L&D: New challenges, new approaches

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To increase our impact, in service of our purpose, we're focusing our research agenda on three core themes: the future of **work**, the diverse and changing nature of the **workforce**, and the culture and organisation of the **workplace**.

WORK

Our focus on work includes what work is and where, when and how work takes place, as well as trends and changes in skills and job needs, changing career patterns, global mobility, technological developments and new ways of working.

WORKFORCE

Our focus on the workforce includes demographics, generational shifts, attitudes and expectations, the changing skills base and trends in learning and education.

WORKPLACE

Our focus on the workplace includes how organisations are evolving and adapting, understanding of culture, trust and engagement, and how people are best organised, developed, managed, motivated and rewarded to perform at their best.

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Acknowledgements

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Executive summary

The only constant is change. Numerous studies have reported that the external environment is volatile, uncertain, complex and ambiguous (VUCA) (for example, Bennett and Lemoine 2014, Johansen 2007). This research takes stock of the situation by identifying the trends and trajectories of change drivers. The aim of this study is to explore how these changes are impacting organisations and the critical capabilities L&D needs to develop in this evolving context. The report reviews the context in which L&D professionals operate and highlights where there have been significant changes in recent years, or where changes are expected. Through this we aim to inform L&D practitioners and organisations of the potential implications of these changes and perhaps to instigate change in L&D functions.

VUCA environment: a kaleidoscope of change

Globalisation is here to stay, as the world is rapidly more connected with little sign of abatement. Technologies are increasingly the product of cross-scientific disciplines (such as nanotechnology), which makes it more difficult to predict new technologies.

Societies continue to evolve with values changing. Such factors have significant impact on organisations, careers options, work and individual capabilities. New organisational strategies need to be fluid and 'co-opetition' (to co-operate and compete at the same time) is becoming the new status quo, with organisations preferring this to head-on competition. Rivalry is now between groups of organisations from different sectors (sometimes referred to as ecosystems), rather than individual organisations within particular industries.

People will have more than two careers in their lives and many are expected to take the entrepreneurship route because of opportunities provided by technology and other social innovations, such as crowdfunding. The nature of work is predicted to change dramatically, to be more social/collective, ad hoc, de-routinised and virtual.

The impact of these trends and trajectories will vary for different organisations; however, all organisations must respond if they are to survive and thrive.

The organisation: adaptive, agile and ambidextrous

To meet the VUCA challenges in the environment, organisations must be *adaptive*, *agile* and *ambidextrous* (in both operations and learning) (Figure 1).

To be adaptive, organisations need to be attuned to the external environment so as to sense and recognise changes and their various implications. Recognition for the need and type of change should be followed by the ability to internally accommodate and assimilate the change as the first step in adapting to the new environment.

To be completely adaptive to its environment, an organisation also needs to be agile. Agility is the *dynamic capability* of an organisation to change strategic direction and organisational

... all organisations must respond if they are to survive and thrive.

Figure 1: A kaleidoscope of change

The environment: volatility, uncertainty, complexity and ambiguity

The organisation: adaptive, agile and ambidextrous

Learning and development: savvy, affecting and aligned, versatile and ubiquitous

Volatility
The external environment is unstable and presents challenges that are unexpected at great speed.

Uncertainty
Unprecedented trends in the external environment mean that long-term trajectories are more difficult to predict.

Complexity
The external environment has many interconnected parts that can be overwhelming and confounding.

Ambiguity
The external environment is hazy, with many unknown unknowns, and cause-and-effects are unclear.

The external environment impacts organisations

Adaptive
High levels of absorptive capacity. Attuned to external environment, awareness for the need and type of change.

Agile
Dynamic capability to change strategic direction and organisational competencies.

Ambidextrous
Able to concurrently *exploit* current capabilities and be *explorative* in breaking with the past and be ready for new trajectories of development.

L&D supports organisations in their response to the external environment

Savvy
Commercial acumen in understanding the organisation's business model. Business, organisational and context savvy.

Affecting & aligned
L&D help to shape organisational strategy, but must also be aligned to its present and future needs. Includes alignment of culture.

Versatile
L&D is flexible and versatile. Able to quickly react and operate across different organisational landscapes. Able to competently play different roles.

Ubiquitous
Omnipresent in different landscapes (such as organisational divisions, strategic, and operational levels).

competencies. Agility also involves being flexible and fast in integrating new ways of working to operate in the new landscapes and rules of the game.

The ability to both change and manage change is vital, but arguably an effective working environment requires an element of stability. So how does an organisation balance the need for stability, while at the same time equipping itself to face a VUCA environment? The answer is to do both at the same time. Organisations must be ambidextrous in their operations and learning. This is a balancing act that involves both exploiting present capabilities while being open to breaking with the past and ready for new opportunities.

Learning and development: savvy, affecting and aligned, versatile and ubiquitous

L&D plays a crucial role in supporting organisations. L&D must be more business, organisationally and context savvy as this helps L&D to anticipate and contribute to organisational needs in the future. By being savvy, L&D will be in a very good position to be affecting and shape the organisation's direction. Once a new direction has been set, L&D must be aligned to the business needs, organisational culture and in turn the learner. It is essential that L&D is versatile in playing different roles within the organisation, so they can anticipate and respond to changes in the external environment. In playing each of these roles L&D must be ubiquitous to build flexibility and agility into every part of the organisation.

Introduction

Background and aim of study
Today's external environment comprises a kaleidoscope of change. Peter Drucker, a distinguished management guru, said in 1973, '*The only thing we know about the future is that it will be different,*' which still holds true today. The focus of this study is how the key trends and trajectories of change in the external environment are having (or may in the future have) a direct and indirect impact on L&D. The report will review the context in which L&D professionals operate and highlight where there have been significant changes in recent years, or where changes are expected. It will then explore how these changes are affecting the organisation, and in turn how L&D needs to adapt and respond.

This study builds upon recent findings in literature (CIPD 2014d, Learning and Performance Institute 2013, Towards Maturity 2013) exploring the future direction of the L&D profession. It contributes to this body of research by demonstrating how crucial it is to cultivate a new way of thinking, as these changes alter our basic assumptions about people, work and the workplace – rendering many previously trusted methods and techniques in developing people redundant.

Who is this research for?
This report is for L&D practitioners, to help them consider how they can best respond to changes in the external environment in order to improve the effectiveness of their learning practice, and in turn enhance organisational performance. It is also relevant for HR and OD professionals keen to explore the impact of the key drivers of change. It is hoped that the report sparks insight and action, to encourage more organisations to align their L&D practice to future requirements.

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Overview of research methodology

The research method primarily employed involved a literature review of academic materials, alongside practitioner publications and research. Firstly, this involved identifying general trends and trajectories in the economic, science and technology, and social and cultural domains. The next step concerned exploring how broad drivers of change may impact organisational strategy, careers and work, and individual capabilities and competencies. Finally, the last step encompassed identifying specific drivers of change that influence the L&D field, function and practice, and profession. A framework was developed to assist with the literature search and review (Figure 2). The secondary research method involved interviews with key L&D and business professionals.

Report structure

This report has three main sections. The first section reports the drivers for change in the external environment. The economic, scientific, technological, social and cultural domains are investigated. The second section explores the impact of these changes on organisations, careers and work, and capabilities and competencies. The need for organisations to be adaptive, agile and ambidextrous is explained. The third section reports how L&D professionals can support and drive these attributes by being savvy, affecting and aligned, versatile and ubiquitous.

Figure 2: Literature review framework
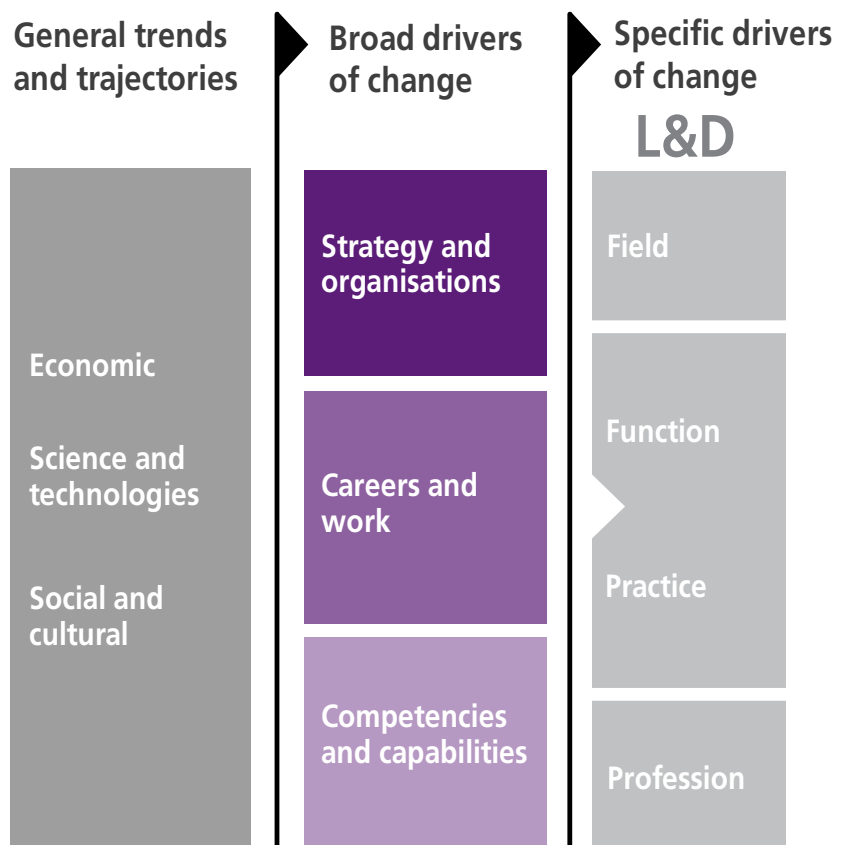
1 Drivers for change – the external environment

In this section we explore the key changes affecting organisations across three themes: economic developments, science and technology, and social and cultural change.

Economic developments
Global economies continue to be further integrated. Globalisation is here to stay, as major economies are interdependent with one another. Nation states are intricately integrated on all fronts: economic, social, industrial and technological. A recent report from McKinsey & Co states that global flows were worth $26 trillion, or 36%, of global GDP in 2012, with the rate of growth of knowledge-intensive flows (for example research and development) outpacing all other flows (for example services) (Manyika et al 2014). China's imminent succession over the US as the world's biggest economy signals the importance of the BRICS nations as key sources of growth (Euromonitor International 2014). Further on the horizon, global economic prosperity and value continues to be redefined by sustainability that in turn impacts upon nations' economic development strategies and industry (Deloitte Touche Tohmatsu 2010).

Science and technology
The pace of advancement in science and technology is unparalleled. Technology has become a 'game changer' as it transforms supply chains and the way organisations operate (CIPD 2013c). Information communication and technologies (ICT) have blurred the boundaries amongst industries to create alliances of organisations with new business models and new ways of competing (World Economic Forum (WEF) 2007). These unprecedented shifts in the marketplace have changed the nature of competition (Keys and Malnight 2014). Emerging cross-discipline technological developments (such as nanotechnology) are increasing the likelihood of radical innovations in vastly varied trajectories. This makes predicting new technologies a challenge, which is also exacerbated by the rapid diffusion of technology.

Nonetheless, not all prediction is in vain. Some projections by the Institute for the Future in 2007 have become reality, such as the use of motion and gesture sensors in *immersive haptics*, which involves dealing with data through multiple sensory channels such as 3D visual, auditory and touch, is now used in 'augmented reality' technologies. McKinsey & Co report that the *Internet of Things* (which are devices, systems and services that are interconnected to one another over the Internet), such as networks of sensors, will become more pervasive in data collection, monitoring, decision-making and process optimisation (Manyika et al 2013). It is now possible to 'fingerprint' individuals by their typing style, for example, remotely identifying a person taking a massive open online course (MOOC) assessment (Billsberry 2013).

The pace of advancement in science and technology is unparalleled.

Technology offers many opportunities for L&D, such as game-based learning and simulations to develop more complex skills (CIPD 2014d) and by connecting people to facilitate informal learning through conversations (Bennett 2014). Technology also fundamentally changes how organisations operate and how work is performed, both of which ultimately necessitate a response from L&D. For example, it is envisaged that the *Internet of Things,* big data and advanced analytics will eventually automate many forms of knowledge work that we complete today.

Social and cultural change

Similar to science and technology, predictions suggest that societies and cultures will continue to change, and be in continual flux, as a consequence of population and demographic changes, and migration. The World Future Society predicts that there will be 9.2 billion people on the planet by 2050, partly due to enhanced longevity (Cetron and Davies 2010). Greater workplace diversity and generational changes are also anticipated (Cetron and Davies 2010). The Millennials, those born in the early 1980s to early 2000s, have been the focus of many studies. The Economist Intelligence Unit (EIU 2014) reports that this generation have high expectations for

personal development (for example opportunities for intercultural experiences) and work–life balance. PricewaterhouseCoopers (PwC) state that Millennials are unconvinced that excessive work demands are worth the sacrifices or rewards, and many may choose unconventional careers (Finn and Donovan 2013). However, one must consider the age of many Millennials in these surveys because an individual's stage of life can shape expectations and motivations.

In addition to changes in demographics, changes in expectations of education and life-long learning are anticipated. Education and life-long learning will continue to play a critical role in the development and mobility of workers as second and third careers are becoming common (Economist Intelligence Unit 2014). Many people will be studying for their next occupation, even as they pursue their current careers (Cetron and Davies 2010, Muja and Appelbaum 2012). This shift was also recognised in recent CIPD research (CIPD 2014f).

Entrepreneurialism is a global trend and will continue to grow as technology provides individuals with the tools to establish and

grow their own businesses (Cetron and Davies 2010). McKinsey & Co provides some insight into this trend as they argue that rapidly expanding access to digital services, as well as the rise in unconventional sources of investment, such as crowdfunding, will play a significant role in promoting entrepreneurship (Chui et al 2013).

VUCA
The findings support the perspective that organisations are now operating in an external environment that is volatile, uncertain, complex and ambiguous (VUCA). Significant changes in the external environment are anticipated and the nature of these changes suggests that they are volatile

and uncertain as the future is not beholden to the past. This adds to existing complexity in the external environment. Because of the high pace of change, the outcome of the interactions amongst these various factors is ambiguous. A summary of how each of the drivers of change relates to VUCA is illustrated in Table 1.

Table 1: The volatility, uncertainty, complexity and ambiguity that the drivers of change bring: a case of more questions than answers	
VUCA	**Examples**
Volatility: The external environment is unstable and presents challenges that are unexpected at great speed.	• Technology is constantly changing the way organisations and industries operate. Will these changes prove too disruptive? Which technologies do organisations adopt to stay ahead? • The speed of advancement of technology means that more changes occur even before prior changes have had time to settle. How does this impact the nature of work and skills that need to be developed?
Uncertainty: Unprecedented trends in the external environment mean that long-term trajectories are more difficult to predict.	• The increasing growth of the *Internet of Things* presents many opportunities as well as threats. Which of these technologies will prove successful and worth investment now? • Many expectations and attitudes of Millennials (for example, in terms of perception of rewards) are very different from previous generations. What organisational policies should be adopted?
Complexity: The external environment has many interconnected parts that can be overwhelming and confounding.	• Many developing countries are becoming economically stronger, changing the balance of power. What are the implications of such changes? What does deeper interdependence and globalisation mean for organisations? • New technologies are a product of various sciences (for example nanotechnology, electronic, bio and materials), increasing the opportunities for radical innovations. How do organisations 'keep track' of technological developments?
Ambiguity: The external environment is hazy, with many unknown unknowns, and cause-and-effects are unclear.	• China and other BRICS may change their domestic economic policies as their economies transform. Will a change in these domestic policies have a knock-on effect? What are the implications of the advance development of the BRICS countries? What role will China play as the new economic powerhouse? • Increasing numbers of people are having multiple careers in a lifetime, some may even have two at any one time. How can organisations retain employees and should they still aim to do this?

2 Impact of change – the internal organisation

The increasing global interconnectivity and workplace diversity necessitates a sophisticated organisational response ...

This section explores how economic, scientific and technological, and social and cultural changes are affecting organisations and how they can respond to these developments by being adaptive, agile and ambidextrous.

Impact on strategy and organisation, careers and work, and capabilities and competencies

Strategy and organisation

The impacts of the drivers of change in the external environment are multi-fold and far-reaching. The changes are multi-fold as they may impact both organisations and individuals at the same time, albeit in varied ways. They are far-reaching as they may transform the way work is performed and the skills required.

The future organisational strategy will be underpinned by networks and relationships, with other organisations, groups and individuals. The increasing global interconnectivity and workplace diversity necessitates a sophisticated organisational response (EIU 2014) and puts adaptability at the centre of organisational strategies (Davies et al 2011). 'Co-opetition' has become the default position of many organisations. This means that competition is increasingly amongst alliances of organisations rather than between individual organisations. Many such alliances are centred on digital platforms that enable players across supply chains and industries, big or small, to participate (Cenamo and Santaló 2013, Manyika et al 2014).

Organisations are starting to facilitate these changes by adopting new organisational structures and forms, for example 'adhoctratic' (flexible and on-demand teams formed for specific tasks), project-centred (formalised teams established for projects) and knowledge-intensive networks (formal or informal group of individuals, groups and/or organisations that come together to share knowledge in advancing common interest) (CIPD 2012c) that leverage social and collaborative technologies (Davies et al 2011).

Careers and work

The nature of career and work methods is also evolving. People are redefining what constitutes a 'career' and how this plays a role in their personal identity. Individuals are more likely to identify themselves with a professional/skills network than with organisations (PwC 2007). The meaning and direction of careers closely parallels individuals' personal motivations and development, cognitively and emotionally (Muja and Appelbaum 2012).

Temporary employment now appears to be a permanent fixture (EIU 2014). This rise is due to both organisations' shift from *employment to deployment* (this refers to a change in approach from focusing on recruiting and developing permanent/full-time employees to focusing on the 'workforce' that may include full-time employees, part-time employees, contract staff, agency staff and consultants from other firms as an example) and individuals' needs. The growth of multiple careers and the rise of

temporary workers have in part driven the development of learning badges to facilitate 'transferability' of learning in reflecting the growing portability of L&D (Russ Eft et al 2014). Individuals are increasingly encouraged to take ownership of their own learning.

Work is predicted to be more collective, less routine, more specialised, more spontaneous and on demand (Austin 2010). The networked organisation is one that involves working collectively and collaboratively on projects with others, both internal and external to the organisation in the virtual world. Gartner supports this view and suggests that people will increasingly work with others, inter and intra organisation, formally and informally, as 'work swarms' (Austin 2010). McKinsey & Co reports the rise of a similar notion in the form of a social matrix that harnesses the ability and creativity of people in and outside the organisation for distributed problem-solving (Chui et al 2013).

Technology will also continue to permeate every aspect of work.

Swarming
Gartner argues that swarming is a new work style that is characterised by a flurry of collective activity by anyone and everyone who are able to add value. Gartner distinguishes swarming from traditional team models that consist of individuals who know one another and work for the same manager. Swarms are unlike these traditional teams as they form quickly, attacking a problem or opportunity and then quickly dissipating (Austin 2010).

Even tasks currently thought to be exclusive to knowledge workers can now be substituted by intelligent systems that are able to solve relatively unstructured and subtle problems (Manyika et al 2013). For example, some aspects of strategic management can now be performed by predictive software and smart analytics.

Capabilities and competencies
By virtue of the changes in organisations, the workplace and work itself, new capabilities and competencies are also required. New ways of working will mean that social intelligence will be an increasingly vital ability (more so than at present) along with cultural intelligence in addressing the global needs of organisations. Individuals need to be able to connect to others in a deep and direct way, to be able to sense and stimulate reactions and interactions (Davies et al 2011). Cultural intelligence is also necessary in developing a global mindset (Centre for Tomorrow's Company 2014). Organisations can help by developing and incentivising employees' connectivity goals and collaborative behaviours.

The growing need for new media literacy, computing skills as well as effective social and cultural abilities, means that individuals must approach their development holistically. The World Future Society states that there will be a growing need for 'synthesists' (a person who is competent in many areas and adopts a systems, holistic, approach) who will be able to bridge gaps and adopt both multi- and trans-disciplinary approaches in problem-solving (Cetron and Davies 2010). The Institute for the Future assert that a design mindset and systems and adaptive thinking will be key competencies

in the future (Davies et al 2011). The VUCA environment will also further amplify the need for effective sense-making capabilities. Leaders and managers will need to discern context, complexity and connectedness more effectively (Schwandt 2005). However, these 'new' capabilities and competencies may quickly become 'outdated' in a fast-changing environment, thus the most important ability is learning how to learn.

Coaching and mentoring
Coaching and mentoring remain a key L&D 'method', and facilitate development at individual and group levels. Coaching helps managers in developing insights and refining their sense-making abilities. There is also evidence to suggest that coaching can be an effective mediator in the diffusion of individual learning to the collective (Swart and Harcup 2013).

The adaptive, agile and ambidextrous organisation
To meet these challenges and the new VUCA environment, an organisation must strive to be adaptive, agile and ambidextrous (see Table 2).

Adaptive
The need to be adaptive has been echoed by Tomorrow's Company (2011). To be adaptive, organisations must have high levels of *absorptive capacity* by being attuned to the external environment in order to sense, recognise changes and the implications. Recognition for the need and type of change must be followed by the ability to internally accommodate and assimilate the change as the first step in adapting to the new environment.

To be completely adaptive to its environment an organisation needs to be agile.

Organisations must be sensitive to the patterns of change and have peripheral vision, as the significance of some changes (for example micro-trends) are not obvious.

Agile

To be completely adaptive to its environment an organisation needs to be agile. In this context agility is the *dynamic capability* of an organisation to change strategic direction and organisational competencies. Agility also involves being flexible and fast in integrating new ways of working, the importance of which has been noted in recent CIPD research (CIPD 2014f). The ability to change and manage change is vital. Some organisations recognise that their size and legacy may be a barrier to being agile and consequently have deliberately initiated L&D and change management programmes to effectively support organisational transformation.

Ambidextrous

Alongside the need for agility, organisations also need to keep core operations functioning, which are likely to require an element of stability in both people practices and processes. So how does an organisation balance the need for stability, while at the same time equipping itself to face a VUCA environment? The answer is to do both at the same time. Organisations must be ambidextrous in their operations and learning (Meyer et al 2009). Ambidextrous learning is a balancing act that involves concurrently exploiting present capabilities while being explorative in breaking with the past and being ready for new trajectories of development (CIPD 2013b).

Table 2: The adaptive, agile and ambidextrous organisation	
The VUCA environment and key external drivers of change are influencing organisational strategy, careers and work, and capabilities and competencies.	**Adaptive** to the changes brought upon by the VUCA context and key drivers of change, by being highly attuned to the external environment in recognising and assimilating change.
	Agile to work with new partners and alliances, and strategies. Organisations also need to be flexible in catering for the needs of the workforce, changing work styles and new technologies and able to change strategic directions and organisational competencies at speed.
In this context, to succeed, organisations must be:	**Ambidextrous** in learning and operations to further exploit existing skills to attain short-term goals, but be explorative in developing new capabilities and competencies at the same time. This requires being able to break from the past and be ready for new trajectories of development.

3 L&D: savvy, affecting and aligned, versatile and ubiquitous

Learning and development functions and practices can play a decisive role in supporting organisations in becoming adaptive, agile and ambidextrous. Indeed, the CIPD's 2014 *Learning and Development* survey suggests that closer integration of L&D activity and business strategy is anticipated (CIPD 2014d). To do so, L&D must be commercially and organisationally savvy in *affecting and aligning* to organisational goals and strategy. L&D must also be *versatile* in swiftly responding to organisational changes and by playing different roles, and be *ubiquitous* through being omnipresent by operating within different parts of organisations (for example divisions, departments, strategic and operational levels). Table 3 illustrates key links between these organisational capabilities and that of L&D's. The following sub-section explains the concepts in more detail and outlines implications for L&D professionals.

Savvy
The call for HR professionals to be business-, organisational- and context-savvy extends to L&D professionals (CIPD 2012a, Society for Human Resource Management (SHRM) 2012, The RBL Group 2012). They must understand the 'business' model and be commercially discerning. Possessing business acumen is crucial as it informs L&D on how best to position itself within the organisation and what practices to adopt in supporting learning and development. It is also equally as important for L&D to demonstrate this 'business-savviness' in gaining the confidence of senior management in further elevating its status as a trusted adviser. In addition to being business-savvy, L&D must also be organisationally savvy. It must be able to effectively work with the processes, people, politics and other organisational realities. For example, L&D needs the support of line managers for the transfer of learning to be effective – L&D cannot do this alone (see *Ubiquitous*).

It is also imperative that L&D is context-savvy as this helps develop understanding of the general attitudes, expectations and needs of learners. Using technology as an example, being context-savvy helps L&D to better understand and potentially gain more insight to how best to leverage technology in learning, talent and organisational development, and/or knowledge management. While L&D practitioners also have the challenge to master technology to some degree, it is the context (for example the learner, the subject matter, timing) that underpins the selection and drives the application of technology. It is not about having the *latest and greatest* technology, but it is about fit, which can only be attained if L&D practitioners are savvy about the business, the organisation and the context. For example, the use of mobile technologies for L&D will grow in importance as a 'platform tool' for future development of e-learning content and delivery, as well as to meet learners' need to 'learn on the go' (Towards Maturity 2013, CIPD 2012b).

...L&D must be commercially and organisationally savvy in affecting and aligning to organisational goals and strategy.

Table 3: Developing the adaptive, agile and ambidextrous organisation through L&D practice			
Organisational capabilities	**Adaptive:** Highly attuned to the external environment. Able to recognise and assimilate changes.	**Agile:** Dynamic capability to change strategic direction and organisational competencies.	**Ambidextrous:** Able to exploit current capabilities and be explorative in breaking with the past.
L&D capabilities	**Savvy: L&D can anticipate and contribute to organisational needs in the future.** • Designing learning and development programmes that support the organisation to plan for the future (for example, using scenarios as part of the business planning process). This helps organisations to be more receptive to and mindful of change. • Breaking down silos to encourage the organisation to be more perceptive of the implications of change throughout the organisation. • Anticipating organisational needs to give their organisation a 'head start' in adapting to imminent changes. **Affecting and aligned: L&D can more effectively shape organisational direction and align learner capabilities with the organisation's present and future needs.** • As a savvy operator, L&D is in a better position to shape organisational direction because of the keen insights that it provides in relation to organisational capabilities that will underpin future direction. • L&D is also able to form effective coalitions to gain quick, unequivocal support and commitment to the new direction and actions. • Through these activities L&D can develop a learning organisation culture that supports and drives change. **Versatile: L&D can rapidly adopt different roles in the organisation contingent on the need and organisational level.** • An adaptive organisation needs a versatile L&D function that is able to play different roles in the future (for example, being able to diagnose problems as well develop solutions). • The different roles that L&D plays help it to better orchestrate the organisational response to changes in the external environment. For example, ensuring that there is congruence between strategy (what is required) and operations (what is possible). • Versatility also means that L&D can be flexible to help organisations to be ambidextrous by focusing both on the present (for example, being more efficient) and the future (for example, experimenting). **Ubiquitous: L&D can simultaneously operate in different parts of the organisation.** • Every part of the organisation has unique challenges. Understanding these idiosyncrasies helps L&D to gain the confidence of business leaders and thus develop solutions that support the future requirements of the business units, and ultimately the organisation as a whole. • Ubiquity enables L&D to help build flexibility and agility into every part of the organisation. • There is no formula for the ambidextrous organisation, but ubiquity helps L&D to encourage this capability by tailoring solutions to each part of the business.		

MOOCs

Massive open online courses (MOOCs) are online courses that are accessible to anyone and allow unlimited participants. MOOCs are beginning to take two major forms: xMOOC and cMOOC. xMOOC is the more well financed and may be considered as the online version of a traditional class. In contrast, cMOOCs (or connectivist MOOCs) are much more focused on encouraging collaborative learning rather than mass broadcast (Billsberry 2013).

Experiential learning

Experiential learning is fast becoming the norm. Simulation games (SGs) can enhance cognitive gains, teamwork and stimulate positive emotions in learners. Games are becoming more complex and more cognitively demanding (Proserpio and Gioia 2007). SGs can be used as a vehicle to promote social learning – sparking discussions, role-play and teamwork (Hromek and Roffey 2009). SGs are powerful tools used to pique and sustain learners' interest (Crookall and Thorngate 2009). In addition, the technology used in SGs gives learners more control of their learning, raising the engagement of learners (Pekrun et al 2010). The immersive environment SGs offer enhances the flow mental state of learners in being fully absorbed in their learning (Csikszentmihalyi 1990).

By being savvy, L&D will be able to further contribute to the strategic direction of the organisation as well as to take the initiative in helping organisations to be adaptive and agile. By being proactive, L&D will be able to anticipate the future needs of the organisation, thereby enabling the organisation to be swift in taking advantage of opportunities or addressing threats.

Affecting and aligned

A savvy L&D function will also position itself as a highly influential strategic leader and as an effective change agent. These are two different but complementary roles that L&D must assume. L&D must be able to shape organisational direction; however, once a new strategic direction has been set, it must be able to change and align its processes and practices with the new direction.

To be successful in the first role, L&D must not only be savvy but it needs to be effective in relationship development and management. Relational capability is a key ability for the future (Centre for Tomorrow's Company 2014). Relationship management is already a core competency in the L&D functions of some organisations (CIPD 2013d, SHRM 2012). L&D must be skilled influencers in building coalitions and gaining support from diverse stakeholders (CIPD 2014a).

Collaborative media

Social media has a place in advancing learning in the workplace, specifically informal learning, and in knowledge-sharing. People learn best when there is a specific need and social media enables this form of on-demand learning. The ability to connect with others helps to facilitate the transfer of tacit knowledge that is by nature difficult to encode in written form. The term 'collaborative media' may be more appropriate than social media when used in organisational settings (Thomas and Akdere 2013, McWhorter 2014).

Key action points: savvy

- Develop a comprehensive understanding of the organisation's business model.
- Talk to the organisation's leaders and managers and ask some key questions: how does the organisation earn revenue? What is the organisation's value proposition? What are its main cost drivers? Who are its key customers and partners?
- Gain deeper connection with business units outside of your own area, for example by attending departmental events or job-shadowing.
- Keep up to date with changes in the external environment and their implications for your organisation and L&D practice.
- Build a strong external network.

... alignment helps to reinforce the crucial role that L&D plays ...

In terms of alignment, this involves L&D being extensively connected to the organisation's 'business' and strategic direction, including developing the 'right' culture for an organisation in order to be adaptive, agile and ambidextrous. This involves changing behaviours and attitudes relating to knowledge-sharing, creativity and risk-taking (innovation).

L&D must also be learner-aligned, specifically in terms of learner expectations and their individual differences. By being aligned to the organisation's 'business' and strategy, and with learners, L&D practices and activities will be more effective in helping organisations address the challenges posed by the VUCA environment. In addition, alignment helps to reinforce the crucial role that L&D plays, which in turn helps to further elevate its status as a strategic leader and aids its ability in affecting strategic direction, resulting in a virtuous cycle.

Versatile

L&D must be versatile in adopting different roles across different organisational settings. This report has referred to the role of a change agent and champion in 'developing' and aligning organisational culture with the organisational strategy. L&D must be versatile in playing other strategic roles, such as boundary-spanners, capacity-builders and integrators. At the divisional or departmental level, L&D are now expected to play the role of consultants that troubleshoot to enhance business performance. At the operational level of the L&D function, L&D professionals may increasingly need to play the role of curators of content, in addition to traditional design and delivery roles (Learning and Performance Institute (LPI) 2013).

Boundary-spanning involves linking and co-ordinating an organisation with external parties and elements. L&D is well positioned to play this role as it is able to discern changes in the external environment in terms of what they mean for organisational competencies and the individuals' capabilities. There are many ways of playing this role effectively, including, for example, developing partnerships with universities to provide continuous education opportunities and with external L&D vendors in the development of L&D programmes and events (Sturdy and Wright 2011).

Capacity-building refers to developing an organisation's aptitude to learn, as well as having the time and space to do so. Organisations that are continuously in crisis mode and fire-fighting are less likely to have capacity to learn compared with organisations

that are steady and secure. L&D functions must help organisations to identify ways in which to cultivate effective learning-to-learn abilities and in 'making space' for individuals within the organisation to become better learners.

The third strategic role is that of an integrator, as supporting organisations through these turbulent times requires an all-round response. This is warranted as the differences amongst L&D, talent development, organisational development, change management and knowledge management become less distinct (this is further discussed in the following section, *Ubiquitous*). L&D may be the orchestrator of relationships and a conduit for learning, knowledge and innovation.

At the divisional/departmental level, L&D professionals need to develop consulting skills that enable them to address broader performance issues, which may relate to knowledge, innovation, as well as learning. At this 'level', L&D should also play a broader role in helping divisional/departmental managers in diagnosing problem situations. Learners are now more adept than ever. L&D professionals can only add value if they are a

step ahead. At the L&D 'operational level', the role of L&D has widened to include two key roles: firstly as curator of content in identifying and bringing relevant content together (for example from the Internet) on the behalf of learners; secondly as facilitator of conversations and enablers of constellations of communities of practice (Hotho et al 2014). This is supported by key messages from discussions with our interviewees, who reveal that a change in mindset is required. L&D is no longer just a broker of information and knowledge; it must be a curator of content and facilitate connections across the organisation.

Content curation

Content curation is to bring together materials and content from different sources (for example text from websites, videos) in a coherent manner. The wealth of credible and relevant learning materials means that L&D professionals need not 'reinvent' the wheel. However, they must have the ability to identify and organise relevant materials for specific learners and purposes.

L&D is no longer just a broker of information and knowledge; it must be a curator of content and facilitate connections across the organisation.

Key action points: versatile

- Evaluate existing L&D roles and identify new and distinct roles that may help the organisation become adaptive, agile and ambidextrous.
- Map current capabilities and competencies of L&D professionals in the organisation.
- Match each individual professional's dispositions, skills, knowledge and interest to these roles.
- Establish knowledge exchange practices to help L&D professionals perform better in the roles and to co-ordinate initiatives.

Ubiquitous

The versatility of the L&D function helps it to effectively operate in various parts of an organisation. It is argued that L&D is only able to fulfil the previous roles discussed if it is ubiquitous across the organisation. L&D ubiquity is about having a presence in different parts of an organisation's landscape. This helps L&D learn about the unique opportunities and challenges faced by various divisions/departments. Such knowledge helps L&D to better identify broader performance issues that a business unit may be experiencing.

The advantage of effective engagement in different parts of the organisation is in the knowledge gained. By intimately understanding the business unit, L&D is then able to effectively help learners transfer their learning to their own work environment. While learners may enjoy and truly learn from L&D interventions, this learning does not necessarily always transfer to the learner's workplace. On-the-job-training is perhaps the most effective form of training (Saks and Burke-Smalley 2014) as it involves the actual work. The design of on-the-job-training will be more effective with an L&D function that has insights into that division/department, as the training can then be designed to address specific performance-related issues.

Metacognition

Studies suggest that the enhancement of metacognitive abilities of individuals facilitates effective transfer of learning (Georghiades 2000). Metacognition helps individuals to recognise patterns and similarities between context, and in knowing what can be transferred and how. Metacognition can be developed through conversations with coaches/mentors (Perkins and Salomon 1992).

This deep knowledge of the business also helps L&D speak the language of the business. L&D is also able to be a more effective partner to business unit managers in evaluating the efficacy of training, which requires managerial support (from the line manager) and expertise in evaluative methodologies (Kennedy et al 2014). To be able to genuinely evaluate the effectiveness of training, L&D needs to be able to observe and record the actual behaviours and 'results' of learners within the business (Saks and Burke 2012).

In addition to developing a deep understanding of each organisational area and having a bird's eye view, the ubiquity of the L&D function is necessitated by the overlap with other organisational support functions such as organisational development. While many L&D functions have undertaken various approaches to foster innovation, such as job rotation to drive collaboration and external workshops to encourage external collaborations (CIPD 2013a), integrated solutions with other support functions are required. L&D will need to work closely with 'support' functions in providing cohesive solutions to other areas within the organisation.

By being ubiquitous, L&D is able to promote its 'offerings and solutions' to different parts of the organisation to achieve other goals. L&D interventions and practices can influence employee engagement and retention, leadership development, motivation, and help to enhance social capital (Sheehan et al 2014). In relation to its boundary-spanning role, L&D functions should also increasingly develop a presence external to its respective organisation (for example, by being involved in benchmarking consortiums to learn more about best practices in supporting learning and performance).

Key action points: ubiquitous

- Build on 'relational capability' (developed to be 'affecting and aligned') by translating these relationships into insights.
- Start with 'small' projects on which L&D can work with business units to improve performance and capability.
- Start from the 'bottom-up' to explore the practices and processes that can help drive organisational flexibility and agility.

Conclusion

Meeting the challenges of the future starts today. L&D functions must develop the foresight to anticipate what is required by their organisations in the future. They must embrace new practices to support new ways of learning and working, be able to respond at speed and scale up faster as well as having the discipline to 'stay on course' for the long term (Towards Maturity 2013). Top learning organisations build the capacity and capability of their L&D team ten years in advance, and they do not stop, even in a recession, as continuous development of the team is paramount.

The democratisation of learning and development, and the empowerment of learners, means that L&D must reposition itself. 'What and how' depends on the organisational context that L&D operates in. Generally, the most effective L&D functions see themselves as 'connecting', 'collaborating' and 'facilitating', while still maintaining focus on the 'traditional aspects' of L&D (for example delivery of training, measurement of return on investment).

The plethora of change is driving transformation within the L&D profession. This necessitates considerable resilience, particularly as there is added pressure on L&D professionals to shape change for learners, the organisation, the L&D function and themselves. L&D practitioners must be flexible to adapt to external trends, change at the right pace and develop the competencies required by their organisations.

Forthcoming research, to be published in 2015, will explore these issues in more depth with case study examples of organisations that have transformed their approach to learning and development.

L&D functions must develop the foresight to anticipate what is required by their organisations in the future.

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