront changes within organizations, as well as externally (Learning and Performance Institute, n.d.; Loon, 2014). Basically, the job of an organization change agent is twofold. In addition to monitoring and evaluating existing changes, organization structure, forms of work and methods which supporting organizational development and offer suggestions and interventions through change strategies and operations (Learning and Performance Institute, n.d.), L&D should also prepare organizations for the future, such as building capacity, developing capabilities, cultivating a learning climate, and driving agility (Loon, 2016). In other words, a change agent intends to align with management on the process of designing and implementing change strategies while also empowering employees to participate in change programs and activities proactively through injecting stimuli for changes in order to foster organizations and employees having capacities and capabilities to survive and sustain in the future.

L&D as a Business Partner

The role of business partner played by L&D has evolved from HR business partner (HRBP) which is responsible for serving organizations at all levels on learning and development (Learning and Performance Institute, n.d.). Traditionally, L&D is responsible for crafting learning strategies and tactics in accordance with business strategy, conducting programs and activities in line with the learning strategy, and providing support to organizations and employees in order to response to their needs (Davies et al., 2004). However, the traditional role of L&D has been not sufficient to cope with the unprecedented external and internal changes in VUCA (BasuMallick, 2020; Deloitte, 2021; Werner & DeSimone, 2012). Reasons will be introduced below.

First, a number of organizations have employed hybrid work or remote work due to the pandemic (AM et al., 2020; Kaufman et al., 2020). A variety of challenges and issues have arisen from this situation. For example, some employees may lack skills to work online

(Hamouche, 2020; Hamouche, 2021). In addition, mental-health problems may occur due to isolation (Deloitte, 2021). Additionally, upskill and reskill could be another significant issue for organizations and employees currently (Bruce, 2019; CIPD, n.d.; Lund et al., 2021; McKinsey Global Institute, 2017; Przytuła et al., 2020). A report by McKinsey estimated that around 800 million jobs could be displaced as a result of the automation by 2030 (McKinsey Global Institute, 2017). Another report by the World Economic Forum contended that half of employees need to be reskilled by 2025 (Forum, 2020). It should be also noted that advanced technologies such as AI and VR have been adopted on the manufacturing line in several organization for years whereas they have not really been used in management recently (Lind et al., 2021; Vey et al., 2017). At present, the COVID-19 pandemic has been accelerating the usage of technology in management (Deloitte, 2021). Given that a digital mindset is needed for L&D practitioners. a variety of technologies such as AI, robotics, VR and AR can be adopted to develop and build programs and activities to fulfill the needs of organizations and the personalized needs of employees. Finally, L&D have to cope with multigenerational workforce challenges along with more and more Generation Z entering the workforce (Korhani, 2021; Sahrash, 2020). All above shows that the traditional role of L&D is no longer appropriate for workplace and workforce in today's VUCA world. As a business partner, L&D should collaborate with executives and employees to fill skill gaps, develop capabilities, and increase productivity (Bruce, 2019; CIPD, n.d.; Werner & DeSimone, 2012). Furthermore, L&D should be a boundary spanner and a community manager to embrace advanced technologies and employ them, thus fostering increased innovation and agility in organizations (Loon, 2016).

L&D as a Culture Shaper

A learning culture has become increasingly vital for organizations, not only in VUCA world (Darwin, 2017; Rider et al., 2018; Smircich, 1983). According to Carwin (2017), learning is the key to success and survive for organizations. Additionally, a podcast by Styr (2020) which discussed four emerging trends on learning and development with five thinkers in this field put forth perspectives that learning will be central to shape businesses at all levels and impact across the organizations. Furthermore, they also suggested that organizations will be more likely be successful if their cultures align with their business strategies (Styr, 2020). With this in mind, it may not be enough for L&D to solely operate it traditional part on the culture element as embedding and driving the culture ordered by management if organizations want

to survive and sustain (Finch, 2019; Learning and Performance Institute, n.d.). As an evolving role in VUCA world, the culture shaper should collaborate with managers to shape the learning culture through a series of steps including dampening the negative elements and strengthening positive elements including organizational structures, systems, and policies (Center for Creative Leadership, 2020; Rider et al., 2018). Meanwhile, learning programs and activities should be conducted among employees to encourage them to model the culture and the habits over time (Center for Creative Leadership, 2020; Rider et al., 2018).

L&D as a Digital Content Developer

The trend of digitalization in learning and development started to show it effect when the COVID-19 pandemic spread widely (Learning, 2022). A sheer variety of technologies such AI and VR have been used in workplaces across industries (Lind et al., 2021; Vey et al., 2017). L&D has been working as the content developer over years (Learning and Performance Institute, n.d.). However, digital content developer as a new role emerged due to the implications of technology in organizations mainly (Learning and Performance Institute, n.d.). To play this role, L&D need to create, curate, and deliver digital learner-centric content to employees by using tools including webinars, online platforms, and apps (Deloitte, 2021; James, 2020). L&D can create a range of content including videos, images, games, and infographics for delivery to employees (James, 2020). Compared to traditional paper-based and instructor-led training style, digital learning is more flexible and effective (Sousa & Rocha, 2019). Learners can access the digital content at any time and everywhere (Sousa & Rocha, 2019; Tratar, 2022). In addition, through using these technologies L&D is able to build content ecosystems to track learners' learning behavior, gain data, and build the database as well (Deloitte, 2021). This data can be a good resource for L&D to evaluate the effectiveness and efficiency of content and tools, while also analyzing employee preferences (Deloitte, 2021; Tratar, 2022). Furthermore, according to a report by Deloitte in 2021, around 75% of organizations stated that they do not want to buy content anymore (Deloitte, 2021). It is better to create their own digital content due to the lower cost and better strategic alignment (Deloitte, 2021). Creating and curating original content can dramatically reduce the cost of learning and development part (Deloitte, 2021). This is significant for organizations while they have to reduce the budget of learning and development during the pandemic (Deloitte, 2021). In addition, to compare the content bought outside creating and curating own content is more likely to produce the content which can align with business strategies better (Deloitte, 2021).

To conclude, this is worthy as it can help organizations increase the effectiveness and efficiency of learning and productivity (Sousa & Rocha, 2019).

L&D as a Learning Analyst

The role of HR analyst has been around for years (Learning and Performance Institute, n.d.; Werner & DeSimone, 2012). The function of L&D on analyzing typically include conducting appraisals, measuring learning revenue on investment (ROI), and data management (CIPD, n.d.; Learning and Performance Institute, n.d.). However, the rise of digital learning and adoptions of tools and platforms in organizations has caused an amount of data related to learners' behavior (Learning and Performance Institute, n.d.). A report by Deloitte (2021) mentioned that one of seven disruptors in the new normal is the data tsunami. The data in the past two years has been growing nine times more than before. This situation is driven by technology and accelerated by the COVID-19 (Deloitte, 2021). Given this reality, only operating the analyzing single function is not sufficient for L&D currently. A full-time learning analyst role need to be advised to organizations to fulfill those needs concerning collecting, measuring, analyzing, and reporting data (Learning and Performance Institute, n.d.). At the micro level, the learning analyst should collect data related to learning behavior, preference, and performance of learners to optimize learning content, program, and tools in addition to measure the learning ROI (CIPD, n.d.; Deloitte, 2021; Learning and Performance Institute, n.d.). At the macro level, the learning analyst is responsible for building the database to provide support for both the content ecosystem, as well as the learning strategy (CIPD, n.d.; Deloitte, 2021; Learning and Performance Institute, n.d.).
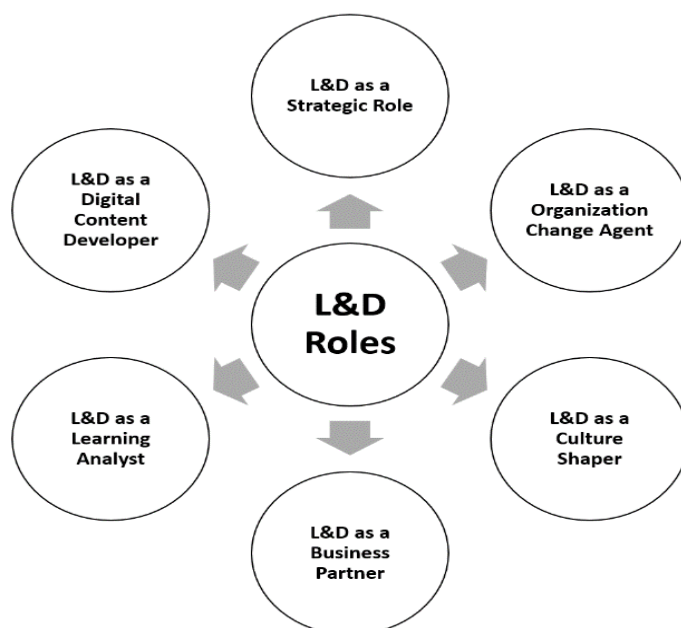
Figure 3.2: The role of L&D in VUCA world for sustainable organization

In summary, the role of L&D has been evolving for decades (Learning and Performance Institute, n.d.; Werner & DeSimone, 2012). During the VUCA world as a result of three factors including the COVID-19 pandemic, technology, and workforce diversity, a lot of challenges emerged, for example hybrid work, skill gap, and shifting talent pools (e.g., Hamouche, 2020; Hamouche, 2021). The evolution of the role of L&D is driven by those challenges (e.g., Deloitte, 2021).

Traditional Roles	Evolving Roles	Emerging Roles

• **L&D as a Strategic Role**
  ❖ Aligning learning to business strategy
  ❖ Create the learning strategy
 	
• **L&D as a Organizational Change Agent**
  ❖ Advise organizations in designing and implementing change strategy
  ❖ Foster agility, innovation, and the learning process of individuals and organizations
	• **L&D as a Culture Shaper**
	  ❖ Nurture a vibrant organizational culture that prizes learning and development
	  ❖ Shape a culture of innovation through creating learning and innovation opportunities
	
	• **L&D as a Business Partner**
	  ❖ Deliver the learning strategy
	  ❖ Consult and support talent management
	  ❖ Engage stakeholders effectively
		• **L&D as a Learning Analyst**
		  ❖ Collect and assess L&D practices and programs
		  ❖ Advise L&D strategy and tactics through analyzing L&D data
		
		• **L&D as a Digital Content Developer**
		  ❖ Create and curtate digital content
		  ❖ Deliver the digital content

Figure 3.3: Summary of the role of L&D in VUCA world

Implications of Learning and Development in the VUCA World for a Sustainable Organization

L&D plays a significant role in many organizations. For instance, the role of L&D has helped many businesses realize notable improvements at the individual, team, and organization level by providing training courses to enhance employees and manager critical thinking and problem solving skills, as well as to help employees across organizations to become more flexible and adaptive in order to meet current management various challenges, while also increasing productivity within organizations. Especially, in the contemporary VUCA

World context, where a number of impending situations maybe quite difficult to be forecast due to the unpredictable nature of current economic developments. Therefore, L&D has the potential to offers actionable solutions to businesses and their employees to survive, adapt, innovate and thrive in the VUCA world. Executives, managers and employees will need to have a durable and growth-oriented mindset, and be prepared to train individuals to face and deals with rapid changes. The purpose of this section is to cover some primary implications of L&D such as individual learning, digital learning, intercultural learning, soft skills communication learning, coaching and mentoring, and challenge-based learning.

Individual Learning

As individuals, we all respond different to various ways of being trained. It is an individual's ability to learn as they wish while utilizing their own means and resources. For instance, the 70:20:10 workplace learning model reflects on how employee learn through various methods, the most common one; 70 percent from on-the-job experiences, 20 percent from colleagues, mentors, and the other 10 percent from formal training (Anderson, 2014). According to Olivia (2011), individual training is aimed at developing specialized skills within each individual and this type of training is mainly used during the employee performance evaluation process. Furthermore, this type of learning will help empower individuals to think critically and develop new perspectives within the context of a variety of potential circumstances related to performing workplace responsibilities. The individual learning plan (ILP) involves both a career exploration process, as well as career plan development. It is personalized to the needs and interests of each individual and aims to assist with determining employee career goals, examining future labor market needs in selected occupations of interest, global market needs and identifying an individual's current knowledge and skills may meet market needs within a specific area (Hackmann et al, 2019).

Learning has become a routine and a lifelong learning reality as people can always develop themselves by developing a growth mindset to challenge themselves. In the workplace environment, individual employees will often have different preferences with respect to preferred training methods. Some individuals may be visual learners where they learn best through demonstration and observation; aural learners may respond most effectively to listening; read/write learners may prefer taking notes; and kinesthetic learners may respond best to simply doing (Drago & Wagner, 2004). In addition, Kolb's experiential

learning cycle emphasizes the four-stage learning cycle which are active experimentation; trying out what you have learned, concrete experience; having the actual experience, reflective observation; reflecting on the experience, and abstract conceptualization, learning from experience. Regardless of the learning styles, learners eventually touch all four bases (Mcleod, 2017)

Digital Learning

Digital learning also plays a key role in the VUCA world as the advancement of technologies has resulted in leaders and employees being required to possess the ability to develop and adapt themselves to a constantly changing digital world. If they do not continually make adjustments to adapt to ongoing change, then those organization have a higher chance of being disrupted. In order to be more accustomed to multiple digital technologies, organizations should have the ability to demonstrate flexibility with respect to modifying thinking as required to best respond to various problems that may occur (Nowacka & Rzemieniak, 2021). Individuals should be eager and ready to use different type of social media networks, and other online resources. Organizations are also encouraged to promote an environment that encourages workplace trainers to design courses that meet specific outcome-oriented criteria so that objectives will be clear and achievable for individuals. Some examples suggested by current research include the view that online learning must be well structured, and include clearly defined learning expectations, as well as constant feedback across different levels (Adamson, 2012). In addition, digital learning has provided a variety of options for learners. For example, individuals have access to more variety by various modes such as learning through text, images, learning videos, for instance audio and visual simulations that may increase individual's interest and enthusiasm for learning digitally (Cerya et al., 2021).

Intercultural Learning

As nations have evolved and expanded, it has become crucial for diverse groups of individual to have a better understanding of one another. To avoid misunderstanding and conflict it is crucial for organizations to provide training to their employees in order to improve their adaptability, innovation and analytical skills across a variety of situations (Pialat, 2022). Ultimately, many organizations are more interested in individuals who are skilled, and ready

to adapt to the current economic environment, as this will be beneficial to the business internationally. Some notable factors that help improve intercultural communication training are building self-awareness of cultural norms, and communication skills (Sinden, 2021). Moreover, there are three main components in intercultural competence which are cognitive, affective, and behavioral. Cognitive is when individual gain knowledge about other cultures than the individual's own. Affective is being aware of the intercultural sensitivity and Behavioral is having the acquire skills to effectively and appropriately manage intercultural situations. Later on, these three is merge into one main component (Graf, 2003).

Soft Skills Communication Learning

The majority of organizations cannot depend exclusively on employees possessing hard skills, which pertains to measurable specific abilities. Previously, there has been a shift in focus towards the development of soft skills for personnel within organizations. Soft skills include people skills, social skills, interpersonal skills, problem solving skills, and conflict resolution skills. Excellent communication is the foundation of a pleasant working relationship between employees and the management (Mehdi & Mehdi, 2017). In the VUCA world, if organizations begin to reinforce more of the soft skills training for their employees, then they will be able to gain new business partners, improve customer service metrics and develop relationships with international organizations (Colman, 2020) Furthermore, organization that have employees with soft skills capabilities tends to have higher organizational performance. For instance; employees who learn from their previous experiences, and constantly apply their learnings into practice in new situations, often acquire additional skills, face new challenges with increased confidence and success, and perform skillfully in changing environments (Horstmeyer, 2020).

Coaching and Mentoring

Another factor in the VUCA world that organizations should take into consideration, is the value of coaching and mentoring for their employees. Amidst a climate of sustained and accelerating global uncertainty, it is important that employees are well taken care of, as well as receiving clear guidance and training to develop confidence in practicing decisive decision making. 'Coaching' is a development-focused relationship with a trained coach, in order to assist a trainee to realize and fulfill their potential, whereas 'mentoring' focuses more on passing an expert's skills to their mentees. Mentors are typically recruited from external

professional networks (Croswell, 2020). Both of these approaches to knowledge and skills development can help organizations build resilience to obstacles and challenges, support decision making processes, and develop employees to become cross functional leaders in the future (Merrick, 2017). Especially in this era, generation differences may be a challenge for coaches and mentors, as they have to deal with different preferences and levels of digital expertise. For instance, Generation X are happier to work independently without close supervision, but may be less familiar with advanced technologies when compared to their Generation Y and Gen Z. Generation X are also more likely to feel offended when having a younger generation peer take charge in a leadership role and act as a mentor. As a result, both coach and mentor have to find a way for different generations to work together collaboratively and get on with shared leadership in order to survive in the current VUCA world (Kornelsen, 2019).

Challenge-based Learning

One example of a concern addresses by challenge-based learning is that there are some individuals who do not have access to highspeed internet while assigned to work remotely from offices. This leads to frustration related to incomplete training and information from the trainer to the learners (Matsuda, 2021). The main challenge is to cope with how to harness the broad range of access to technology and information, while also attracting a highly diverse group of participants (Willis, Byrd & Johnson, 2017). Overall, the challenge-based learning (CBL) covers three phases: Engage. This is a commitment an individual takes on in facing a challenge. Investigate. This is when the individual needs more information to analyze it. Act. This is the stage where the individual designs and implements a procedure to put into action in order to get to the final solution (Scroccaro, 2021).

Finally, this study provides HROD practitioners a comprehensive framework and detailed knowledge concerning L&D's role in the VUCA world. The framework could be a guideline for organizations to review, adjust, and build their L&D system. Organizations and managers can adopt the framework to their strategies according to their environment. Moreover, conducting activities and programs which are related to L&D in organizations could be another practical implication of this study. For instance, L&D practitioners may play a change agent role during the COVID-19 pandemic by conducting a hybrid training program to meet the needs of employees and organizations. Additionally, the framework may be employing by organization

development practitioners as a diagnosis tool to scan what and where the issues and challenges are as well as to provide solutions.

Conclusion

When organizations and individuals understand each other more and continuously strive to adapt their orientations, skills and productivity the VUCA world, it is not difficult for them to survive. If organizations communicate and collaborate with each other more frequent and use advanced technology to aid their daily work. L&D will always remain one of the key components to most organizations to make sure that their employees have the ability to grow and develop themselves professionally, which will positively enhance their performance and accelerate their career advancement in the future (Gill, 2019). Organizations need to change their judgement from implementing traditional L&D procedures, and instead move towards shifting their focus to look at evolving and emerging roles such as digital content developer, culture shaper, strategic learning and development, business partners, organization change management and learning analyst. Especially when more organizations are providing their employees with the hybrid and remote working model, employees have to use various technology devices to effectively communicate with other employees across departments both internally and externally. If everyone makes the effort to help each other within their organization, then trainings for individuals to learn new things will be more efficient, as employees will have more knowledge and understanding of what they are being trained for such as intercultural training, soft skills and how to cope and deal with challenges. These trainings reflect on lifelong learning for both the individual and organizations to continue to improve, develop, and strengthen themselves. In the near future, organizations should shift their perspectives from denying the new reality of the world and focus their plans in order to move towards the same goals. Any obstacles that occurred often leads to an opportunity for organizations to find a solution and even possible that they will come up with alternative solutions.

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