Developing a digital learning strategy

Today’s digital workplace blends different technologies, working practices and generations, but how can organisations ensure an effective return on investment?

Tony Sheehan highlights the value of considering nine challenges in the digital environment, and introduces a framework for aligning organisational needs with digital learning strategy.
Introduction

Although Arie de Geus’s quote 1 is now over 20 years old, it still remains true that in business:

The ability to learn faster than your competitors may be the only sustainable competitive advantage

Rapid innovations in technology have caused digital learning to emerge as an option that is no longer restricted to merely blending with face–to–face interventions. Today’s organisations increasingly think, communicate and work digitally, and learning has had to evolve to keep pace. These organisations exist in a cauldron of information, of global competition, and of financial constraint. Individuals are always connected, always collaborating, always on, thanks to a wealth of new devices — yet are pressured to make effective business decisions faster and faster amidst a sea of distracting content. This creates a considerable challenge for executive education; a need to devise strategies that help people to learn in a digital age even though there is little time or inclination to do so in practice. So how can organisations develop digital learning strategies around mobile devices, online content, social networks, virtual community discussions and real time collaboration solutions? How can busy executives find time to learn digitally in a world where there is barely time to think? Is there a way in which new technologies can help learning rather than simply generate still more search results?

To answer these questions, Ashridge has explored the changing nature of three distinct areas:

- The needs of digital learners
- Digital learning objectives
- Digital channels and devices.

Each of these are considered in turn before exploring a framework for development of digital learning strategies that align with the needs of today’s rapidly evolving business landscape.

The needs of digital learners

An average person consumes 10,845 words or 34 gigabytes on a typical day, not even allowing for information at work 2

There is little doubt that digital learners have become extremely effective information processors, but current working and learning practices are somewhat less effective. Individuals in the workplace are now more often expected to drive their

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own career development, but in the face of information overload, and of complexity in the business environment, distraction is rife: the need to align digital learning strategies to business strategies and learner needs is paramount.

An effective digital learning solution needs to understand the learning objectives of a particular intervention, the preferences of digital learners and how they aggregate into a dominant digital learning ‘culture’ of individuals within an organisation. The digital learner within a given organisation will vary in terms of three distinct needs as shown in Figure 1:

- **Technology** — the extent to which new technologies, social media sites, online collaborative courses, ebooks etc are embraced or shunned
- **Timing of learning** — the idealised approach to learning on the job, just-in-time, or in the classroom, just in case
- **Location of learning** — the place of ‘persistent presence’ where learners tend to spend their time and think.

By exploring these needs, an understanding of the most dominant digital preference of learners within an organisation can emerge, as well as ideas on suitable learning designs that may fit with the time, technology or location preference. For example, a time-starved senior leader who prefers to learn ‘on demand’ will tend towards virtual and mobile learning solutions, whereas a new recruit getting up to speed in their field or studying for a qualification will tend to be more receptive towards more structured programmes and e-learning modules requiring formal attendance and assessment.

Even when digital learning interventions have been created, the behaviours that people exhibit when engaging with digital content is highly variable, with a new wave of digital learning styles starting to emerge:

- Surfers and divers — characterised either by a desire to retain broad overviews of connected concepts or a preference towards detailed understanding of narrower subject areas
- Contributors and consumers — characterised by those who actively engage in digital learning activities or those who more passively observe with limited active participation
- Steady learners or socialites — characterised by those (particularly those starting to build competence in their field) who tend to need more knowledge delivery and ‘scaffolding’: as opposed to those who are more willing to learn on demand through social and business networks
- Activists and objectors — characterised by those who are eager to engage and explore new learning technologies: as opposed to those who are less keen and more cautious.

Organisations inevitably contain a blend of these learner preferences which makes creation of a ‘one size fits all’ solution difficult. As such, although learning solutions should be designed to reflect the most dominant technology culture to stimulate and support business priorities, there is also a need to provide some elements of fluidity and choice to support other learner preferences. It is easy to become almost paralysed by the varieties of course design and technologies that could be used to support learning. Schofield, West and Taylor highlight the challenges of adopting a suitable strategy for mobile learning in such circumstances but also stress the value of starting and sustaining a freedom to fail approach. They also highlight the increasingly impatient attitude towards digital learning from all of the above groups, highlighting the need for content that is

**Just enough, just in time, just for me**

**Crafting the right approach to digital learning**

Having established the dominant types of digital learner need within an organisation, the focus moves towards selection of methods to deliver the desired experience. Whilst there is no shortage of choice of tools, techniques and innovation in the digital learning space, there is still all too often limited user satisfaction. The wealth of resources available results in what Schwartz calls ‘the paradox of choice’, whereby digital learning designers are almost paralysed by the choice available, anxious that they may not have made the right decision and frustrated at the gap between their expectations of good digital learning and the realities of their actual experience.

The e-learning market space demonstrates this paradox in practice; it continues to thrive, with the US market alone worth $22bn in 2011 and projected to grow to $27bn by 2016. At the same time,
however, Armstrong and Russell\(^7\) suggest that structured e–learning courses remain one of the least effective management development practices for middle managers. To cut through this challenge and develop clear objectives for an appropriate digital learning design, three key factors again need to be considered, as shown in Figure 2:

- **Content strategy** — in particular, the decision whether to actively curate and signpost to content, or to trust and encourage learners to make full use of available resources
- **Delivery focus** — the choice between knowledge delivery by experts as opposed to more active facilitation of group-based discussion and problem solving
- **Programme scale** — the decision on whether to create more targeted learning opportunities or to encourage large volumes of users to learn in parallel.

The content available to support digital learners is currently influenced by the interplay of the declining physical book market, growth in access to free digital content and the proliferation of open educational resources and online collaborative courses. The explosion in free online content (through blogs, tweets, whitepapers etc) creates immense choice and opportunity for knowledge creation, but can also add to the frustration of many digital learners. Mere access to content does not necessarily equate to improved quality of new insights and knowledge as TS Eliot\(^8\) observed:

*Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?*

Individuals are now accessing content on demand (for example via mobile) and frequently developing increased confidence in decisions made using this approach. This, in turn, creates a need to consider the implications of new learning behaviours that might start to evolve as a result of our digital environment. Sparrow et al\(^9\) have analysed this trend and suggest:

*When people expect to have future access to information, they have lower rates of recall of the information itself, and enhanced recall instead for where to access it.*

Those seeking to develop digital learning strategies in the face of assumed continual access to learning materials must therefore consider whether it is sufficient to allow learners to find their path in a sea of content or to what extent distilled signposts to relevant (or perceived quality) content may be more appropriate.

There is also a need to build on the social nature of much of today’s knowledge base. Internet content can be enhanced through organisational adoption of Web 2.0 and Enterprise 2.0 principles such as collaboration and co-creation of content. Although tools such as blogs, wikis and discussion fora have been available for many years, the improved recent adoption of these tools within organisations as well as improved access to debate via mobile devices now allows the wisdom of the crowd\(^10\) to be far more achievable in practice. The advent of more social learning models embracing these principles and empowered through technology has significant implications for digital learning design, as the knowledge

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**Figure 2. Establishing digital learning objectives**
of learners within and accessible to a community of practice can now frequently be as current, perceptive and powerful as the expert view.

The impact of social learning is, however, influenced by the extent to which such practices can be cultivated in a given learning context. Communities require engaged users who are relatively easy to create when:

- Networks are social (for example Facebook to keep up-to-date with friends)
- When there is business benefit (for example LinkedIn networks opening up job opportunities)
- When usage is at scale with a purpose (for example Wikipedia’s ability to maintain quality due to a belief in the value of sharing knowledge).

Digital learning designers need to cultivate similar social drivers of individual engagement, enthusiasm and energy within courses and learning interventions. However, the organisational learning context often fails to provide sufficient scale or stimuli to create commitment and belief in the community. What are the consequences of not participating in a collaborative activity in an organisational learning community? What are the benefits? Is there enough dialogue, diversity of opinion and debate to sustain the community?

Social learning models have challenged those delivering executive education to evolve rapidly from expert teacher towards a blend of facilitator, signposter, problem solver and critical reviewer.

The need to stimulate and sustain learning communities is now a given, one which can stimulate considerable engagement, participation and knowledge creation if successful. That said, it requires some rethinking of existing models and behaviours. For some, this has stimulated the development of the new modes of learning delivery that are now emerging at a pace to fit with new models for content and social learning. At Ashridge, the MBA programme has started to ‘flip the classroom’ with more theoretical principles, models and knowledge delivery delivered online in advance via the Virtual Ashridge platform, in preparation for more detailed exploration of context and application to real business problems when in online communities and real-time sessions.

In the broader context, digital learning opportunities are now increasingly presented at scale, increasingly embracing better digital practice and increasingly free at the point of consumption by many global institutions. The development of open educational resources, such as iTunesU and MIT’s Open Courseware, meant at first the offer of free content at scale. This has more recently been supplemented by structured MOOCs (massive open online courses). These courses have delivered learning on demand to vast numbers, stimulating new modes of teaching and learning on a global scale through the likes of Khan Academy, EDx and Coursera (two consortia of US universities). At Stanford, an artificial intelligence course taught onsite to 200 students in 2010 became an online event attracting over 160,000 participants from 190 countries in 2011. Building on this success, the numbers registered on MOOCs run by Udacity and Coursera have now approached and exceeded 750,000 and 1 million learners respectively.

The benefits of teaching at this scale include dramatically improved access to learning and immense scope for peer-to-peer interactions to build knowledge. There are also, however, inevitable compromises, particularly when moving from knowledge delivery towards activities that may require more complex levels of dialogue and debate (for example strategy, leadership, change). As a result, digital learning has
also benefited from interventions that blend global reach with online web conferencing tools such as Cisco Telepresence, WebEx and Skype. Successfully embracing such technologies demands both the recognition of different experience in such online environments and a need to develop new skillsets as educators. As Caulat and O’Brien highlight:

Good listening, the ability to build trust and intimacy in a virtual environment, becoming comfortable with silence and reflecting on its meaning and acquiring good process skills appropriate to the virtual environment, are all aspects that good virtual facilitators need to develop.

Supporting digital learning channels

The combination of improved choice of content, improved internet access and recent penetration of devices such as tablets and smartphones has revolutionised the digital learner’s ability to consume digital learning. In 2010 more than 60% of the world’s population were using mobile devices such as smartphones, with smartphone penetration growing at over 20% a year and now exceeding 50% in the US.

The proliferation of such devices does, however, create three further challenges for learning designers as shown in Figure 3:

- Devices — the decision as to whether to support one or multiple devices
- Formats — the selection of content format to support a particular device or to compromise and apply best endeavours to work across multiple devices
- Innovations — the ability to fix learning for a period or to adopt a more fluid approach in order to keep pace with on-going technology developments

Digital devices — smartphone, tablet, and laptop alike — have become learning lifelines, the veins through which knowledge can be exchanged and through which rich learning now needs to be stimulated. Costs of these devices were previously out of reach of the typical consumer and many organisations adopted strategies based on, for example, a single software platform or mobile device, largely under the control of CIO and Enterprise IT departments. Such centralisation brought with it considerable benefits; centralised storage of knowledge, centralised support, centralised security and common business systems which made digital learning design relatively straightforward with common standards.

Times have changed. Digital devices now support digital social lives and set high expectations for access to learning when the device is brought to the work-place. Learning must now be as accessible as Google, as insightful as BBC.com and as fun as Angry Birds, with few rules, standards or systems to outline how to deliver on these needs. Learning also needs to ideally work on multiple devices, since depriving individuals of access through their preferred device restricts a channel for knowledge delivery and creates a barrier to the discretionary effort that many individuals put in after hours.

As a result, some organisations have adopted BYOD (bring your own device) policies, allowing users to bring their own devices to work whilst trusting them to both avoid accidentally corrupting company data through firewall breaches and to not spend excessive amounts of time on activities inconsistent with business needs. Multiple devices are accepted within the business, content is often stored in the cloud and social and business networking co-exist throughout the day. Others have questioned BYOD practices, arguing that device inconsistencies create unnecessary barriers to collaboration, and create challenges (of, for example, decentralised password management) that constrain knowledge sharing. Standardised device policies do cultivate a level of unity around users and content that allows some degree of central support as well as encouraging investment to ensure that user experience in the business reflects that of a social network. At Daiichi Sankyo UK, for example, the adoption of a standardisation policy based on Apple iPads and iPhones has been seen as a way of driving adoption of digital practices across the business. From a clear link to business strategy and culture (in particular, enhancing the ‘Issho’ — togetherness — ethos inherited from its Japanese parent) the policy has been seen to revolutionise both internal communications as well as interactions with customers and stakeholders.

Decisions must be made on appropriateness of learning object design in a manner consistent with device strategy; is it always fitting to deliver learning on demand in ‘bite sized chunks’ through a

Figure 3. Digital channel and device strategy
smartphone or is this merely a springboard to richer learning in the classroom, online or at work? There is also a challenge to be faced due to a lack of agreed standards for learning content on mobile, tablet and other devices, which can lead to complex demands for the same learning assets to work on, for example, iOS, Android, Flash, HTML5, different internet browsers etc. If content needs to be suitable for both mobile and tablet devices, how can content be readily repurposed to be accessible through small and large form devices?

Even as such development decisions are made, the pace of innovation in the digital space creates an on-going challenge. Each week brings new devices, new ideas, and new learning solutions. To remain relevant and appropriate to user needs, the digital learning designer must maintain awareness of evolving trends, explore which solutions offer best fit and incorporate best practices as appropriate. There is a need to decide how frequently to invest in refreshing learning and, indeed, to consider how viable it is to innovate continuously in this space. It is difficult for any one individual, one team, even one organisation to dominate a space now occupied by so many diverse needs and opportunities and as a result, more flexible approaches are evolving to keep up with the pace of change. Solutions are continuously evolving: flexibility, agility and building bridges between different knowledge domains and different areas of digital learning design are more critical than ever before. As Steve Jobs\textsuperscript{17} suggests:

\textbf{Creativity is just connecting things. When you ask creative people how they did something, they feel a little guilty because they didn’t really do it, they just saw something. It seemed obvious to them after a while. That’s because they were able to connect experiences they’ve had and synthesize new things.}

\textbf{Integrating your digital learning strategy}

In order to distil the above trends into an effective organisational digital learning strategy, there is a need to explore three areas:

1. Business needs and available investment for digital learning
2. The organisational response and position to the nine key challenges summarised in Figure 4
3. The resultant scope of both digital learning strategy and appropriate digital learning interventions.

These issues may not necessarily be explored in that order; new technologies could well influence business strategy, but the broad process is illustrated in Figure 4.

Given the variety of organisational needs, of potential positions available across the nine areas, and of potential learning objectives and strategies, it is hardly surprising that many different digital learning solutions have emerged. Our work with Ashridge clients, courses and contacts has allowed us to observe a variety of good practices that adopt considerably different positions and practices shown below. For example:

- For a retail client, a technology integration exercise blending an open source learning management system with a video based portal and content from Ashridge and other trusted content providers into a seamless user experience
- For a public sector client with a limited budget, a Virtual Ashridge portal provides access to digital learning content on demand, any time, any place for a large volume of organisational learners
- For a group of high potentials seeking to energise social networking, a series of bespoke online conference sessions supplemented by an online portal combining Ashridge content and community features to seed and support discussion

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{integration_diagram.png}
\caption{Aligning nine key challenges to develop digital learning strategy}
\end{figure}
Digital learning is an area of rapid change, with few silver bullets, few right answers, and a multitude of possibilities where good practice can be developed. To succeed, our research suggests it is appropriate to first consider organisational needs, then the optimal position in the context of current industry trends, and only at that point to focus on exploration of detailed learning interventions and technologies. The transient nature of the digital learning space means, however, that any given strategy – even in the instances outlined above – will need to remain fluid. There are risks that excessive investment at a time of rapid change could result in outdated or inappropriate solutions, and yet failure to embrace digital could also result in considerable loss of learning opportunities.

Conclusions

The future for digital learning is one of accelerating change, of rapid shift towards self-managed development and of demand for virtual learning solutions that blend quality content, rich community interaction and application to real world problems. Digital learning has evolved rapidly and the principles of learning any time, any place and anywhere are not just possible, they are now a critical business requirement. Inevitably, such changes will continue to create questions: Where is the classroom? Where is the learner? Where is the trusted content? What is the comparative value of a certificate of completion for a current MOOC as opposed to a programme taught for a formal qualification? What financial models are appropriate for this new world of learning?

The answers to such questions will evolve in response to the volume of learners who are now starting to experience learning digitally. These challenges to the learning industry mirror those of the digital music industry 20 years ago, a world of vinyl, record shops and marquee labels almost unrecognisable from the digital music sector today due to innovations highlighted by Bono:

What turns me on about the digital age, what excites me personally, is that you have closed the gap between dreaming and doing. You see, it used to be that if you wanted to make a record of a song, you needed a studio and a producer. Now, you need a laptop

The digital music industry highlights the benefits of embracing, exploring and shaping new possibilities; the digital learning industry must now do the same.

References

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