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WORKING
PAPER



Corporate Digital Learning: How to Get It “Right”

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IMD-2015-1

Executive summary

This position paper is a collaborative effort between KPMG AG Wirtschaftsprüfungsgesellschaft, Germany (KPMG) and IMD business school, Switzerland (IMD). The aim of the paper is to create awareness about the demands and challenges of digital learning, to present clear and informed opinions on the issues associated with this type of learning, and finally to suggest practical, actionable measures to effectively integrate new technologies into corporate learning and development (L&D).

The insights and opinions presented in the paper are based on information gathered from executives in 68 international clients of KPMG and IMD, all industry leaders in their respective sector. Responses from the surveys and interviews provide an in-depth look into the use of digital learning in corporate L&D. The questions addressed are:

1. What is the unique proposition of digital learning?
2. What is the right digital learning solution for your organization?
3. How do you implement digital learning in your overall L&D strategy?

In an environment in which the global e-learning market has been growing by 900%, our findings indicate that digital learning is currently used 20% or less in most companies. Within the next 18 to 24 months, a shift up to 60% is anticipated, yet investment in new learning technologies accounts for a maximum of 20% of the L&D budget. Since many e-learning courses are developed in-house, this figure could be misleading due to hidden costs.

Many companies use digital learning in a blended learning format, some more successfully than others. Overall, e-learning is greeted unenthusiastically, often with indifference, and could benefit from a boost in didactic effectiveness. The transfer of learning back to the workplace is estimated to be 40% or less. In most cases the impact of learning is measured, if at all, through surveys rather than on-the-job performance or tests. The lack of motivation and impact may be due in part to technical difficulties. A recurring problem is the lack of a learning management system (LMS) or, when it does exist, it is an outdated and incompatible system. Interestingly, none of the companies involve IT in the decision-making process for digital learning.

To make digital learning more effective, we suggest that it is essential to create an up-to-date knowledge map of the targeted learning groups along with a solid understanding of the company's current technical capabilities. These are baselines for defining a relevant and coherent L&D strategy, which can then also be measured. We also emphasize the need for more enjoyable, high-impact learning through a professional blend of learning methodologies, taking into consideration the various types of knowledge and motivation. Accompanied by an internal marketing and change management process, the right digital learning portfolio will not only enable a company to retain talent but also to increase its future competitiveness.

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1. Introduction

1.1 Developments in learning technology

Gone are the days when we took classroom learning for granted as the standard method of delivering learning and development. While this traditional form remains irreplaceable in many learning situations, blended learning, which uses both classroom and digital methodologies, is quickly becoming the norm. According to 2012 industry statistics, for US corporate training alone, e-learning amounted to \$52.6 billion of a total corporate training volume of \$200 billion,¹ and this was predicted to more than double by 2015.² In 2011 an estimated 77% of American corporations were using e-learning compared to a mere 4% in 1995.³ The US and Europe dominated the e-learning industry (70%), but e-learning revenues were expected to grow 20% per annum in Asia. Digital learning is the fastest growing market in the education industry: since 2000 the global e-learning market has grown by 900%.⁴

Due to the widespread availability of digital learning, the teaching and learning process is taking a quantum leap toward global accessibility. The emergence of massive open online courses (MOOCs) is breaking down time and geographic barriers. The courses are available 24/7 to any willing learner practically anywhere on the planet, as long as he or she has access to the internet. These trends tend to enforce the belief that learning should be similarly ubiquitous in companies. Yet, just as MOOCs are clearly not the right solution for everyone, many e-learning programs fall short of their company's L&D goals. This is particularly the case when they are implemented as a cost-cutting measure rather than as targeted and precisely fitted programs.

As far as learners themselves are concerned, these advancements in learning technology have led to increased responsibility. More than ever, employer attitudes are that employees should take the learning initiative and be willing to co-invest in their future. This requires a different motivation and discipline, which may not yet be well served by the daily work environment or the available e-learning options. Similarly, greater demands are being made in terms of the instructors' capabilities than ever before. A radical shift in teaching skills to a "flipped classroom" model⁵ remains uncharted territory for many.

Whether at the corporate academy level, where entire curricula are concerned, or at the program module level, the digital transformation is inescapable. Failing to be adept at digital learning would be the equivalent of continuing to carve on tablets of stone for fear of the printing press. In this paper, we want to create awareness of the changing shape of education and to support companies to go beyond the status quo. It is time to break out of the box (the classroom box) and embrace the digital learning tsunami while avoiding the dangers of a fragmented approach.

¹ znanja.com. (2012, January 19). *The elearning Revolution 2012*. Retrieved from <https://www.youtube.com/watch?v=dlJshzOv2cw>.

² PRWEB. (2012, February 15) *Global E-Learning Market to Reach US\$107 Billion by 2015, According to New Report by Global Industry Analysts, Inc.* Retrieved from http://www.prweb.com/releases/distance_learning/e_learning/prweb9198652.htm.

³ Cultus. (2012, December). *20 Facts about Elearning Programs*. Retrieved from <http://www.onlinecultus.com/20-facts-about-e-learning/>.

⁴ Ibid.

⁵ Holland, Beth. (2013, October 30). *The Flipped Mobile Classroom: Learning "Upside Down"*. Retrieved from <http://www.edutopia.org/blog/flipped-classroom-learning-upside-down-beth-holland>. In a flipped classroom, the face-to-face time with the instructor is used for students to demonstrate, apply or experiment with the knowledge gained through content learned outside the classroom, not through traditional lectures.

1.2 Purpose of the position paper

In the midst of this digital learning revolution, companies around the globe are confronted by return on investment (ROI) challenges as they try to leverage new technologies in their capability-building initiatives. On the one hand, there is an urgent need for strategic talent development to ensure the company's future, while on the other, there is pressure for financial stringency to safeguard today's bottom line. Often L&D and training managers resort to digital learning in the form of web-based training (WBT) as a cost-saving alternative for large groups of employees. Just as often, they realize that the training has been executed with no significant performance improvement or behavioral impact.

The 70:20:10 (70% experiential learning: 20% informal learning: 10% formal learning)⁶ framework continues to persist, despite a growing portfolio of learning opportunities. The perceived dilemma with this model is that the knowledge gained through formal instruction (10%) and from peers or coaching (20%) is not trickling down to the 70%, understood in this case as on-the-job application. Yet one could argue that digital learning is turning this model on its head by individualizing learning. The more recent “pervasive learning” model argues that with flatter hierarchies and greater availability of information, the breakdown is more like 3x33%.⁷⁸ No matter how the learning pie is sliced, there is insufficient evidence that corporate education programs result in the transfer of learning to the workplace. Consequently, it is important to integrate digital learning into experiential and informal learning in order to design an effective program. Although the rapid growth of instructional technology can seem overwhelming, its adoption in an organization may be hugely beneficial. In fact, it is something that can be structured and managed to enhance organizational performance: “The real question is not, ‘What is the role of technology?’ Rather, the real question is, ‘How do good-to-great organizations *think differently* about technology?’”⁹

In Section 2 of this paper we describe our methodology. In Section 3, we take a look at the advantages digital learning can bring to the corporate learning environment and what types of digital learning are available today. This is followed by a discussion in Section 4 on how to determine the right digital learning for your business. In Section 5 we share experiences on how to implement digital learning in order to fulfill your corporate strategies. Along the way, we include some client perspectives to illustrate where they find themselves on this learning journey. Section 6 is the conclusion.

2. Methodology

2.1 Target audience and profile of survey respondents

We conducted a survey among a number of IMD's and KPMG's corporate education clients. IMD is an international market leader in executive education, offering leadership programs for mid-management upwards. KPMG is a market leader in Germany for international company programs, mostly on strategy and operations for all levels of staff. The survey was

⁶ Lombardo, Michael M. & Eichinger, Robert W. (1996). *The Career Architect Development Planner* (1st ed.). Minneapolis: Lominger. p. iv. Retrieved from <https://www.702010forum.com/>. In this case, the 70:20:10 breakdown refers to the hypothesis that human beings learn for the most part (70%) by actually doing the work, somewhat (20%) by observing the work being done and the least (10%) through formalized learning.

⁷ Pontefract, D. (2013, March 4). Video *Flat Army Chapter 9 Overview*. Retrieved from <http://www.danpontefract.com/flat-army-chapter-9-overview/>.

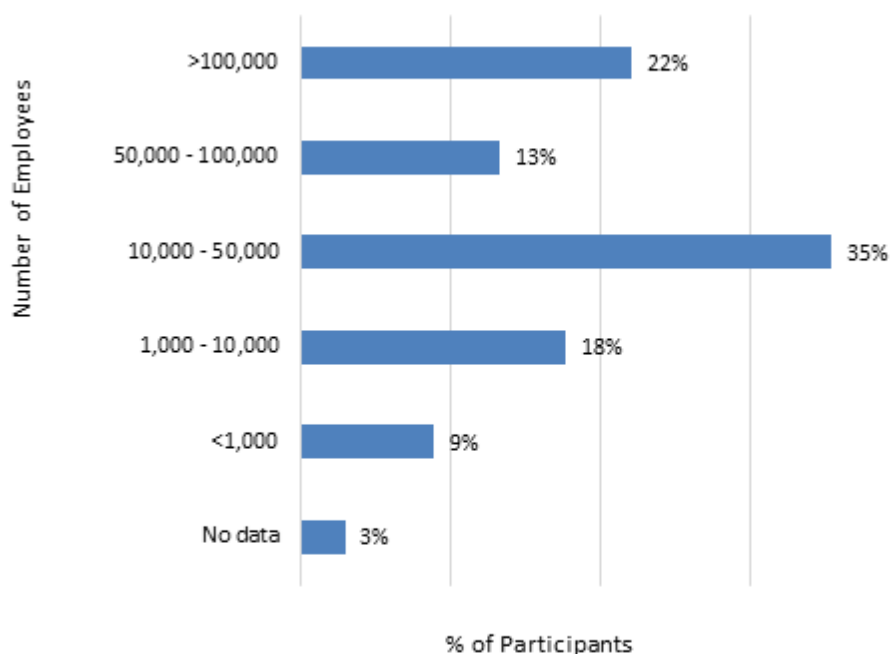
⁸ Morrison, M. (2014, March 11). See diagram in 70:20:10 – *has the model had its day?* Retrieved from <https://rapidbi.com/wp-content/uploads/2014/03/pervasive-learning-3-331-1024x745.png>.

⁹ Collins, J. (2001) *Good to Great*. NY, NY: HarperCollins Publishers Inc. p. 147.

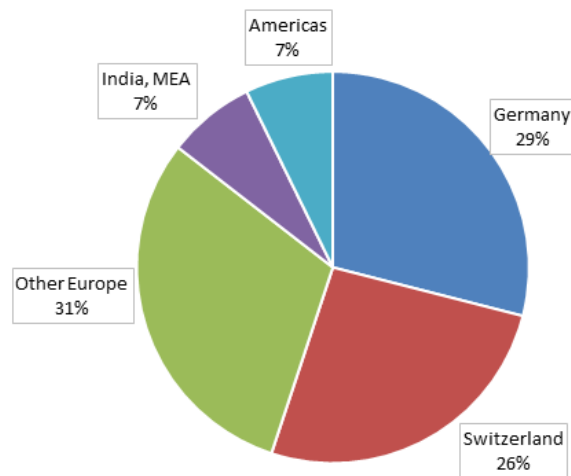
conducted separately and the quantitative data was consolidated for the analysis. Qualitative data was also generated through the survey and was complemented by interviews with selected clients and stakeholders. This, along with general desk research, enabled us to validate our findings.

We received responses from 68 different companies, all of which are top industry leaders in their respective sectors. They were mostly large international corporations, although smaller companies were not excluded. Of the total 132 client contacts invited, 76 executives – mostly from HR and L&D, but also from other functions – participated in the online survey, representing a response rate of 58%. In some cases more than one stakeholder from the same company chose to participate.

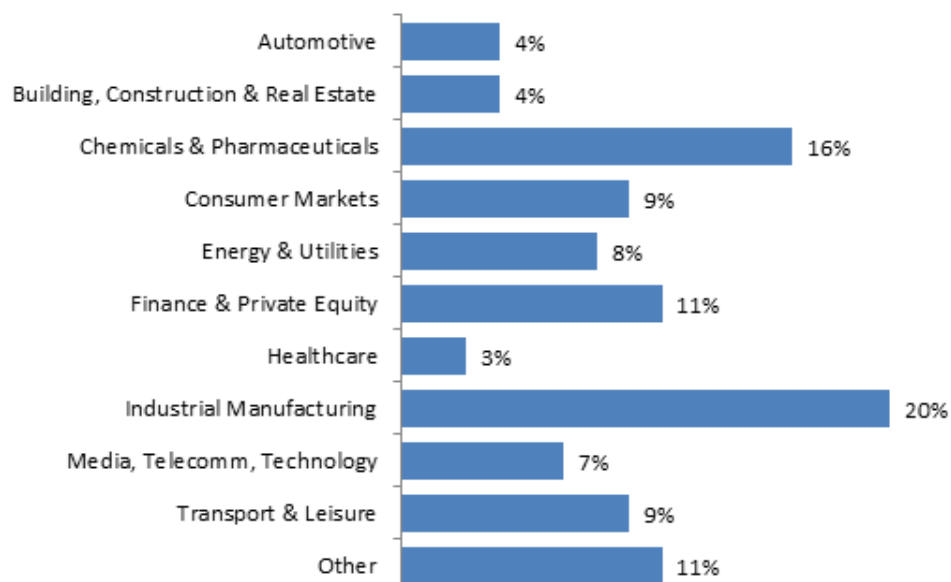
Figure 1: Company size



Of the survey respondents, 22% represented companies with over 100,000 employees, 13% had 50,000 to 100,000 employees, 35% had 10,000 to 50,000 employees and 27% had fewer than 10,000 employees (see *Figure 1*). The respondents were mostly HR (55%) and L&D (27%) directors, i.e. chief learning officers, and 16% were from functional positions. The participating organizations were primarily large European companies that are global players (86%) (see *Figure 2*). Of all the participating companies, 88% had business activities of extensive international scope with a presence on all continents.

Figure 2: Company location

The respondents also represented diverse industry sectors. The largest was industrial manufacturing, which accounted for 20% of respondents, followed by chemicals and pharmaceuticals with 16% and finance and private equity with 11% (see *Figure 3*).

Figure 3: Industry sectors

2.2 Interviews

In addition to the survey, qualitative data was collected through semi-structured interviews with L&D and training managers, including KPMG's L&D and Semigator, an online training search portal for both classroom training and e-learning. The interviews not only helped to validate data but also revealed some insights about the state of the industry, which we summarize in the following sections.

2.3 Key questions

Based on the data collected, we tried to address three fundamental questions:

1. What is the unique proposition of digital learning?
2. What is the right digital learning solution for your organization?
3. How do you implement digital learning in your overall L&D strategy?

3. What is the unique proposition of digital learning?

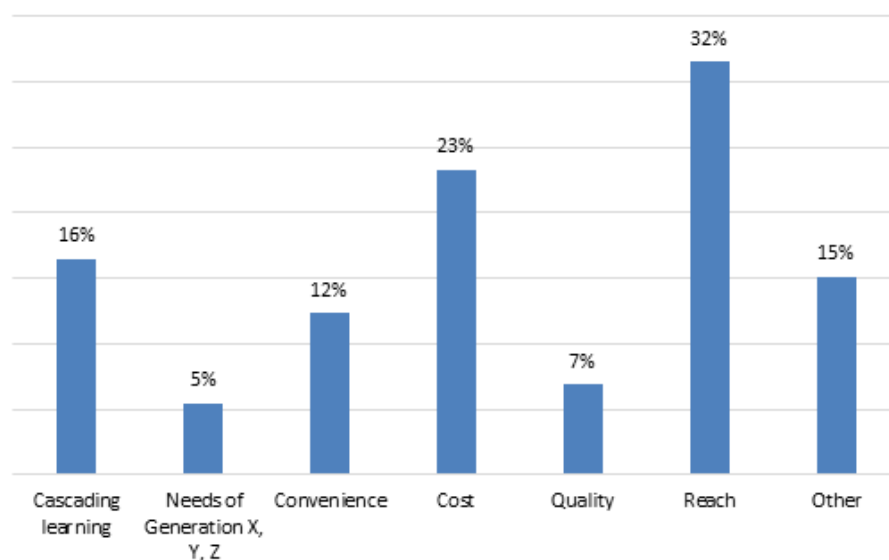
3.1 Advantages of digital learning

There are several good reasons to use digital learning in place of or in addition to traditional classroom learning. Most of them are self-evident, but not all. According to the survey, the main reason for using digital learning is its “reach,” rated as important by 32% of respondents. As mentioned, some of the companies have businesses on every continent, and face-to-face training could not match the global reach offered by digital learning. Several respondents commented that what makes digital learning preferable is not only a question of reach but also of the consistency of content, such as WBT or videos that need to carry the same message across the world. However, our experience indicates that content needs to be glocalized and open for social discourse, so consistency is a double-edged sword.

In addition, worldwide access enables a higher level of homogenization among target participants. Gathering country business unit managers together in a webcast is easier than in a classroom, even though time zones are still a hindrance. The reduction in travel costs as well as in the time and effort required to organize a physical location are considered attractive. In some organizations, up to 60% of total training costs can be attributed to travel costs alone. Not surprisingly, then, the second reason for using digital learning was “cost” (23% of respondents). Opportunity cost – reduction in absenteeism – was another aspect of “cost” often given in the comments.

In third place was “cascading learning” (see *Figure 4*). Digital learning makes it easier to train the trainers, for which a certain degree of consistency is indeed important.

Figure 4: Main reasons for using digital learning

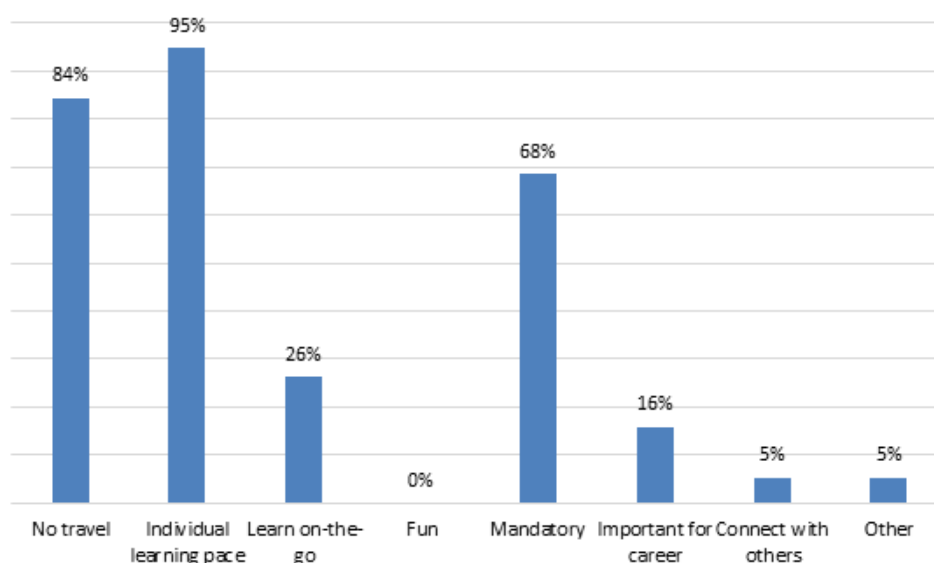


This was a single choice question, and comments under “other” were that “reach” and “cost” combined were the key reasons.

Some respondents pointed out that their preference is for blended learning rather than pure digital learning. For them, digital learning supports the classroom experience, where they can concentrate on exchange and application, for example, rather than on teaching content. Another pertinent comment about digital learning in a blended context was that it improves learning sustainability and transfers to the workplace, since it can be continuously available over an extended period of time.

But what about the learners’ side of the story? What advantages does digital learning hold for them? A wide variety of e-learning is available, or training that can easily be converted to digital learning. Depending on the type of learner, the digital approach can be more effective than the classroom approach. The most apparent advantage is that the learner can take control of the speed of learning. For example, an employee can replay instructions that are in a foreign language in an online video as many times as necessary. Or sometimes an employee has the option to repeat an online examination in the privacy of his office or home until he is comfortable that he has attained the learning goals. The results of our survey confirm that “individual learning pace” is what motivates learners most (95%). In second place was “no travel” (84%). The third most common motivator was that e-learning was “mandatory” (68%). No respondents described it as “fun” (see *Figure 5*).

Figure 5: Motivation for e-learning



It is evident that digital learning has its merits, and employers as well as employees appreciate the flexibility and convenience it offers. But is digital learning right for everyone? We know from adult learning theory and neuroscience that not everyone learns the same way. Beyond being individually paced, how can digital learning address the diverse needs of a heterogeneous employee population?

3.2 Types of digital learning

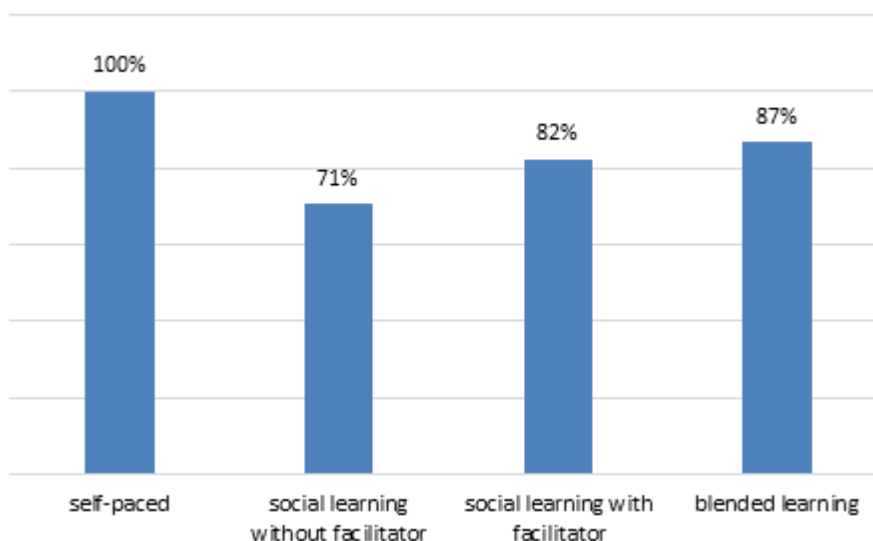
It is natural that companies resort to technology to meet the talent management challenges of their diverse, international, multigenerational employees: Some learners are visually inclined, others are audio or kinesthetically oriented; some learners are highly experienced in

the job, others are less so; some have grown up in a digitized world, others have severe techno-aversion. According to *Personnel Today*, the top learning technology options used in 2011 were:

- E-learning courses – 80%.
- Live online learning, including virtual meetings, virtual classrooms and video conferencing – 77%.
- Online assessment – 68%.
- Video-based content – 61%.
- Open education resources – 54%.¹⁰

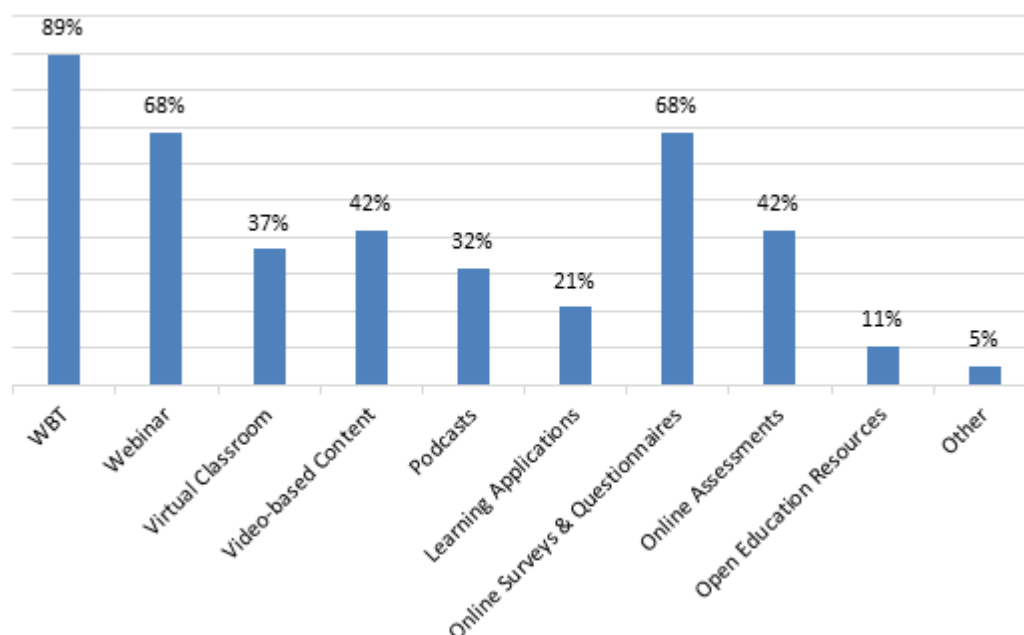
Our survey took a slightly different perspective. First, we asked in a multiple choice question about the type of digital learning used (self-paced, social learning without a facilitator, social learning with a facilitator, blended learning). According to the results, the prevalent modus operandi seems to be that HR provides a portfolio of digital learning, mostly self-paced e-learning, which can be used as needed. In some cases, digital learning is used to supplement classroom training. When used in this form, it tends to be pre-work rather than learning during the course or post-work. Most respondents commented that they are either at the beginning stages of incorporating digital elements or that they intend to move toward blended learning. Social digital learning, both with and without a facilitator, is also in use but remains largely experimental (see *Figure 6*).

Figure 6: Types of digital learning used



The predominance of self-paced learning is reflected in the digital tools in use – mostly WBT, followed by webinars and online surveys and questionnaires. We did not ask to what extent the WBT and webinars are information-push rather than truly interactive, dynamic learning offerings, but as we will see later, the reaction to e-learning is marked by “indifference.”

10 Chamberlain, L. (2011, November 17). *Virtual Learning Used by Three Quarters of Employers* in e-learning, Latest News, Learning & development. Retrieved from <http://www.personneltoday.com/hr/virtual-learning-used-by-three-quarters-of-employers/>. Only options for learning, not assessment or learning management systems/portals, are mentioned in the text above.

Figure 7: Types of digital tools used

Today, technology-based learning options have multiplied and evolved: wikis, mobile “TED” podcasts, e-fora, digital labs, serious games played by avatars in virtual classrooms on a headset – the choices continue to expand (see *Figure 7*). Yet the real art to creating learning impact is not just in using technology but in incorporating the appropriate options effectively; “...to be effective, the relative benefits and limitations of each must be understood. Only then can they be successfully blended.”¹¹

3.3 Blended learning

“Blended” learning has been used for centuries. We blend the right mix of content, teacher time, textbooks, projects and assignments, appropriate tests and assessments, field trips, experiments, and so on to create a learning experience. In Europe, a 2012 study indicated that the most popular e-learning method was blended learning.¹² Ironically, some believe that blended learning means just including WBT in the curriculum. There is another level of blending that assimilates technology and face-to-face contact into a sophisticated hybrid learning format using a mix of methodologies and technologies in each module. In this case, technology complements the human element because some knowledge – tacit knowledge – simply cannot be transferred without human presence.

To determine what can go digital and what cannot, it is essential to consider the two types of knowledge: explicit and tacit.¹³ While explicit knowledge can be verbalized or codified and readily transformed into e-learning, tacit knowledge involves creativity, judgment, reflection, intuition, conversation – activities that cannot be captured without shared human experience.

¹¹ Impact International. (n.d.). *Trend Report 2014, Integrating Technology*. Retrieved from <http://www.impactinternational.com/integrating-technology>

¹² Checkpoint eLearning. (n.d.). *Increase in 2012. eLearning Barometer: CrossKnowledge Presents the Results*. Retrieved from <http://www.checkpoint-elearning.com/article/10596.html>

¹³ Polanyi, M. (1966). *The Tacit Dimension*. Chicago: University of Chicago Press.

This is truly education through culture transmission,¹⁴ the 70% learning that happens by social osmosis (experiential learning).¹⁵ Tacit knowledge is inherent in social processes, and unless an employee is physically immersed in his job, he can never completely understand all the intangible aspects of doing his job well. Take the case of Toyota. The competitive and real cost advantage that Japanese car manufacturers were able to achieve in the 1980s could be attributed to the firms' social knowledge, personal ties and shared habits, including the close physical proximity of its suppliers which allowed for intense personal interaction.¹⁶ at tacit knowledge advantage and Toyota's related success were difficult to emulate, as was clearly demonstrated by the unsuccessful attempts of American competitors.

Behind the scenes: Basic Blue IBM

An early example of a successful blended learning program is Basic Blue, IBM's training program for new managers, which was launched in 1999. Through this blended approach, more than 5,000 new managers were trained annually. Previously the new managers were brought together for five days to learn about the firm's culture, strategy and management practices, but this proved to be ineffective because of information overload.¹⁷ So IBM transformed the program using a mix of classroom and digital technologies and extended it to one year. Basic Blue is a combination of four "blended approaches"¹⁸ defined by IBM as 1) learning from information, 2) learning from interaction, 3) collaborative learning and 4) classroom learning. The program is divided into three phases. The first phase uses self-paced e-learning, simulations, in-field experiences and "second-line coaching" to convey critical management information over a five-month period. The simulation modules use videos of fictional colleagues and customers to replicate real-life scenarios. The second phase is a five day face-to-face interactive workshop building on phase one information. After this experiential event, the managers continue with e-learning, online group simulations and mentor one another on the job for another seven months for the final, collaborative phase.¹⁹

This blended approach enabled the managers to learn five times more content at one-third of the cost of a classroom-only program, according to Harvard Business School. Furthermore, although the managers originally said they would rather have face-to-face training, after Basic Blue, they preferred to have some of the training delivered electronically in a blended format.²⁰

¹⁴ Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

¹⁵ van Schaik, C.P. & Burkart, J. (2011, April 12). *Social learning and evolution: the cultural intelligence hypothesis*. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3049085/>

¹⁶ Ichijo, K. „Dealing with Complexity by Managing the Knowledge-Based Competence of the Organization" in *Managing Complexity in Global Organizations*. Steger, U, Ammann, W. and Maznevski, M. (Eds) 2007. West Sussex, UK: John Wiley & Sons, Ltd. pp. 191-203

¹⁷ Mullich, J. (2004, January 30). "A Second Act for E-Learning", *Workforce Management*. Retrieved from <http://www.workforce.com/articles/a-second-act-for-e-learning>.

¹⁸ The "blended approaches" are also referred to as "tiers of learning delivery" in Hall, B. & LeCavalier, J. (2000). *E-learning across the enterprise: The benchmarking study of best practices*. Sunnyvale, CA: brandon-hall.com. An excerpt referring to Basic Blue is available at <http://jacqueslecavalier.com/wp-content/uploads/2014/05/Blended-learning-and-Basic-Blue-excerpt.pdf>

¹⁹ IBM Learning Solutions. (June 2004). *IBM's learning transformation story*. An online version can be accessed on <https://www-304.ibm.com/easyaccess/fileserv?contentid=183268>.

²⁰ Mullich, J. Ibid.

4. What is the right digital learning for your organization?

Many companies think that content should determine the use and type of digital learning, but there can be shortcomings in taking this view. If digital learning is being used primarily to make training available at lower cost, this could turn out to be counterproductive: As one corporate training manager said, “I think our staff learned more about how to do virtual group work than the things they were supposed to learn.” We must be clear that ultimately the purpose of any digital learning is the *learning*, not the *digital* aspect. It is also wise to understand for which specific purpose the digital element will be used, because – as previously mentioned – some skills and types of knowledge do not lend themselves to a virtual platform. For example, the Advanced Negotiation Training module at KPMG was created to practise the principles of negotiation in a classroom setting. While any method could transmit knowledge about the principles of negotiation, real learning occurs when those negotiation skills are applied in face-to-face role play. Experienced coaches are on site to give personal feedback. As third-party observers, they can pick up non-verbal cues that often escape the attention of even seasoned negotiators. Furthermore, the learning is compounded by exchange with peers from other locations, who share company-specific concerns. They are the best sparring partners and can give immediate feedback, thus creating a two-way learning flow. This interaction could not be captured in an e-learning environment, because the same learner engagement is simply not possible.

Cost should not be the driving factor, but it is undeniably an important factor in choosing digital delivery. The scope and scalability of e-learning cannot be matched by face-to-face events. Then there is consistency. In some instances, too much “consistency” can make e-learning feel particularly static and, if not properly designed, even boring. So not only do we need to identify the right digital learning solution for the right population with the right subject matter, but we also need to design and implement it in the right way. At the micro-level, how can digital learning excite and empower employees? And at the macro-level, how must it articulate with the overall capability-building strategies of the company?

The lesson here is that the learning outcome, not the cost or convenience or content, must determine the methodology. Learning outcomes are concerned with the personal achievements of individual learners and must be related to the type of knowledge to be acquired. Simply put, the method is dependent on the intended outcome, which is dependent on the type of knowledge and skills (cognitive, affective or psychomotor).²¹ If the intended outcome is to learn company policies (explicit knowledge requiring cognitive skills), e-learning that is engaging might do the job. If the intended outcome is to give a great speech (tacit knowledge requiring all skills), digital learning would be limiting. For employers to arrive at the desired learning outcomes, they need professional insight into the exact learning requirements of employees and the right calibration of content and methods. A good place to begin is to draw up a knowledge map of the company, upon which you can build a roadmap to close the competency gaps.

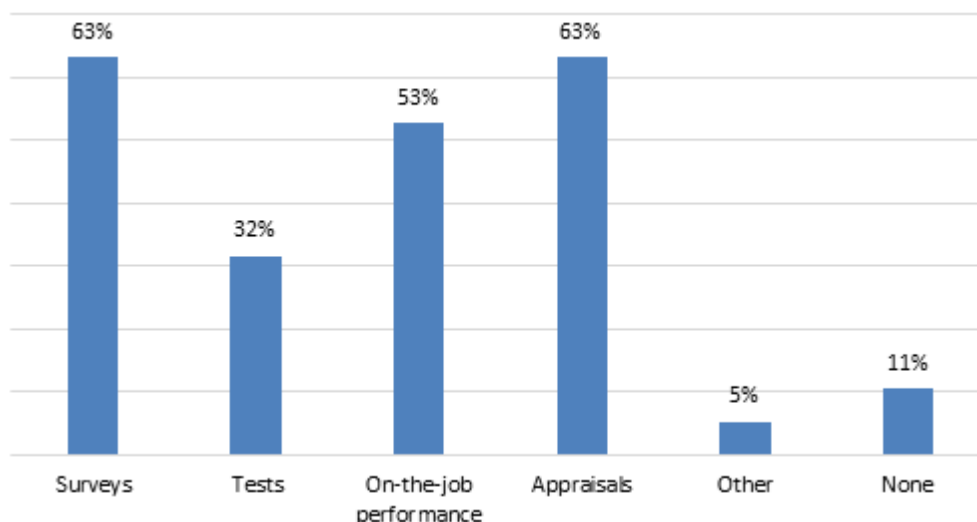
4.1 Do you know what your employees know?

Assuming that you have a clear set of desired learning outcomes, you then need to establish who needs to learn what, which job profiles require which competencies and skills. How do companies evaluate their learning requirements? Our survey revealed that both surveys (63%) and appraisals (63%) are more widely used than on-the-job performance and tests to evaluate learning requirements. This was a multiple choice question. So even though evaluation methods could be used together, job performance accounted for only 53% and

²¹ Bloom, B. S. et al (1956). *Taxonomy of educational objectives: The classification of educational goals*. Handbook I: Cognitive domain. New York: David McKay Company.

tests for 32% in identifying competency gaps (see *Figure 8*). While it could be argued that an individual's abilities are also reflected in appraisals, they can be more directly, objectively and amply assessed through tests or job performance.

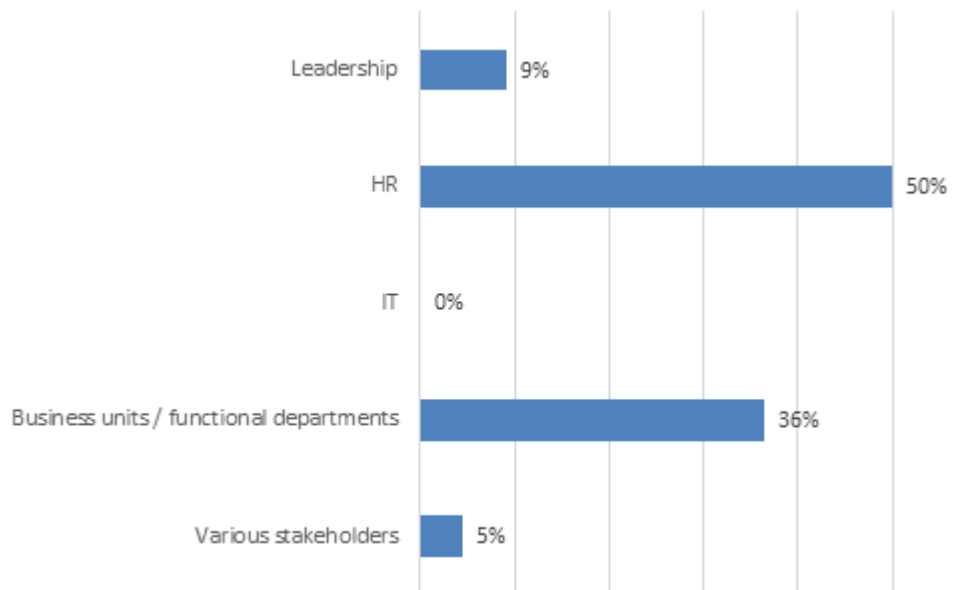
Figure 8: Evaluation of learning requirements



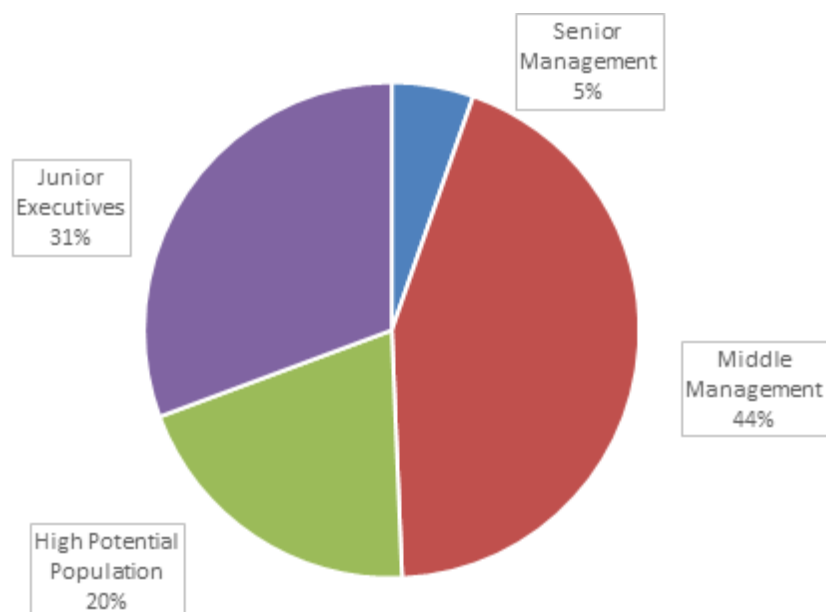
Also notable is that 11% of companies in our survey conduct no evaluation of learning requirements at all. When no evaluation of requirements takes place, one could imagine that “learning” might imply merely information dissemination, such as the introduction of new guidelines or changes in processes. One comment was quite frank – it was simply up to the boss. In the best case scenario, the boss might take a stab in the dark and his or her gut feeling might be right. In the worst case, it would imply that a certain amount of learning was random and perhaps not even necessary.

The lack of systematic evaluation made us curious about whether current knowledge maps exist in organizations. There is no sense in delivering courses that fit the competency needs of the business five years ago. All companies are organic entities that evolve. Staff and job profiles change, and learning goals must adapt to developments in the economic environment. It would be helpful to assess not only knowledge about the subject area but also technological competence. The former is necessary to identify what to learn, the latter for how to learn it.

Further results indicate that the decision to use digital learning is largely taken by HR (50%) and thereafter by the business unit or the functional department (36%). Leadership accounts for 9%; although the decision is sometimes taken jointly between HR and leadership (5% “various stakeholders”). IT is not involved in the decision making at all (see *Figure 9*), which is curious considering the litany of technical challenges cited by survey respondents. Technological readiness, not just of individual learners – as mentioned above – but also of the organization’s systems seem to be unknown variables.

Figure 9: Decision makers for digital learning

We also asked about the target population for digital learning. This was a single choice question, and a few comments indicated that it is used across the board or throughout the hierarchy. Thus we assume that the differences in the distribution must be more or less the same as the answers received, namely that digital learning is mostly geared to middle management (44%) or below. Junior executives also receive a large proportion (31%), which exceeds the amount dedicated to the high potential group (20%). Only 5% is targeted at senior management (see *Figure 10*).

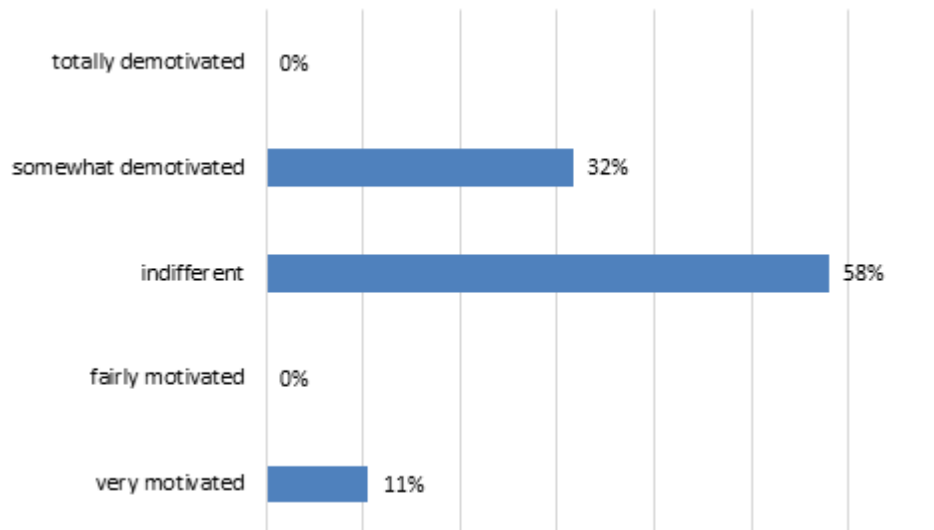
Figure 10: Target population

What do these results tell us about the level of staff and use of digital learning? Do they mean that the physical presence factor with real-time networking is considered irreplaceable for the development of senior management and high potentials? Do well-functioning programs exist for these target groups that the companies does not want to tamper with? They might want to leave well alone because significant investments have already been made for senior management and high potentials, whereas other training still needs to be rolled out across middle management and junior executives. Another possibility is that it is just a matter of demographics: the more junior staff and middle management there are, i.e. the more job profiles, the more digital learning is available for them. These reasons do not need to be mutually exclusive.

4.2 Does your L&D roadmap fit your knowledge topography?

Assuming that you have a good picture of the learning landscape, you then need a good roadmap. When asked which subject areas would be of interest or relevance for digital learning, respondents gave a wide range of answers. They covered everything from basic information to technical and functional skills and competencies (sales, marketing, finance, operations, etc.) and even leadership, interpersonal and other soft skills. It seemed that we are still in the early days, and there is a multitude of possibilities for digital learning. Yet why was the learner reaction to e-learning less than enthusiastic? In total 58% were indifferent to e-learning and overall almost 90% were either indifferent or demotivated (see *Figure 11*)!

Figure 11: Reaction to e-learning



Despite all the glamorous technology at our fingertips today, have we merely opted to replace classroom spoon-feeding with digital spoon-feeding? Is that why “mandatory” is such a big “motivator”? Perhaps we have replaced trainers’ monologues with passive WBT consumption, and employees are being bombarded with information that is not particularly relevant to their work.

Experts often say that companies look to e-learning as a cheaper solution, without considering whether it is an effective solution. Successful e-learning starts with carefully thinking through the purpose of training. In an article, Michael Brennan of IDC says that

companies set arbitrary e-learning goals, such as putting 80% of training online in four years, without thinking about how receptive the audience will be, what the business drivers are, and how they will combine e-learning with other forms of training. “When I hear numbers thrown out without business arguments other than ‘we’ll save money,’ I’m skeptical,” he states.²² His point underlines the importance of not only having *an* outcome, but *the right* outcome, to drive the decision.

Yet the job is not accomplished simply by pairing the appropriate types of knowledge with the suitable learning technologies. There is obviously a motivation problem. It is impossible to fill a mind that is not receptive – even when spoon-feeding the mouth has to be open. With professional expertise, even the duller of subjects can become fascinating when the didactic approach taps into the right learner motivation. There are two forms of motivation: extrinsic and intrinsic.²³ Clearly most of our survey participants are driven by extrinsic motivation – there is a business obligation to do the training, and the benefit of doing it by e-learning is that they do not have to stress themselves doing group work or have the hassle of travel. There is a good chance that much of their learning rapidly dissipates until the next time training becomes mandatory. Learning only truly happens when the motivation is intrinsic – when we want to learn because we enjoy it.

In sum, digital learning needs to be nested in a global L&D strategy that addresses the competency gaps of individuals in the organization. Digital learning needs to be suitably matched to the type of knowledge to be transferred and the intended business outcomes. Digital learning – in fact, all learning – needs to be fun! Even more, an effective L&D strategy must anticipate the knowledge base required to establish the company’s competitive advantage in the future and the technology to build that base. All this must be glued together with widespread awareness and acceptance of the corporate strategy and a tight social culture.

Behind the scenes: Digital learning in KPMG’s L&D

KPMG’s L&D addresses KPMG internal corporate education as opposed to KPMG’s Education Unit, which caters to external corporate clients. KPMG L&D’s curriculum includes focused learning and development interventions based on individual and corporate requirements. KPMG uses a broad spectrum of learning tools, methods and channels and is currently championing the implementation of new digital learning formats in addition to more traditional classroom-based sessions.

While cost reduction might seem like an obvious argument for using digital learning, it is not the most relevant. The implementation of digital learning requires investment, and the cost benefits typically only materialize in the medium to long term. Thus other advantages like increased reach and speed as well as improved flexibility for the learner and the company can be more important drivers and ultimately lead to competitive advantage.

KPMG’s learning journey has moved from a traditional classroom-centric approach to a culture in which working and learning go hand in hand and in which the learner should be able to learn “just in time and just enough.” Digital learning formats, tools and techniques are key elements in this approach. Maria Süß and Magdalena Kretschmer from the German KPMG L&D team share some lessons learned when implementing digital learning, which could be useful for other organizations as well:

²² Mullich, J. (2004, January 30). “A Second Act for E-Learning”, *Workforce Management*. Retrieved from <http://www.workforce.com/articles/a-second-act-for-e-learning>.

²³ Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. Harper: New York.

- Prior to any decision on a formal learning concept, whether digital or face-to-face, key questions, such as the learning objectives, target audiences and corporate goals take center stage. Ideally L&D should take the role of a learner and ask, “Where am I as employee and how can learning help me to better contribute to corporate objectives?” Answering these questions is essential to determine the strategy and the content, objectives, methods, tools and technologies to meet training needs.
- Learning objectives have to be clearly defined. Attempts to simply replace seemingly more onerous face-to-face learning with a digital format will fail. Instead, the decision and approach have to be based on learning objectives, e.g. whether the aim is primarily to provide content knowledge or achieve a change in behaviors or even attitudes. Even simple aspects like these help guide the decision on the right training format.
- Digital, and in particular modular, learning formats that enable the learner to select learning “nuggets” based on their individual knowledge and allow them to decide when and where to access the learning prove to be particularly popular. They receive highly positive feedback.
- A wide range of know-how and capabilities is needed to develop successful digital learning. Face-to-face elements can rarely be translated into digital formats – rather, close collaboration between technical experts, L&D leaders and design experts as well as external agencies is essential.
- In addition to getting the content and format right, stakeholder management and marketing within the organization are critical. Ideally, decision makers within the HR function work together with other stakeholders, such as business area leads and work councils, to develop a digital learning strategy and charter across the organization. This improves acceptance and supports the business areas in implementing new learning styles and formats. “At KPMG we also had highly positive experiences by engaging the MfE (Managing for Excellence) partners early on and exchanging ideas and supporting HR strategies.”²⁴
- Alongside all of the above, a change management approach has to be agreed upon and implemented. Sometimes this can be even more important than providing the digital learning itself and has to be part of the resource planning process when contemplating digital learning. “From our experience, it’s also important not only to focus on standard questions such as ‘Which software should be used?’ or ‘Will the learning be produced internally or via external agencies?’ but also on more sensitive topics like company politics and supporting marketing campaigns.”²⁵
- Finally, managing expectations has proved to be a key success factor. Stakeholders might expect digital learning to resolve many unspoken HR or talent management challenges “en passant,” such as improved learning effectiveness, faster turnaround or development times, increased motivation to learn as well as reduced investment costs. To avoid frustration, it is essential to discuss expectations early on and to agree on realistic goals and objectives in terms of what the digital learning will achieve.

The biggest takeaway here is, “Cheaper is not better, only better is better!”

5. How can you best implement digital learning?

The vast majority of companies face numerous challenges in managing their learning approach, whether they are small enterprises just venturing into digital learning or large, early adopter multinationals. According to the Towards Maturity 2012-2013 Report, only 23% of companies achieve rapid application of learning back on the job.²⁶ Some of the challenges referred to in the report were internal and stemmed from the organizational structure,

²⁴ Kretschmer, M., 25 November 2014. Interview.

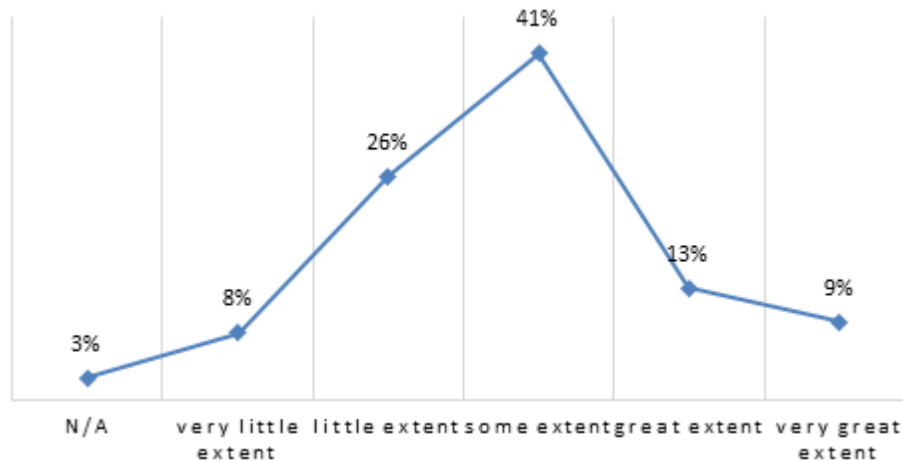
²⁵ Süß, M. 15 January 2015. Interview.

²⁶ Humphreys, C. (2013, July 04). *5 Practical Ideas for Embedding Learning into the Workflow*. Retrieved from <http://www.towardsmaturity.org/article/2013/07/04/5-practical-ideas-embedding-learning-workflow/>.

strategy and systems. Other challenges were provoked by the rapid technological changes in the training and education industry. In our survey we focused on two areas of implementation in which our clients face challenges: 1) impact and 2) the rollout and sustainability of learning.

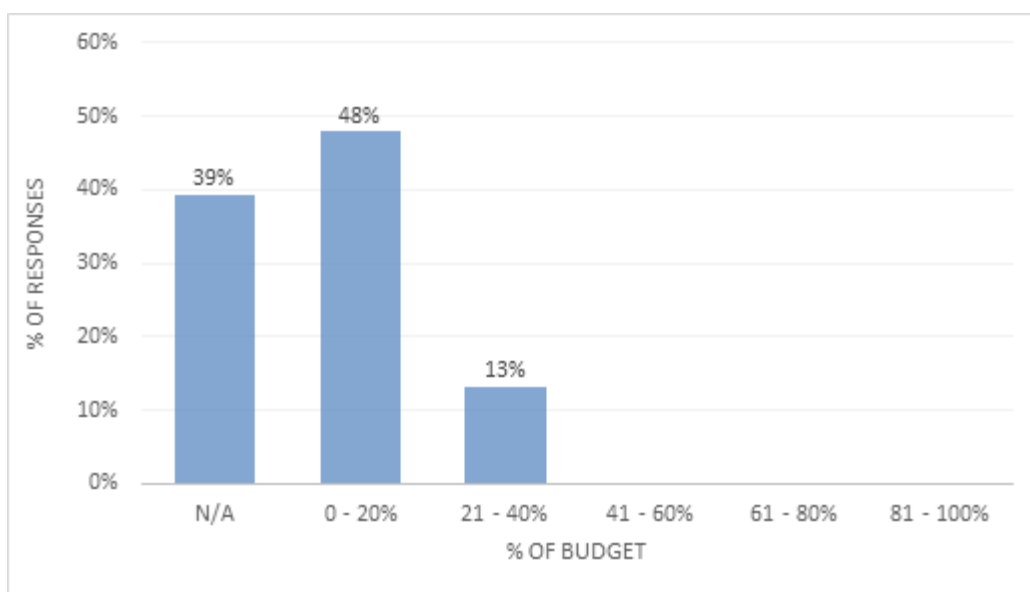
According to our results, 34% use digital learning very little to little, 41% use it to some extent and 22% use it to a great or very great extent; 3% chose N/A (see *Figure 12*).

Figure 12: Extent of use



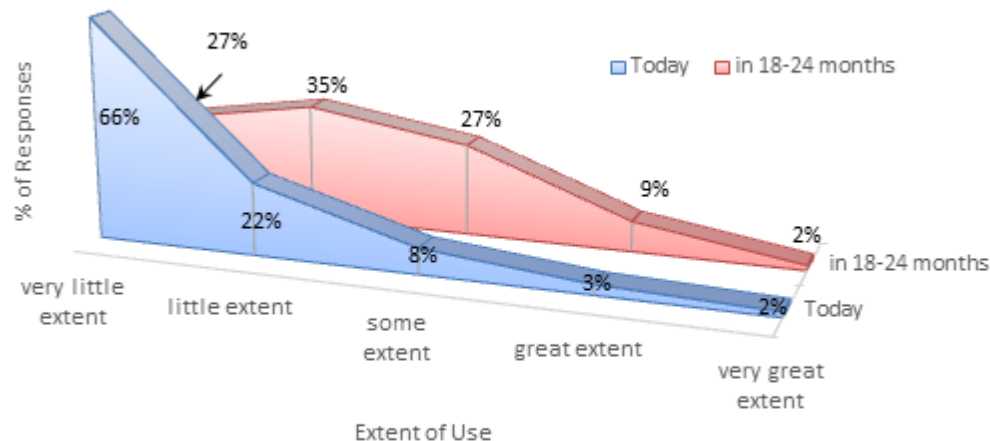
In addition, approximately half the respondents (48%) indicated that their organization invests 20% or less of its L&D budget in digital learning; 39% chose N/A (see *Figure 13*). It was not clear whether those respondents did not know the amount invested or did not wish to divulge the information.

Figure 13: Digital learning within L&D budget



Respondents agreed that digital learning is expected to grow in the near future. Although it is currently used 20% or less in two-thirds of companies surveyed, a shift from 20% to 60% is foreseeable within the next 18 to 24 months (see Figure 14). Yet many companies do not have a full-blown LMS.

Figure 14: Use of digital learning

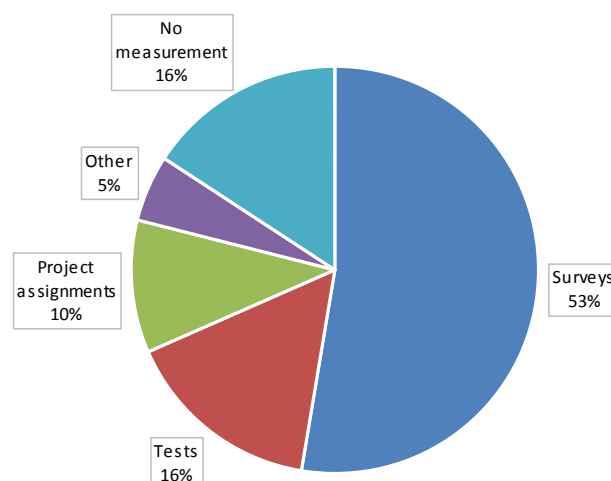


5.1 The difficulty with learning impact

By far the most commonly cited challenge associated with digital learning was the impact – defining, creating, delivering and measuring it; 58% of respondents agreed on this point. Impact cannot be achieved when there are implementation issues. There was equal distribution of around 20% each for implementation challenges arising from accessibility, integration in current systems, completion, and relevance, while keeping materials up to date was slightly higher (32%). Other challenges mentioned included the acceptance by the learners and their motivation and discipline.

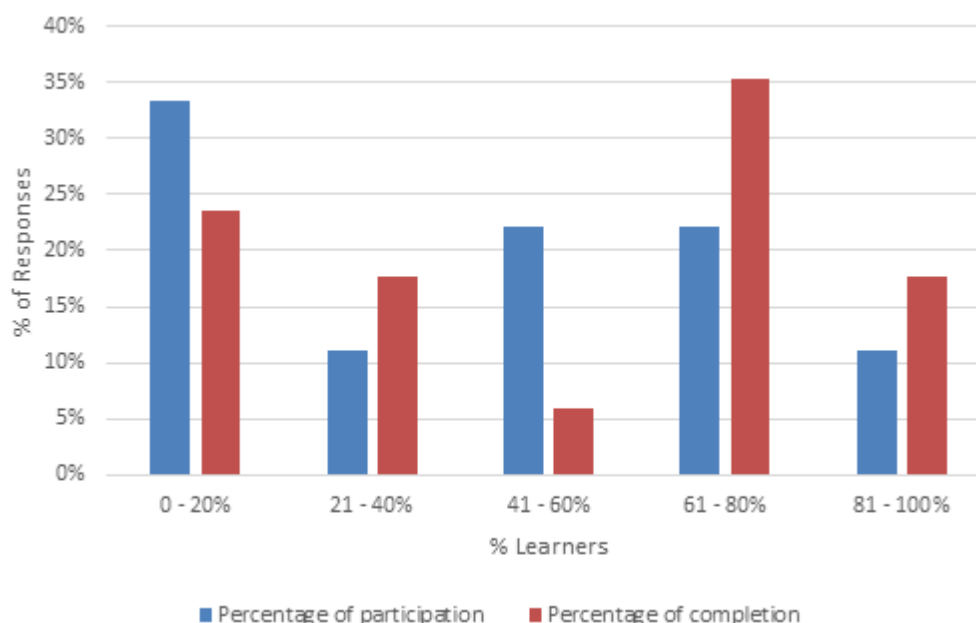
The majority of respondents felt that less than 40% of learning is transferred back to the job. The most widely used method of impact measurement is surveys. We hope these surveys are 360° or at least sent to more than one party who can observe the change in performance or behavior. One of the most powerful measurements is projects, but only 10% of the companies surveyed implement them; 16% did not measure impact at all (see Figure 15).

Figure 15: Method of impact measurement



Although a third of respondents estimated that the e-learning participation rate is between 61% and 80%, the completion rate was felt to be much lower. Two-thirds believed that 60% or less finish the courses. In fact, a third of respondents believed that only 20% or less actually complete their courses (see Figure 16). This disparity could imply several things. The courses might not be sufficiently relevant or engaging to retain participants' interest. It could also mean that participants lack the discipline or competence necessary to complete a course. In line with this, there may be no consequences associated with either finishing or not finishing the course. Finally, technical difficulties may hamper participants' ability to finish.

Figure 16: E-learning participation vs. completion



Behind the scenes: Boosting impact at CCBS²⁷

Since 2000, Client Corporate Business School (CCBS) has been using digital learning and has gained considerable experience in terms of the advantages and disadvantages that it can bring. However, according to the director of training development at CCBS, measuring impact has been a real challenge.²⁸ The school did not have an effective measurement system to evaluate the return on its e-learning investment and found it difficult to identify the right key performance indicators (KPIs). Performance may be constrained by technical as well as human problems. One significant problem for CCBS was the heterogeneous IT-hosting capabilities in the different countries in which CCBS operates worldwide. This issue was exacerbated by the many technological changes that have occurred over time. Measurements over different time periods and geographies were not comparable.

However, in spite of the hurdles it has encountered, CCBS has created a highly effective blended learning program for young leaders. Although the program is proving to be a success, the director of training development commented that formulating business goals in such a way that they can only be fulfilled through certain learning elements could really power the initiatives and generate greater impact. This is not only valid for leadership programs but is also important for understanding the impact of technology-driven learning programs in general.

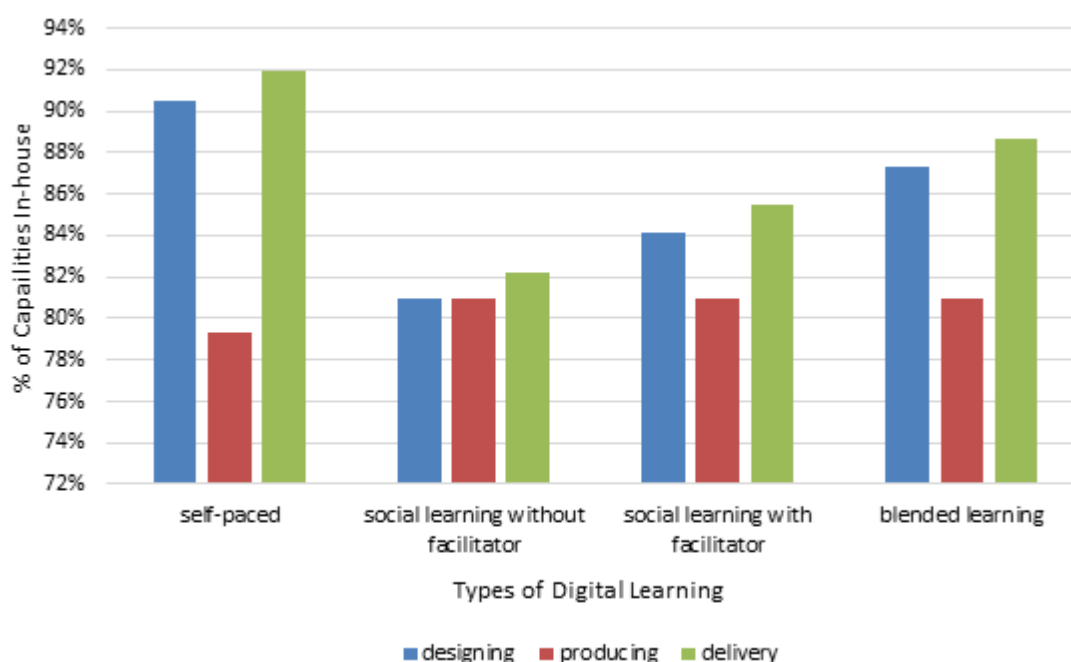
²⁷ The company name has been disguised for reasons of anonymity.

²⁸ Anonymous client. 13 November 2014, Interview.

5.2 Challenges with rollout and sustainability

CCBS is not alone in the technical challenges it faces. Many of our survey respondents have been using digital learning for several years and are capable of designing, producing and delivering the courses themselves in-house. Results showed that while in-house capabilities for design and delivery are both very high, production capabilities lag behind. Self-paced digital learning is the dominant format, with production supplemented by outside providers. The blended learning format comes next – here, production capabilities are slightly higher than for self-paced learning. Respondents felt that in-house capabilities in designing and delivering social learning are greater with a facilitator than without (see Figure 17).

Figure 17: In-house capabilities



Semigator's experience validates some of the hype around digital learning. Semigator is a German online search portal, which acts as an intermediary. It aggregates training and facilitates a virtual training marketplace. Manja Hellmann, senior marketing manager of Semigator, observed that demand is concentrated on digital management of traditional training rather than on e-learning itself. She commented that most large companies do not have the foundations in place for digital learning. Around 80% do not have a true LMS and tend to use an intranet solution for their talent and personnel management.²⁹

Over a third of the respondent companies use internally built learning platforms. Others use both internal and external. Those who use external providers pointed out some positive aspects, most of which are generic such as having a single landing platform for a wide range of offerings, availability around the clock and not being tied to a specific location. However, respondents also shared a number of concerns:

²⁹ Hellmann, M. 14 December 2014. Interview.

- **Administration challenges:** The most common remark was about the inflexibility of the systems as well as difficulties associated with the administration, which can be so demanding or complex that a dedicated administrator is recommended. In addition, the technical support offered with an LMS is often not satisfactory.
- **Technical aspects:** A challenge for many in setting up an LMS is not only the customization and integration into existing systems but also the integration of other learning solutions. The general lack of compatibility with existing systems and new access devices such as iPads means that it is not possible to take full advantage of the functionalities. International companies have problems with different IT standards and bandwidth across many countries. Also, IT security is a growing issue.
- **Cost and quality:** Content development takes a long time and content hosting remains expensive. Often the modules are too long. In addition, the quality of modules is not consistent. The platforms themselves are not visually appealing; some respondents commented that they resemble a throwback to older applications or their university days (approximately 20 years back)!
- **Lack of engagement:** Many said they feel they have to drive their staff to use the platforms. Engagement from the business side is not forthcoming. This could be attributed to the lack of user-friendliness since the platforms are perceived to be more technology-focused than user-focused.

For effective rollout and sustainability of learning, we invite companies to ask themselves if they are technologically ready. Without a good understanding of the current capabilities and technical expertise in-house, it is difficult to integrate digital learning in an effective way. HR expectations might be dashed by IT disappointments when the fit between legacy systems and a new improved LMS is not there, no matter how sophisticated and expensive the new solution is.

Behind the scenes: ABB SCM Academy

In 2014, ABB won the internationally recognized Procurement Leaders Award for Learning and Development. ABB uses e-learning extensively – up to 80% at the basic level – and it achieves a high completion rate. According to Christian Walton, Global Supply Chain Management (SCM) training manager, employees prefer ABB's in-house SCM e-learning because of its authenticity and connection to the content owner. Deploying training in a geographically diverse and multicultural environment means taking into account cultural and language challenges to ensure that training is communicated and delivered in a meaningful way for a global audience.

Dealing with such diversity also presents technical challenges – for example, the technology required to deploy digital learning, LMS maintenance, and internet connections that do not always work. Common issues are, for example, bandwidth in China, which does not always support video streaming, or maintenance service interruptions in the Middle East on European weekends. One way to address such issues and provide support is a helpdesk. Through e-mail, the turnaround is typically within 48 hours and the helpdesk also provides an opportunity to gather feedback from internal customers using the training program.

Given that in the last three years, SCM-related digital learning in ABB has experienced a six-fold increase, there could be the potential opportunity to digitize everything. But Walton cautioned that digital learning is not a “one size fits all” solution: “You need to step back and ask yourself, ‘Is it the right thing to be doing?’” Digital learning requires a lot of internal development because an essential aspect is quality. The focus must be on content and not just a flashy tool: “The learner should be engaged with the content, not distracted by the delivery!”

Walton's tips for creating a positive buzz for digital learning include:

- Offer relevant, short and interesting modules to build a positive reputation for e-learning.
- When using WBTs, a short video or audio clip from the content owner at HQ helps to create a personal touch. Participants feel a connection and can relate to the material. They will be less hesitant about contacting the content owner or HQ with queries.
- Do a sales pitch to promote e-learning on Yammer or in an intranet article or newsletter to let employees know that the courses are available and to make them want to take them.
- Give employees a roadmap. For example, if there are over 40 courses, let them know which are compulsory and which are not to avoid the risk of them getting lost in e-learning overload.
- Follow up with KPIs (at the business and country levels). At ABB, SCM leadership is directly involved in talent development, and monthly KPIs on the penetration of training activities are part of the management reports.

These tips bring home the message that most learners have been educated all their lives to be knowledge consumers, and they need support to readapt. Helpdesks, learning roadmaps, KPIs and various other measures all help to smooth the rollout. Of course, not all e-learning is so exciting that it fires up great enthusiasm among learners, and in that case, internal marketing can boost participation and improve the returns.

6. Conclusion

The L&D industry is “in the middle of a renaissance”³⁰ because new technologies are pushing the knowledge (and learning) envelope to new frontiers. Just as knowledge is changing, so also is the learning process. The unique proposition of digital learning is that knowledge can be brought to the learner at the point of need – to remote locations, in real time, at any time. The power of digital learning is not so much in the cost savings, but rather in its almost infinite scale and scope. E-learning brings together reach, cost efficiency and consistency in a way that was not possible previously. Historically, learning was more or less a one-way process. Since the advent of the internet, learning has become an interconnected process in which feedback can be given and received immediately through multiple points of contact. This can actively shape knowledge as it travels throughout a company. Ideally, capability-building would become a dynamic, almost organic process, whose direction is defined by organizational strategy. Today, most of the L&D industry is just getting over the honeymoon phase and seeking to settle down into a sustainable relationship with digital learning, with all the advantages and disadvantages it has to offer. One piece of advice that keeps re-emerging is not to do it the old way. Don’t be “either or.” Instead, use blended learning to flip the classroom. This way, face-to-face time becomes quality time and deep learning can occur. New knowledge, competencies and skills can be sealed into your knowledge landscape through multiple learning methodologies.

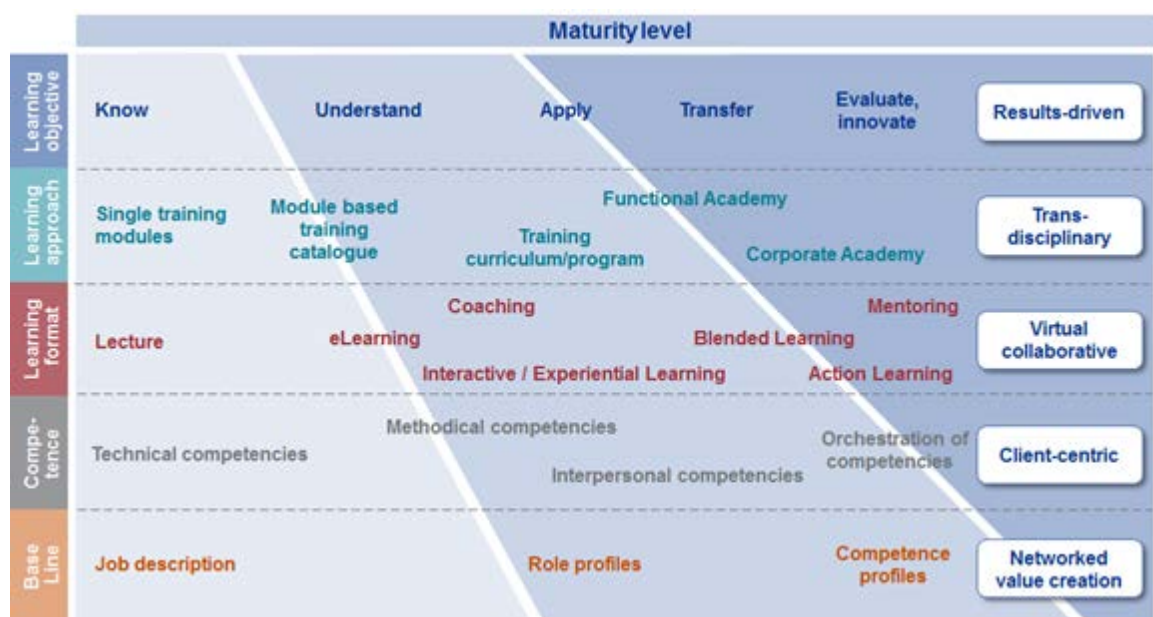
A good starting point for establishing a relevant and sustainable digital learning portfolio is at the end – the outcome(s). The method is dependent on the *learning* outcome, not the budget outcome, as well as on the type of knowledge and skills to be transferred. Ensuring the “right” digital learning solution depends on the learning population, the method and the content. Make sure you identify the *right* target groups and evaluate their learning needs in a systematic manner with a structured and focused approach, for example with a knowledge map. Even if appraisal processes are already in place, a more robust knowledge map reflects direct assessments through tests and on-the-job performance. To determine the

³⁰ Bersin, J. (2012, October 12). *Growing Gap Between What Business Needs and What Education Provides*. Retrieved from <http://www.forbes.com/sites/joshbersin/2012/12/10/growing-gap-between-what-business-needs-and-what-education-provides/>

right method, establishing the technological readiness of both staff and systems can set clear boundaries as to the kind of digital learning that can or cannot be deployed. Engaging the CIO in the overall decision making for technology solutions is advisable to avoid technical headaches later. Finally, there is the question of *right* content. Digital learning must be relevant, otherwise the demotivation triggered by a series of boring WBTs will create a negative spiral and kill the digital learning potential. A frequently neglected element in e-learning is the fun factor – there is no excuse for learning not to be enjoyable!

KPMG's Education Unit believes that sophisticated corporate education aligns the learning maturity profile across five dimensions: the learning objective, learning approach, learning format, client-specific competencies derived from a client defined learning baseline (see Figure 18).

Figure 18: Learning design matrix³¹



KPMG augments this with research on relevant megatrends to boost performance and development for the future. It is not enough to be current; knowledge needs to stay ahead of the curve. With good calibration, a learning roadmap based on a forward thinking L&D strategy and an accurate knowledge map of individual competencies helps to create and measure impact.

Assuming you have the solution, how will you implement it when only 20% or less of your budget is dedicated to digital learning, you do not have a proper (or up-to-date) LMS, and you are revving up for significant growth in technology-driven L&D? To start with, it would be helpful to quantify the hidden costs of the internal resources that go into designing, producing or delivering internally produced digital learning to obtain a better understanding of the real investment cost. Then, budgets can be loosened with an attractive ROI, but keeping in mind that cheaper is not always better, there are other ways to justify the need for greater investment – with evidence of strong impact. The challenge is how to measure

³¹ KPMG AG Education Unit (2013).

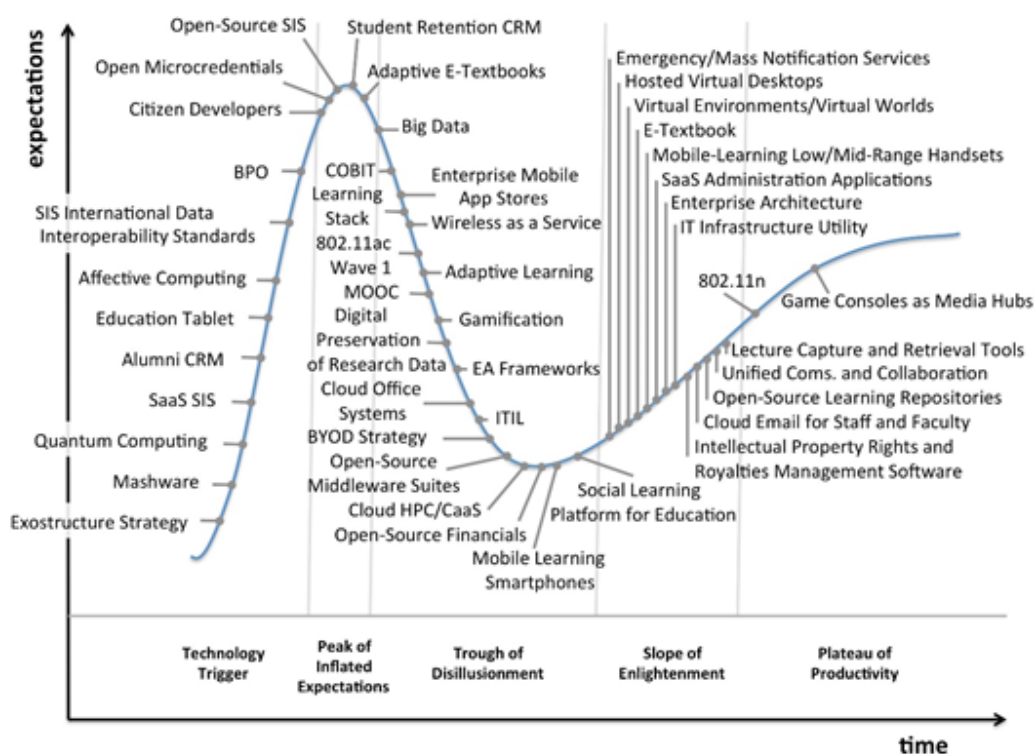
learning impact. Of course, some types of learning such as soft skills based on tacit knowledge are difficult to measure, but even so there are possibilities. Although a survey is the most common method for measuring impact, depending on how it is constructed, it is not always a reliable performance indicator. A time-tested method would be to use projects that represent actual business cases. The CCBS story suggests taking this a step further and making business goals attainable only through learning. That would be a foolproof way to generate real-world learning as well as some clear KPIs.

Some points about implementation to take into account are administration challenges, technical aspects, cost, quality and lack of engagement. Digital learning and digital management go hand in hand, and this amplifies the administration and technical difficulties – so much so that most users do not realize how many resources digital learning can consume. To avoid the nightmares of expensive, inflexible, complicated and incompatible systems, companies must ask themselves three key questions:

1. What are my company's current capabilities in terms of digital learning?
2. How mature is the technical expertise required to integrate digital learning elements?
3. What should I expect from a service provider/LMS?

Also, including IT in technological readiness discussions could spare a lot of headaches in launching digital learning on a broad scale. The Hype Cycle is one possible tool to help CIOs improve strategic decision making on technology investments. Here the Hype Cycle for Education (see *Figure 19*) illustrates the trough that follows the initial digital learning honeymoon and suggests potential didactic options to meet maturing expectations.

Figure 199: Hype cycle for education³²



³² Figure based on analysis by Lowendahl, J-M. (2014, July 23). *Gartner Hype Cycle for Education*. Retrieved from <https://www.gartner.com/doc/2806424/hype-cycle-education->

The last consideration is about getting traction. Engagement not only from learners but also from other stakeholders is critical for sustainability. KPMG's L&D emphasized the crucial role of the change management process, getting all the parties around the table to promote the digital learning agenda from all sides. Another way to address motivation is internal marketing: creating awareness and enthusiasm, introducing, explaining and inspiring everyone to get on board. A WBT just sitting on the learning platform is not going to promote itself and the indifference of staff will also not dissipate with the next mandatory e-learning. Insights from ABB underlined this, as well as the importance of appealing to intrinsic motivators. An effective way to generate positive reaction to new learning opportunities is to make digital learning personal and authentic. By doing so, it can lead to meaningful conversation with others, including the content owner and become a springboard to cultivate self-organizing learning networks.

In closing, we recognize that the current talent shortage is enormous and digital learning will inevitably be part of the solution. Universities and other educational institutions lag far behind the talent recruitment needs of the corporate world.³³ Increasingly, corporate universities will need to step in to fill the knowledge gap: in some cases to keep the firm competitively staffed; in other cases to develop outstanding leaders. In this journey, L&D will loom ever larger on the economic horizon, and technology-powered learning ecologies will emerge more frequently. It is an exciting period in the history of knowledge transformation. In this adventure, let us not forget that learning is not just about acquiring knowledge. It is a journey that includes its application, development and, finally, evolution. Through digital learning, you have the power to innovate the learning process and co-create knowledge in your company. We hope you take full advantage of this enormous lever, because it will ultimately shape our industries in the future.

³³ Bersin, J. (2012, October 12). *Growing Gap Between What Business Needs and What Education Provides*. Retrieved from <http://www.forbes.com/sites/joshbersin/2012/12/10/growing-gap-between-what-business-needs-and-what-education-provides/>.