DIGITAL AGE LEARNING

EFMD SPECIAL INTEREST GROUP REPORT
This EFMD special interest group was facilitated by Nigel Paine, former CLO BBC and the Author of the “The Learning Challenge” and “Building Leadership Development Programmes that Work.”
FORWARD BY SIG SPONSOR STEVEN SMITH

The digital revolution profoundly impacts the future of work, the skills and capabilities that are needed and it requires a fundamental rethink of the corporate learning function. Through the EFMD a Digital Age Learning Special Interest Group (SIG) was formed to look in depth at how learning and the learning function must change in this disruptive context.

Sponsored by Capgemini University and with the collaboration of IESE, this group brought together 16 companies which worked on some of the building blocks for Digital Age transformation such as re-imagining learning architecture, harnessing the power of social learning, transforming the user experience and more. The group built its point of view on “the nature of learning in the digital age,” based on business and academic literature, the direct experiences of the group as well as neuroscience.

The Digital Age is providing us greater ways of developing skills and capabilities as well as accelerating both the results and speed at which we need to transform and grow. Exciting times! And a key reason to bring together a leading business school, renown subject matter experts and multinational companies to gain insight into how it can be tackled!

This SIG Report offers insights into what is Digital Age Learning, how it is being brought to life within corporations and what it means for the learning function. I hope you will find it informative and useful.

Steven Smith
Digital Age Learning SIG Sponsor
Executive Vice President and Director Capgemini University
1. INTRODUCTION
   a. Outcomes
   b. Context
      i. Business is changing. Skills/capabilities are changing
      ii. Learning is changing
      iii. A paradigm shift is needed: from virtualisation to digitalisation
           from reproduction to transformation
   c. Approach

2. “THE EXPERIMENTS”
   a. Our 8 Experiments
      i. 9 projects: Brief overview of each
      ii. Key learning from each, by DAL characteristics

3. BUILDING THE ROLE OF THE LEARNING EXPERIENCE DESIGNER
   a. Designing digital-age learning
   b. The mindsets of a Learning Experience Designer
   c. Developing Learning Experience Designers

4. CONCLUSIONS

5. SELECT READING LIST
The EFMD Special Interest Group (SIG) “Digital Age Learning” explored how organisations can equip themselves to fully exploit the learning opportunities of the digital age. The SIG focused on documenting existing good practice and trapping emerging technologies, tools, services or learning paradigms that would help member companies move forward exponentially. It combines, therefore, an intensely practical element as well as looking at emerging research and experimentation.

The overall goal was to advance the critical area of digital age learning in concrete and practical terms, while helping install the practices that will allow innovation and development into the future. It acknowledged existing research and this report indicates areas where more research might be needed. The essential aim was to work in partnership with the members of the SIG and share their initiatives and challenges rather than ‘tell’ them what they should do. This project was a partnership in a profound area of learning development, across industries, across geographies and between research and practical applications. This report summarizes the conclusions and is accompanied by a detailed research report on digital age learning written by Capgemini.

An initial interview was conducted with those companies who signed up for the EFMD SIG. What emerged was the importance of digital transformation as a live and current challenge for each member company. The implications of this rebounded directly on the learning and development function. That function had the task of transforming itself into a digital age operation as well as lead the reskilling of all staff and all companies caught up in this process. DAL was therefore centre stage and both the subject and object of the process.

What was also clear, however, was that L&D was by no means leading the charge. In fact, the opposite was true. L&D has a significant role in reskilling and changing the mind set of staff to accommodate the changing conditions that digital transformation was creating, and is struggling with the process.
This is the genus of the report you are reading. It is an acknowledgement that the L&D function is critical in terms of helping organisations adjust to very different futures by developing new skills and new mind sets, but has a long way to go in terms of fulfilling that need and realigning itself around the exigencies that the current social, technological, economic climate dictates. If we had to choose title for this report, it might be: “Some Way Forward, But a Long Way to Go!”.

The research report reveals six key characteristics of digital age learning, and shares a vision for what an L&D future might look like. The experiments that were undertaken by the member companies demonstrate most of the characteristics but reveal the gap between what is currently being developed and the full panoply of digital age learning. They reveal both the considerable progress is being made as well as pointing the way forward for the road ahead.

The fact that there is some misalignment between the promise revealed in the research, and the reality displayed in the case studies is a sign of health and strength not weakness. There is a recognition of the direction of travel and first steps have been taken. This is a lot of solid progress that should be applauded. Each experiment reveals encouraging signs, and indicates some of the challenges moving forward. This was, after all, action research where the abstract and the theoretical was put to the test in real world situations that emerged from the members work in progress.

The experiments were not artificial attempts to prove a point but realistic projects set inside the cultural context of the companies listed here. There is some excellent work, and innovative rethinking of how learning should be remade in the light of the current contingency. There is also a large amount of variety in the experiments, which reveals the diversity of the challenges together with an abundance of need.

Each case study is described in a similar format, so that comparisons can be made and the outcomes and lessons learned, can be clearly described. The report concentrates on categorizing the embodied innovation, rather than going into detail about any specific learning programme. The idea is to reveal the thinking behind the experiment, and show the scaffolding that holds it together. These the most transferable elements, and the ones that will have direct influence on L&D going forward.

The report, therefore, has a very simple structure. It sets the scene,
defines the business landscape and the L&D context and how the
digital age is transforming both the business, the learner and the
learning organisation. It then describes the research undertaken
and the report’s conclusions about the six principles of digital age
learning.

This sets the stage for describing how the case studies embody
many of the DAL characteristics. These are laid out in detail in the
accompanying research paper. In summary, the six characteristics
of digital age learning focus on three essential areas.

Digital Age Learning is continuous and cross-context; it is learner-
led and social, as well as being data-driven and personalized. The
analysis revealed six core characteristics that define DAL and
differentiate it from what came before. The learning is engaging
and delivers an exceptional learning experience. Learning is
empowering, personalized and largely self-directed. Learning is
ubiquitous, just-in-time, and in context. Learning is social, both
formal and informal, and experiential wherever possible. Learning
is hyper-connected with analytics everywhere. Finally, learning is
continuous and promotes inquiry, exploration and doing.

The final section focuses on the necessary mind set changes
needed to fully embody, and enrich digital age learning. This shift
is encapsulated in the new roles of learning architect and learning
experience designer that seem to underpin the changes necessary
for digital age learning.

The report also includes a select bibliography, which reveals and
underpins the research conclusions. These references are a good
starting point if you want to explore further.
A. OUTCOMES

The focus of the SIG was on the process of innovation and the challenge of keeping learning and development relevant and vibrant into the future. The project explored how these new opportunities could be developed to meet the new demands facing companies and their people. The project also explored what the new learning opportunities offered by the digital age might look like.

Specifically, the project:

• Brought together 16 large European companies together with a prestigious Business School, under the sponsorship of Capgemini University, to define and debate the issues

• Ran nine experiments in aspects of digital age learning based in five companies representing different industrial sectors, from banking, to consultancy services to manufacturing.

• Developed a detailed background paper and reading list to define the nature of digital age learning

• Engaged in debate and deliberation, with experts drawn from Europe and North America, on the changing nature of, and the challenges facing, corporate learning. This change is both a product of the changing business environment and the need of both the company and its learning function to adapt, and prosper in the digital age.

B. THE CONTEXT

I. BUSINESS IS CHANGING

The digital revolution, hand in glove with the increasing pace of technological innovation, is profoundly changing the environment in which individuals live and companies operate. The world has become tremendously more complex, markets are volatile, and change has become the new normal. Digital Darwinism is impacting every market and industry. The ability to transform rapidly and continuously has become the key to survival. The US military originated expression, VUCA, sums this up well. We live in a world of increasing volatility, uncertainty, complexity and ambiguity. The former Governor of the Bank of England Meryn King claims in his book *The End of Alchemy* that we have moved
from *uncertainty* to *radical uncertainty* when even the options available are not known. No industry is immune from these waves of change and no industry is immune from their impact.

According to “Becoming a Digital Organisation” by Soule D et al (from which this diagram was taken), there are four critical dimensions of digital transformation inside organisations. The final one listed is ‘empowered talent’ but, in many ways, that is the critical first transformation, as it allows the other three to proceed. It involves developing a new wave of digital skills as a means of increasing engagement across the organisation, as well as bringing new insights from beyond the enterprise.

At the level of the individual, digital technologies have impacted our relationships with others but also the way we consume services and relate to the world, thus shaping a new culture and new behaviours. The era of the ever-more empowered customer has forced every industry to define a frictionless, tailor made and interactive experience revolving around each individual. This

**DIAGRAM FROM SOULE D ET AL ‘BECOMING A DIGITAL ORGANISATION’**

- Openly explore digital opportunities
- Prioritize digital solutions

**DIGITAL-FIRST MINDSET**

- Automate what can be
- Employ data-driven decisions

**DATA ACCESS & COLLABORATION TOOLS**

- Introduce collaboration tools
- Increase use of real-time customer and operations data

**DIGITAL ORGANISATION**

- Develop digital skills across the firm
- Increase engagement within and beyond the enterprise

**DIGITIZED PRACTICES**

- Encourage collaborative learning

**EMPOWERED TALENT**
overall, individual-centric and customer focussed environment and experience, powered by digital technologies, has significantly impacted people’s behaviours and expectations. New standards now apply to every interaction we have with the world, our service providers, and even our employers. This has had a net impact on what is learned and how it is learned.

II. LEARNING IS CHANGING

More specifically, learning has also been profoundly disrupted by digital technologies and culture. Unlimited global connectivity and instant access to information has transformed the relationships of individuals to knowledge, and learning in the broadest sense. According to David Weinberger, in his 2011 book “Too Big to Know”, Americans consumed about 3.6 zettabytes of information in 2008. Eight years later that may well have doubled.

In addition, the emphasis on social interactions and community-based interactions, supported by web 2.0, is significantly impacting the way we research, assess, consume and apply knowledge. It even impacts on our definition of what constitutes knowledge. Is the greater need to be able to recall information, or recall the location of information?

In this world of increasing complexity, constant change, and empowered learners, corporate learning has never been more critical to the survival of companies, but is also facing a significant challenge. Indeed, corporate learning has the task of solving the complex process of building core competence, as well as continuously developing emerging skill sets required for companies to thrive in this constantly disrupted environment. Speed has also become a critical factor of success, and the pressure is on to ensure faster and more agile delivery, just in time, and on the job learning opportunities. In addition, corporate learning needs to adopt digital standards and leverage technology and culture to provide a more engaging, personalized, interactive, tailor-made, and ultimately more impactful, learner experience.

The new learning age inside companies will become increasingly digital, and increasingly tailored to an individual’s unique and specific needs rather than generic and general need. One size fits one, is the embodiment of that digital age, in terms of delivery of services, customer intimacy as well as learning opportunities, and this is what is required for accelerated learning.
III. PARADIGM SHIFT

The case for exploration and action seems clear: not only in building new paradigms for learning, but also in building a modern workplace capable of delivering and flourishing in an increasingly uncertain climate. This is the prime moment for leading companies to differentiate themselves, lastingly, from their competition. This requires the creation of unprecedented workforce engagement, and increased agility through learning. In essence, digital age learning will be continuous and cross context, learner-led and social as well as data-driven and personalised. This is a significant paradigm shift from what has been in evidence before.

The essential shift is not when you translate existing practice into digital mode. This is merely a virtualisation process whereby learning content becomes, for instance, translated into e-learning. Digital Age Learning is a more profound transformation of the learning process, using digital tools to re-think what needs to be done and exploiting entirely new opportunities that are presented. For instance, using algorithms to personalise the learning experience. Digitalisation is a process of rethinking what is possible and moving learning onto a different level of use and complexity. This is clearly illustrated in a graphic produced by Capgemini’s Corporate University to illustrate their own learning journey.

FROM THE VIRTUALISATION PHENOMENON TO THE DIGITAL TRANSFORMATION OF LEARNING
This process demonstrates the six characteristics of digital age learning that are explained in detail in the research paper. The summary graphic describes these characteristics.

1. **Engaging through an exceptional and relevant learning experience** Learn-centric design and business aligned objectives

2. **Empowering, personalized and self-directed** Learner drives his/her own development, and learning fits individual needs (one size fits one)

3. **Ubiquitous, just in time, on-demand and in context** Learning supports performance on the job, in relation with specific activities and problems. Small learning assets accessible anytime, from anywhere

4. **Hyper-connected with analytics everywhere** Connected and targeted learning to drive effectiveness (that is measured)

5. **A blend of social, experiential, formal and informal** The right format for the right purpose, mixing formats makes learning more effective

6. **A continuous learning behaviour** Promoting inquiry, exploring and doing, creating a learning culture
C. APPROACH

We identified the core issues that the group wished to explore and then encouraged pilot solutions to be implemented and tested in different member-organisations. A systematic working process was followed:

• In-depth interviews with each member of the working group were carried out

• Identification of key areas of focus for each member company were defined

• Dialogue with leading thinkers in the field was instigated and their ideas helped shape the direction and focus of the project.

A summary of these outcomes is captured in this report, together with a summary of the experts’ input. There is also a list of readings and critical texts at the end of the report for those who wish to explore further.
There were nine experiments undertaken by six of the participating companies that were reviewed against the six characteristics of DAL that were identified in the Capgemini research paper and listed earlier and reproduced below. They formed the high-level model against which the experiments were measured.

They clustered into two cognate areas: Social learning and user experience. Each experiment was measured against those six characteristics.

**THE EXPERIMENTS**

<table>
<thead>
<tr>
<th>Cluster 1: Social Learning</th>
<th>Cluster 2: User Experience</th>
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</thead>
<tbody>
<tr>
<td>Capgemini’s SLACK community experiment</td>
<td>Capgemini’s Game Changer Program</td>
</tr>
<tr>
<td>Swiss Re’s Social Learning Platform</td>
<td>Santander Knowledge Without Limits</td>
</tr>
<tr>
<td>Capgemini’s DAL facilitated virtual learning journey</td>
<td>Santander Open Learning Offer</td>
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**6 - LEARNING IS CONTINUOUS AND PROMOTES INQUIRY, EXPLORING AND DOING**

**5 - LEARNING IS HYPER-CONNECTED WITH ANALYTICS EVERYWHERE**

**4 - LEARNING IS EXPERIENTIAL, SOCIAL, FORMAL AND INFORMAL**

**3 - LEARNING IS UBIQUITOUS, JUST IN TIME, ON-DEMAND AND IN CONTEXT**

**2 - LEARNING IS EMPOWERING, PERSONALIZED AND SELF-DIRECTED**

**1 - LEARNING IS ENGAGING THROUGH AN EXCEPTIONAL LEARNING EXPERIENCE**
**EXPERIMENT 1: CAPGEMINI EXPERIMENT WITH SLACK**

<table>
<thead>
<tr>
<th>CAPGEMINI – SLACK EXPERIMENT WITH ARCHITECT COMMUNITY</th>
<th>KEY COMMON CHARACTERISTICS OF DAL HOW THEY WERE APPLIED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>USER EXPERIENCE</strong></td>
<td><strong>SOCIAL LEARNING</strong></td>
</tr>
<tr>
<td>Learners had option to join and to invite others to the platform. Learners could create own channels based on areas of interest. Everyone could add posts and content on the platform.</td>
<td>Drove engagement through a social platform (SLACK) with curated content and informal discussions. Role experts regularly posted updates on hot topics that were contextualized and relevant to the community.</td>
</tr>
</tbody>
</table>

**WHAT IS THE INITIATIVE?**
An experiment to connect a role based community so that individuals can find role experts and are up to date with the impact of the latest technology trends in their day to day work by sharing information and knowledge.

**BUSINESS NEED**
How to connect a role based community so that individuals can find role experts and are up to date with the impact of the latest technology trends in their day to day work by sharing information and knowledge.

**WHAT DID YOU DO?**
Set up a SLACK team pre populated with curated external content in a number of channels to encourage architects to share their views and add their own recommended content. All known architects from the UK were invited to join the SLACK team and once members could create their own channels. A community manager encouraged engagement and animated threaded conversations.

**DAL FOCUS?**
Learning is ubiquitous, just-in-time, on-demand and in context.

**IMPACT**
48% of UK architects joined the SLACK team, these users invited architects from other countries to the team. Activity varied over the 4 month pilot period – there was higher activity when a recognized senior architect posted on the team and when there was a more informal conversation initiated by the community manager. Request from the architects to keep the SLACK team open until an alternative tool is available.

**INITIATIVE: SLACK EXPERIMENT WITH ARCHITECT COMMUNITY**
<table>
<thead>
<tr>
<th>USER EXPERIENCE</th>
<th>SOCIAL LEARNING</th>
<th>ANALYTICS</th>
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<tbody>
<tr>
<td>Engaged participants virtually to start the program in order to make the face-to-face classroom more impactful. Following 4 phases of learning ‘Engage’, ‘Practice’, ‘Apply’, and ‘Review’. Engage – activities before the course increasing the understanding of the topic so that you are ready to practice. Practice - classroom course either in person or virtual. Apply - learning is applied as part of your day-to-day work &amp; life and get the opportunity to share your learning experience with your colleagues. Review - a follow up where you share your success and what you have learned. All four phases are important, true commitment and engagement are key to heightening the learning experience.</td>
<td>Enable on-going discussions between participants and facilitators’ pre- and post the face to face learning program enforcing each of the 4 phases.</td>
<td>Learning is more effective and sustainable when you advance your knowledge through more than classroom attendance alone.</td>
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<tr>
<td>WHAT IS THE INITIATIVE?</td>
<td>BUSINESS NEED</td>
<td>WHAT DID YOU DO?</td>
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<tr>
<td>Moving towards a culture enriched by ongoing experience and enhanced by learning through collaboration with others and learning on the job.</td>
<td>With the introduction of a new portfolio of professional skills the desire to work with participants to take part not only in the actual classroom course but to raise awareness that they should apply their learned skills also after in their daily business. We wanted to work to bring in the 70/20/10 model allowing learning to also learn socially and apply it.</td>
<td>We piloted two different social learning platforms in Bangalore and Bratislava – Jive and SchoolKeep. Jive is a platform that we currently use within Swiss Re, which we have called OurSpace, and people are used to using while SchoolKeep is an off the shelf product used by the external vendor presenting the classes in question. In both groups were assigned pre- and post work that supplemented a face-to-face course. Learners were assigned tasks to prepare them for the learning so they would all be on the same page. Both platforms enabled them to ask questions and discuss the assignments offering Peer-to-Peer collaboration as well as with either the Learning specialist (Jive) or the instructor (SchoolKeep). By offering this online collaboration before the training many participants were familiar with each other before the met in person. After the training the participants had post-work where they had to apply the learning. Line managers were brought into this as well, receiving emails to inquire if the learning was being applied.</td>
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</table>
**IMPACT**

35 learners were used in the pilot – two groups in Bratislava and one in Bangalore. Although we saw a higher engagement with Learners than in the past using this method – we still have a way to go with engaging everyone. It is a process. We did see that people generally were more prepared for the training making it easier for the trainer and more beneficial for the Learner. Scheduling frequent reminders appears to encourage some learners to continue their learning as many do not continue after the workshop is over – but those who do benefit from reminders. We will continue using Social Learning for our portfolio of Professional skills courses using Jive as our platform. This will also allow Learners to share relevant articles etc that they find.

**INITIATIVE: SWISSRE – LEARNING IS CHANGING: SUPPORTING PROFESSIONAL SKILLS**

**EXPERIMENT 3: CAPGEMINI: DIGITAL AGE LEARNING FACILITATED VIRTUAL LEARNING JOURNEY**

<table>
<thead>
<tr>
<th>CAPGEMINI – FACILITATED VIRTUAL LEARNING JOURNEY</th>
<th>KEY COMMON CHARACTERISTICS OF DAL HOW THEY WERE APPLIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHAT IS THE INITIATIVE? A three week blended learning journey exploring digital age learning with 166 participants across 19 countries</td>
<td>USER EXPERIENCE The programme had a strong social component</td>
</tr>
<tr>
<td>BUSINESS NEED How to help all Capgemini Learning Professionals understand and internalize the impact of Digital Age Learning</td>
<td>SOCIAL LEARNING Use of a variety virtual delivery and social collaboration tools</td>
</tr>
<tr>
<td>WHAT DID YOU DO? Created a 3 week blended learning journey aimed at improving skills and competencies needed in Digital Age Learning, understand the L&amp;D technology and innovation landscape and helping Learning Professionals gain knowledge about Social Learning. The program had a strong social component enabling Peer-to-Peer</td>
<td>ANALYTICS Experiencing as much of the digital learning experience was deliberately build into the programme to drive program content</td>
</tr>
<tr>
<td>DAL FOCUS? Learning is experiential, social, formal and informal</td>
<td>IMPACT? 166 participants registered for pilot from across 19 countries. 91 participants active across the 3 week programme. Informal activities such as posting photos and fun quizzes maintained interest &amp; engagement.</td>
</tr>
</tbody>
</table>
Collaboration. It was developed over a short time horizon using a variety of virtual delivery formats, much of the content was curated (internally & externally). A community manager encouraged engagement.

**IMPACT**
The course did demonstrate the concepts of DAL in a concrete way by ‘doing’ rather than telling. It, therefore had an impact on both the team that developed the programme and those that experienced it.

**INITIATIVE: DIGITAL AGE LEARNING FACILITATED VIRTUAL LEARNING JOURNEY (DAL FVLJ)**

**EXPERIMENT 4: CAPGEMINI: GAME CHANGERS PROGRAMME**

**CAPGEMINI – GAME CHANGERS PROGRAM**

**USER EXPERIENCE**
Designed and delivered the Program to be a “one size fits one” experience through individual personal development plans built from the results of a development centre.

Each participant mentored by a Senior Executive.

Use of Un-conference method to deliver parts of the program.

**SOCIAL LEARNING**
Enabled on-going discussions between participants through social collaboration tools.

Applied learning through individual business assignments that could be included in their VP Promotion Case.

**ANALYTICS**
Used collective development trends to drive program content.

Used data from a Digital Profile Tool and Interactivity Index.

Adjusted program based on continuous participant feedback.

**KEY COMMON CHARACTERISTICS OF DAL HOW THEY WERE APPLIED**
**WHAT IS THE INITIATIVE?**  
A leadership development program for potential VPs

**BUSINESS NEED**  
How to grow our leadership population and inject fresh thinking to enable the group transformation. The aim of the program is to accelerate the career of those people who we feel can make a real difference.

**WHAT DID YOU DO?**  
Developed a 9 month talent acceleration program for director level employees with recognized “game changing” abilities to help them develop as individuals, as leaders and within Capgemini. They are given 7 opportunities to leverage, including a virtual development centre, mentoring, leadership training, participation in a key Group meeting, a personal “game changing” opportunity they need to drive, just in time learning bites through an executive education platform, digital media and gamification activities to help them go from “known” to “famous”. The program is low touch from a program management point of view; the program offers opportunities and we trust the game changers to use these to their own personal advantage. The motto is: Be Yourself, Be a Game Changer.

**DAL FOCUS?**  
One Size Fits One – the journey is different every time the program runs, depending on the specific needs of the individuals and collective cohort as well as ongoing feedback from the program participants.

**IMPACT**  
41% of Game Changers were promoted to VP in Jan 2016 and 48% of those that were not, are up for VP by end of 2016. In total, 49% of Game Changers changed the scope of their position, 26% extended the scope within their position, 8% changed geographies and 8% changed business units. The Game Changers submitted a total of 28 Game Changing Opportunities (some opportunities were submitted by teams of two or three). Group leaders have recognized several GCOs as having real ‘game-changing potential’ for Capgemini, or at the very least representing disruptive thinking.

**INITIATIVE: CAPGEMINI GAME CHANGERS PROGRAM**
## EXPERIMENT 5 AND 6:
### SANTANDER ‘OPEN LEARNING’ AND ‘KNOWLEDGE WITHOUT LIMITS’ PORTALS.

### SANTANDER – OPEN LEARNING OFFER AND KNOWLEDGE WITHOUT LIMITS

<table>
<thead>
<tr>
<th>Key Common Characteristics of DAL How They Were Applied</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User Experience</strong></td>
</tr>
<tr>
<td>Put into place learning that allows self-development with each learner designing their own training plan. The offer is “simple – personal – fair” because it is transparent, self-directed and each request is answered.</td>
</tr>
<tr>
<td><strong>Social Learning</strong></td>
</tr>
<tr>
<td>We are implementing some apps for the pre-face to face and the post-face to face. We share the doc of the courses, provide information about the speakers and rate the speech.</td>
</tr>
<tr>
<td><strong>Analytics</strong></td>
</tr>
<tr>
<td>We analyse the demand for training plans connected with the business. We work with the business areas about new impact initiatives for the business.</td>
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</tbody>
</table>

### WHAT IS THE INITIATIVE?
A new way of designing, executing and assessing learning impact through stronger ties with the business and the learners Plus a corporate learning portal for all employees with market and business content from internal and external points of view.

### BUSINESS NEED
How to keep all of Santander’s employees up to date with the market and business trends.

### WHAT DID YOU DO?
Corporate Learning Portal for all employees in Santander with market and business content from internal and external points of view. It’s platform to disseminate our knowledge, we have in one place the “formal” and “informal” training: LMS and videos. Videos can be shared, rated and commented. We design tools for making viral content for the Organisation.

### DAL FOCUS?
Democratisation of knowledge, everybody can access the knowledge. Learning is personalized and self-managed. You can build your knowledge.

### IMPACT
Our general figures are:
- Global scope: 190 000 employees Santander Group
- Visit per year: +1.000.000
- Average per month: 89,285
It is one of the most visited Corporate Portals. The areas include specialized content aligned with the strategy and impact in the business.

### INITIATIVE: SANTANDER EXPERIMENTS OPEN LEARNING AND KNOWLEDGE WITHOUT LIMITS PORTALS
EXPERIMENT 7:
SOLVAY, PREPARING VIRTUAL CLASSROOM FACILITATORS

**SOLVAY – PREPARING VIRTUAL CLASSROOM FACILITATORS**

**USER EXPERIENCE**
- Minimize time in virtual classroom.
- Put more learning in asynchronous hub
- Use real-world work and examples rather than cases
- Assure the producer role is assigned and of high quality

**SOCIAL LEARNING**
Experiential: Designed and built the initiative using synchronous and asynchronous virtual elements, to create the experience for the trainers that they should create for their participants.

**ANALYTICS**
Used participant feedback to adjust the design and delivery of the synchronous and asynchronous virtual elements.

**WHAT IS THE INITIATIVE?**
Provide an Outstanding Virtual Classroom Experience to participants by preparing Virtual Classroom Facilitators to design and facilitate Virtual Classrooms

**BUSINESS NEED**
Diversify the way we learn, as face-to-face training is still big at Solvay (90%), in order to reduce the time spent traveling for training, while allowing internal trainers to reach global audiences and speeding up response to training needs, by leveraging a virtual classroom platform to offer virtual learning opportunities similar to a face-to-face classroom.

**WHAT DID YOU DO?**
Design a custom solution to train future facilitators on how to effectively design for and facilitate in a virtual classroom. Initially, this custom solution consisted of a series of six two-hour synchronous virtual classroom sessions, with asynchronous intersession work leveraging a learning hub, where participants could find additional resources to consume, submit their work on their own virtual training projects and interact with other participants about the training, their projects and their experience. This solution was modelling the experience that we expect facilitators to provide to their participants.

**DAL FOCUS?**
Learning is ubiquitous, just-in-time, on-demand and in context; Learning is experiential, social, formal and informal and Learning is continuous and promotes inquiry, exploring and doing.
participants in future sessions.

Based on the feedback that we received from the participants after a first pilot, we made several significant adjustments:

* we reduced the number of virtual classroom sessions by pushing more theory on the learning hub to let the learners consume them at the most suitable time for them;
* we reincorporated the interaction with other participants inside the synchronous virtual classrooms sessions by increasing breakout rooms to collaborate in small sub-groups;
* we reincorporated part of the work on real projects inside the synchronous virtual classrooms sessions as replacement for theoretical cases.

We complemented the design with additional coaching after the training by virtual classroom experts to address questions and challenges of each participant individually.

**IMPACT**

Theory can be consumed remotely; use live sessions for social interactions and practice on real projects.

Social learning cannot be forced, especially as sense of community is hard to build remotely, without community manager and for a limited period of time.

Training events should rather include real work projects than theoretical cases; application should not be remote or post-event only.

Connection with an expert of virtual classroom trainings after first inquiring/exploring/doing experiment eases the application.

**INITIATIVE: SOLVAY PREPARING VIRTUAL CLASSROOM FACILITATORS**
**EXPERIMENT 8: FOR.ORG. USER EXPERIENCE FOR DIGITAL AGE LEARNERS**

<table>
<thead>
<tr>
<th>FOR.ORG – USER EXPERIENCE FOR DIGITAL AGE LEARNERS</th>
<th>KEY COMMON CHARACTERISTICS OF DAL HOW THEY WERE APPLIED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>USER EXPERIENCE</strong></td>
<td><strong>SOCIAL LEARNING</strong></td>
</tr>
<tr>
<td><strong>Self-directed:</strong> Using a combination of push and pull channels to reach their learners. Context: Action upon user data to provide personalized experiences</td>
<td><strong>Ubiquitous:</strong> Accessible anytime, anywhere with responsive design. Just-in-time: Small learning units</td>
</tr>
<tr>
<td><strong>BUSINESS NEED</strong></td>
<td><strong>ANALYTICS</strong></td>
</tr>
<tr>
<td>Build an engaging learning experience for dental professionals.</td>
<td>Measure all interactions in a central system. Use marketing automation software to action user interactions.</td>
</tr>
<tr>
<td><strong>WHAT DID YOU DO?</strong></td>
<td><strong>DAL FOCUS?</strong></td>
</tr>
<tr>
<td>FOR has created an online platform that offers education content in various formats. It uses push and pull channels to reach learners. Engagement is boosted through social and informal, approaches as well as by providing a personalized experience based on user data.</td>
<td>Learning is ubiquitous, just-in-time, on-demand and in context</td>
</tr>
</tbody>
</table>

**IMPACT**
15,500 registered users within 3.5 years

**INITIATIVE: FOR.ORG**
# Experiment 9: Digitisation of Siemens Global Learning Campus

## Learning World Digitalisation

<table>
<thead>
<tr>
<th>User Experience</th>
<th>Social Learning</th>
<th>Analytics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to access Learning portal with focus on Digitalisation. New formats like Learning nuggets, an Online Competence Analysis based on seven basic digital competences, a video based knowledge challenge and many internal and external curated learning modules (e-learning and classroom) covered the whole learning world around Digitalisation to support the digital transformation of Siemens.</td>
<td>Direct link to relevant groups in the Siemens Social Network to link individual learning experiences with the global community activities at Siemens. Links to the ‘video@Siemens’ platform included user generated content. The curators actively launched new topics in relation to current Siemens activities and topics (e.g. fairs, market launches).</td>
<td>Although the analytical capabilities of the platform are very basic, the curators adjusted the focus of their work based on insights from the statistics.</td>
</tr>
</tbody>
</table>

## What is the Initiative?
Creating a unique access point to all Digitalisation Learning offerings at Siemens and explore new learning formats.

## Business Need
As Digitalisation is the key topic of Siemens’ transformational journey a central access point was necessary to accelerate time to competency. The Learning World provides orientation and navigation in the fragmented and fast growing content pool of Siemens.

## What Did You Do?
The Learning World was set up with an agile approach, using many small iteration steps with many customer interactions. We created and piloted the new role ‘curator’. Based on the experiences we launched the second generation with many new social features, new content areas and specialized areas for business units in March 2017.

## Dal Focus?
The Learning World touched all six DAL characteristics.
IMPACT
With more than 19,000 accesses of the Learning World in the first months proved the concept of a easy to use single point of entry for all Digitalisation topics. It was also a launch pad for many new learning formats like learning nuggets, learning challenges, user generated content and we gained insights how to run the Learning organisation of the future. Based on these experiences and the customer feedback the ‘Second Generation Learning World’ was created that has the potential to become the future single access point for all Global Learning Campus (and beyond) offerings. This new concept influenced the Learning culture at Siemens introducing a combination of formal and informal learning opportunities.

INITIATIVE: LEARNING WORLD ‘DIGITALISATION’ OF SIEMENS GLOBAL LEARNING CAMPUS
Digitalisation is slowly transforming business and therefore, the way executives learn. There are several attributes that characterise this change. First, learning is moving from being an event-based activity, i.e. constrained to courses, to one that is integrated into everyday life - and hence happens continuously. Second, learning is less and less exclusively L&D driven, i.e. limited to experiences that are pre-selected and guided, and more and more a journey that is learner-led - which combines several activities, many learner-led. Finally, learning is no longer mass-tailored to address the needs of a generic cohort, i.e. modelled on the needs of a generic profile, but personalized to meet the requirements of a unique individual - and moreover, it is adaptive over time, with data used as input to guide future activity.

New, exciting tools are constantly being built; collectively, they hold the promise of enabling this cross-context, learner-led, data-driven learning that we aspire to. For a learning professional, being up to date on the latest trends is essential. But technological savvy is only half the story. In itself, new technology will not guarantee a new way of learning; the technology needs to be deployed well. To do so, learning professionals must couple an awareness of what is possible today with a deep understanding of learners’ needs. By reflecting on needs that are either unmet or for which there is a suboptimal solution, they can devise ways to address them in new, more effective ways.

This capability, to combine cutting-edge technology with extraordinary pedagogy, requires a significant shift in mindset. In part because of the novelty of a learning professional’s toolkit; but also, due to the speed with which this toolkit is evolving. In the stable context of the past, an instructional designer explored the occasional new way of doing something, and scaled the novel approach if it worked. But no longer do we live in a period marked by isolated episodes of rapid change, between long periods of little or no change; change is constant. As a result, learning professionals
must abandon some of the frames around the idea of an ‘instructional designer’, and embrace the demanding yet promising profession of the “learning experience designer”.

Designing Digital-age Learning
To understand what distinguishes a learning experience designer, we must reflect first on the process of designing digital age learning. If we think of a learning journey that is continuous, learner-led and data driven- i.e. a learning journey enabled by digitalisation, four steps can help frame the design process.

1. **Explore the need.**
The starting point is to assist the learner in clearly expressing a need, i.e. the problem the learner is trying to solve. This should be described in terms of what the individual wants to be able to do (skills), know (knowledge) or argue (attitudes). Given the nature of digital-age learning, that is learning embedded in everyday life, it is critical that this need be closely related to the demands of the learner’s current and future role.

2. **Identify opportunities.**
The second step involves helping the learner identify opportunities for learning, or “learning moments”, i.e. a list of common situations and scenarios (i.e., contexts) in their everyday life where the learner is most likely to encounter a relevant experience. What makes a learning moment such, is the fact that it triggers a reflection related to the need that is being pursued. Hence, all the learning moments on aggregate and over time make up the learning journey - each learning moment being a meaningful interaction at a point in time and in a particular context.

3. **Enable the journey.**
The third step is critical, as it involves providing the learner with the toolkit necessary to engage in his or her learning journey. This toolkit allows learners to satisfy all their desires and get the job done.

Part of the toolkit is technology-related – i.e. systems, platforms, etc. A digital-age learning engine must help learners do such things as capture, organize and store information (text, audio, video), detect and visualize patterns to make sense of data, share and discuss insights with peers, connect to a rich multimedia knowledge base, receive context-aware notifications and engage in on-demand social collaboration. Another dimension of toolkit is the people who support the learning process – i.e. the L&D
professionals. These individuals must facilitate the learning journey, which implies being comfortable such things, amongst others, as enabling whatever technology the learner needs; partnering with other HR functions and line managers to involve them in the learning process; and guiding learners to relevant information inside and outside the organisation.

4. Assess and personalize.
The last step involves capturing and analyzing data from the learning cycle, to modify future actions. With this intent in mind, data is important for two reasons. First, it can be used to draw insights, which allow the individual to fine-tune the next cycle. Second, when compared with the data of other learners, it can open the door to the possibility of personalizing the learning experience. Indeed, inputs can be proactively fed back to the learner, suggesting ways in which to make his or her learning experience richer, based on the experience of others.

The Mindsets required of a Learning Experience Designer

The Learning Experience Designer plays a critical, dual role. First, he or she is involved in the learning process, and thus charged with empowering the individual learner to pursue their learning journey. Second, he or she is a member of the broader learning team, which is being asked to bring to life a corporate-wide approach by which learning happens whenever and wherever. This dual role positions the Learning Experience Designer as a catalyst with respect to the change that is needed – transforming learning as a practice, as well as the learning function itself.

Fulfilling this dual role demands a new set of competencies and attitudes. Some of these are collective; they are held by the learning team, and can be leveraged across many activities in which the team is involved. Others are quite specific to the task of helping the learners shape their learning experience; hence, they are of particular relevance to the role of the Learning Experience Designer. Taken together, they represent a significant departure from the approach of an instructional designer.

An instructional designer is focused on learning objectives; i.e. what the students should be able to do at the end of a course. This focus guides the selection and organisation of content, and the order of instructional strategies. In this process, the Instructional Designer
acts as a “learning expert”, using their knowledge of the principles of learning and their practical experience to find the optimal method of instruction.

Ironically, this very expertise constrains the Instructional Designers, and condemns them to being *shapers*. Instructional Designers define the learning experience through their eyes, sequencing elements to meet the desired goals in the most effective, efficient and appealing way, based on a, somewhat, fixed toolkit. Learners are only a concern later, when they are observed going through a pre-defined experience.

This inside-out, expertise-based approach is completely counter to that which Learning Experience Designers must take. They are not immediately concerned with “the product”; i.e. the way their existing “toolkit” maps to particular learning objectives. This product is merely a consequence of an explicit focus on the learner; i.e. looking at the learning experience through a learner’s eyes, and enabling a process focused on *their* needs, using whatever means necessary – the ones they are familiar with, or ones yet to be explored.

This approach requires a new mindset, which rests on a set of competencies and attitudes. The graph below depicts these, as they relate to the steps of the design process. In the following paragraphs, they are described in greater detail.

**THE STAGES OF THE DESIGN PROCESS**
To explore the need... Part data scientist, part design thinker

Data is the foundation of digital-age learning. As learning moments are captured, they generate a data footprint. This data can be analyzed, to understand a person’s learning history. But beyond looking at past performance, data can also be fed back to the learner - to boost engagement as well as make future learning more personalized. This ability and eagerness to visualize and communicate data, and allow it to shape future behavior, is typical of a data scientist, and distinguishes him or her from a mere data analyst.

Equally, defining the right problem to solve is essential. Approaching this task as a design thinker, would imply doing two things. First, observation takes center stage; rather than relying on what one says, observation can help discern what people really need. Second, constant questioning is essential; only after multiple rounds of questioning are the true issues revealed. This discipline allows a design thinker, to suspend judgment and look at the problem through the customer’s eyes – an empathy that differentiates his or her approach from more deductive approaches to problem definition.

To identify opportunities... Part co-creator, part UX-designer

Learning that is embedded in everyday life implies that most development opportunities happen within the context of performing day-to-day work. If this is the case, acting as a co-creator is essential. Co-creation has been used to describe the act of bringing external parties, usually customers or suppliers, into a company’s creative process. For the Learning Experience Designer, it means working together with the learner to create the learning experience; i.e. identify the learning moments most relevant to the individual. While the Learning Experience Designer may steer the process, the learner has a seat at the (head of the) table. Hence, responsibility for success rests equally with both parties, a significant departure from the view commonly held of L&D as a “provider” of a learning solution.

This continuous nature of the learning experience also implies the need to think about the working environments of employees, and their behaviors within that. As said, learning is no longer limited to a course, but rather happens over time and across contexts. The
Learning Experience Designer is charged with creating the systems and processes that allow employees to stitch together various learning moments, and create a holistic experience. This task requires a relentless focus on the learner experience; i.e. the way a learner is capturing learning moments, reflecting on them and extracting generalizable patterns. Improving the ease, accessibility and pleasure of these activities, which underpin the ability of the learner to create an integrated learning journey, becomes a primary concern. This mindset is typical of a *user experience designer*, who prioritizes pleasure in the interaction between the customer and the product above all else.

**To enable the journey... Part maker & tinkerer, part prototyper**

The pace of change, in the age of digitalisation, is astonishing. New technology appears almost daily. This technology opens the door to meet needs in new ways. In some cases, this means addressing an old need differently; in others, it implies the ability to fulfill a previously underserved need. In this context, the Learning Experience Designer must be comfortable with constant experimentation, and be willing to try out new paths - without fear of possible failure. This interest in the creation of new devices and the constant perfection of existing ones is typical of a *maker and tinkerer*.

At the same time, rampant innovation means that there are no certain answers. Hence, it is vital for the Learning Experience Designer to be able to use experiments as a means of testing concepts and as an opportunity to learn. This is a far cry from the typical “piloting” approach; through a pilot, we fine tune a solution in a representative environment prior to rollout, and typically after considerable design and development work has already taken place. Rather, just like a *prototyper*, the Learning Experience Designer must use experimentation as an integral part of the design and development aspect of a solution. It is the experiment itself, with limited work prior to its start, that provides the prototyper the basis to measure results from an initial use case, and iterate to a better solution.

**To assess and personalize... Part optimizer, part disruptor**

The Learning Experience Designer thinks expansively, constantly
exploring ways to improve the learning experience. But when he or she finds a new way of doing something that is effective, it is time to shift gears - and focus on exploiting it, just like an optimizer would. Optimisation is the action of making the best or most effective use of a situation or resource. In today’s times, when the window for exploitation is increasingly narrow, doing so in a timely manner is particularly important. Indeed, digitalisation has brought about rampant exploration, and this in turn has increased the speed with which new solutions are being discovered. As a result, the shelf-life of any novelty is far shorter than it was in the past. Given this context, knowing when to scale and how to do quickly is vital, if one is to take advantage of what inevitably is a short-lived opportunity.

At the same time, a Learning Experience Designer must be sensitive to the fact that a learner’s needs are not fixed, but rather must be continuously reexamined. He or she must leverage the desire to meet these needs, as they evolve over time and contexts, as a source of inspiration for trying new approaches. In doing so, the Learning Experience Designer must, if necessary, act like a disruptor would; i.e. be willing to challenge the status-quo, and put all aspects of a current approach up for grabs. Disruption differs from innovation in that it uproots and changes how we think and go about an activity. In that sense, a Learning Experience Designer must come to terms with the fact all solutions, not matter how good, should exist in perpetual beta. And therefore, his or her role is to constantly improve them, sometimes in radical ways, to meet the needs of the learner.

**Developing Learning Experience Designers**

Recent research has evidenced the fact that HR teams lack the competencies and attitudes to support digital age learning (see G. Auricchio doctoral dissertation, “A Study of the views of Senior Learning and Development Professionals in Flagship Global Companies Regarding their Use of Blended Learning in Executive Leadership Development Programs”). In other words, people working in corporate learning do not possess the appropriate mindset. If that is the case, how might they develop it – and become the Learning Experience Designers that we need, if the shift in corporate learning is to occur?

One thing to keep in mind is that evolving from the current,
programme-centric, L&D-run approach to what we describe as “digital-age learning” is not a quick fix, nor something that happens overnight. It takes time. And during the transition, two realities need to be maintained. On the one hand, programmatic learning must continue to exist – and co-habitat the learning agenda with experiments with cross-context, learner-led, data-driven learning. On the other hand, the learning function must still be visible to employees as an “organizer of learning experiences” - before fading away, as learning itself becomes a dimension of the organisation’s way of life.

Learning Experience Designers are catalysts in this transformation process. They are part of the current learning function, and through their involvement are pushing it to become part of the culture, or “how things are done around here”. They also are responsible for the learning offer; i.e. a recommended program, which they are hoping to evolve to be “a journey that you (the learner) control, and I (L&D) enable”. As a result, they must juggle two mindsets; the traditional one of the Instructional Designer, and the new one of the Learning Experience Designer.

Performing two significantly distinct roles at the same time is not an easy task. But it is necessary for the transition to occur smoothly. Indeed, it is this ability to become equally adept at sustaining the status quo and considering changes to it that underpins the success of the digital transformation of corporate learning. Which is why developing the mindset of a Learning Experience Designer cannot be approached as an “integral reset” process; it must be gradual.

With this in mind, L&D professionals are advised to engage in a series of “stretch” experiences. A typical experience of this kind exposes the individual to new approaches, in a contained environment. This allows the individual to experiment first-hand with a different, out-of-the-box way to address a specific learning need. Importantly, the experience also must make time for reflection and sense-making, so that insights can be extracted and these in turn can begin to influence the practice of individual, and hence their behavior.

One example of stretch experience is that which this group has started to design, and is considering to implement for its members as well as other interested organisations. It requires participating L&D professionals to engage in designing an individual learning
journey using as a model the four steps outlined previously, and the capabilities and attitudes related to each step. In the process, participants will be provided with a toolkit to facilitate their progress in the design – which will include such things as a digital infrastructure, masterclasses, peer-sharing, a multimedia knowledge base, etc. As an outcome, each participant will deliver, in the context of their organisation, a digital-age learning experience; some type of cross-context, learner-led, data-driven experience, for a particular need and cohort.

The transition to becoming a Learning Experience designer is not easy. And many learning professionals are bound to drag their feet. But for change to occur, we must step out of our comfort zone, embrace what we do not know, and consider how these new elements can be used to address certain needs. Only in such a way can we begin to construct a new approach to learning, based not on prejudices but rather informed opinion. A learning that leverages the extraordinary technology of today, but is rooted in the cutting-edge pedagogy of yesterday.
CONCLUSIONS

CONCLUSIONS FROM THE EXPERIMENTS

Overall
‘Analytics everywhere’ was the most difficult of the 6 DAL characteristics to implement and it was acknowledged that it will take time to mature in this area.

Interaction with participants:
It was important to design-in regular interaction with thought leaders and other peers across programmes and into the wider business community, for the duration of the programme and perhaps beyond.

In any social learning context, the role of a pro-active community manager attached to a programme or community, led to increased activity, engagement and interaction.

It is necessary to develop an agile design process, so that it is possible to react to continuous feedback from participants going through the programme and draw on their experience. The most successful programmes were co-created, and therefore always in a state of development or improvement.

In terms of content:
1. The focus should be on curating relevant content for the target audience and creating as little new content as possible
2. Learners should be allowed to shape and structure the content in order that learning is focused to meet their needs

With respect to technology:
1. Use technology that learners are used to using, even at the expense of functionality. This accelerates adoption.
2. Build a link to a single platform for sharing curated material. Multiple locations cause confusion, and overall adoption stalls.
3. Provide a fun and gamified environment to test understanding (using apps such as Kahoot, or Quizizz)
Lessons for the Learning Function:

iv. Develop the entire team of Learning Professionals, so that they understand what DAL means for them and in their context. This works best by creating an experience for them, that mirrors the experience that they need to create for the rest of the organisation.

vii. Learn by doing: run small experiments, adjusting as you go to work out the correct way to move forward. Do not insist on a single, unproven solution and impose that on the organisation.

KEY LESSONS FROM INVITED EXPERT INPUT

1. KRISTA JONES MARS:
BUILD AN AGILE LEARNING CULTURE, ACT LIKE A START-UP

Krista is the head of the Work and Learning Cluster at MaRS, a Toronto based enterprise support centre that offers support, funding and expert advice to start-ups in the ICT, clean tech and health sectors. Krista works with the entrepreneurs, corporate leaders, investors and technologists who are applying innovation and leading edge technologies to create solutions that are advancing the competitiveness of global workers and workplaces.

We no longer compete on a product or service, but rather in how far we can create a competitive, repeatable and scalable business model. This holds good for learning as much as any product or service.

In the 4th Industrial Age where start-ups are able to invent entirely new processes and disrupt huge incumbent players, learning, too, needs to re-invent itself.

The model for action is: move fast, and fix things quickly. The key process is iteration, not planning.

You should see the learner as the user, and the business as the customer.

2. NICK SHACKLETON-JONES, PA CONSULTING GROUP:
FROM COURSES TO RESOURCES

Nick is now a principal at PA Consulting Group having been the Director of online learning at BP where he was responsible for the publication of the Learning Design Toolkit, the Affective Context Model and the Learning Field Guide. He speaks regularly on topics
including the future of learning, culture change, social media and learning innovation and he blogs at conventional.com. Before BP he was Director, Online and Informal Learning at the BBC.

People need access to resources that offer support when support is needed.

The concept of a “course” is over-elaborate, slow to be developed, and over structured.

Courses have value but are no longer the only means of delivering learning inside organisations. Other options are often more effective so, essentially, an innovation mindset is critical.

Learning leaders should encourage experimentation, and help learning move from being imprecise and unresearched (e.g. like alchemy) to more refined and researched, as well as based on terms of reference around what works and why (e.g. more like chemistry).

The bi-product of this process is to shift focus from large slices of pre-prepared and pre-digested information, to less structured resources that can be selected and reconfigured according to the needs of the individual.

In the traditional model, the learning operation did the selection and assembly, whilst in the new model, the learners themselves define what they need and in what circumstances.

The learning organisation supports and facilitates rather than organises and control.

3. JULIAN STODD FOUNDER OF SEA SALT LEARNING: LEARNING IN THE SOCIAL AGE:

Julian Stodd is a writer and consultant on the Social Age. He specialises in exploring learning design, the role of communities, social collaborative technologies and social leadership. He is the author of eight books including ‘Exploring the World of Social Learning’ and ‘The Social Leadership Handbook’. He works on strategy and delivery with many global organisations, and is the founder of Sea Salt Learning which helps organisations get fit for the Social Age. Julian splits his time between writing, and working around the world, exploring the strategy and implementation of learning, leadership and cultural change.

In a world where knowledge is dispersed and distributed, agility
and sense making are more important than knowing.

Increasingly, as organisations and employers cease to look after people, employees must fend for themselves and build their own careers and manage their own development.

Social leadership is as important as other forms of leadership and cannot be handed out or awarded, it must be earned and acknowledged.

Social leadership is contextual and consensual, tribal and fluid. It is based around trust; i.e. soft rather than hard power. And trust is earned by consistent behaviours.

Social leadership is manifested through strong communities. These communities can help define who we are, and offer support and growth.

Therefore, social age learning manifests itself in those informal communities which can subvert formal hierarchies. This is the primary means of sharing tacit knowledge.

Learning is co-created, so it is adaptive and social in nature.

Learning is the primary means of managing the social age and surviving as a valuable worker.

The individual must remain agile to survive.

To support and assist change, employees need the confidence and skills to imagine and bring forth a different reality.

We gain confidence through the sharing of stories. They form a scaffolding for our learning and motivate us to move forward.

4. DONALD CLARK ENTREPRENEUR AND LEARNING EXPERT: WHY AI IS THE DIGITAL FUTURE IN LEARNING.

Donald is a prolific blogger and conference speaker as well as being an investor in new educational technology start-ups. He founded one of the largest learning providers in the UK and sold his stake over ten years ago. He has used his time to challenge what he considers superficial thinking in approaches to learning and to call out phoney learning theory. He is a passionate advocate for machine learning and the coming revolution in Virtual Reality.

Artificial intelligence and machine learning is already critical component of our online life and will manage and define the way we work, learn and behave with increasing intensity in the future.
Machine learning underpins search now and will underpin many more aspects of corporate learning.

AI is the only way we can manage the process of delivering the appropriate learning required by every individual working in an organisation.

Learning will become data heavy as it learns about our needs, and therefore, more accurate and efficient in meeting those quickly and reliably.

There are six core areas that AI will take over from trainers:

- Answering questions and finding what you need
- Offering learner support
- Having expert knowledge
- Course creation, management and delivery
- Adapting programmes to the needs of individual learners
- Assessment of competence, and spaced practice of learning

AI is the only route possible for building genuinely adaptive learning systems.

This approach to technology-based learning could be a massive breakthrough in terms of learning outcomes for millions of learners.

**Adaptive Learning: Case Study Filtered.Com**

This company build algorithms that learn about the strengths and weaknesses of each individual learner and then adapts what learning is presented as the individual progresses through the learning programme. The more a learner uses the Filtered Platform, the better it adapts the learning to the needs of that user. Filtered has over half a million users and, in Filtered’s the company personalises online training to an individual’s needs using adaptive algorithms driven by real user data.

All content and features are developed to enhance adoption, engagement and impact (AEI). This means that the programmes offered, will not teach you everything, just what you need to learn. They do this by stripping out what the learner knows, and what is not useful to them, using their own custom designed and patent pending algorithm.
The learning model is continuously iterated and co-created with the participants. Through the continuous feedback loop, the learning is aligned and realigned with work and work processes and the learning journey modified accordingly. This is much more an experience than a course, where collaboration, discussion and exploration are as valuable as content, which remains fluid and under constant development.
REFERENCES

Select Reading List
Araya, Daniel (2010), “Education in the Creative Economy: Knowledge and Learning in the Age of Innovation”, Peter Lang Publishing
Christensen, C., Matzler, K., Friedrich S. (2011) “The Innovator`s Dilemma”. HBS
Gustin, Sam (2013) “The Internet Doesn’t Hurt People -- People Do: The New Digital Age”. Sam Gustin @samsungustin, April 26, 2013


Vygotsky, L.V. (1930) Mind and Society, Harvard University Press. (by Andy Blunden and Nate Schmolze.)

### Articles / Research

**Christopher Dede** '21st Century Education Requires Lifewide Learning' – HBR

The Economist January 14th -20th 2017: Supplement on Lifelong Learning “How to Survive in the Age of Automation”

Nick Morrison ‘Fewer Teachers, More Data in the Schools of the future’ - Forbes

David Slocum ‘Leading The Future of Learning Through Four Key Trends’ – Forbes

John Ebersole ‘The Myths of Online Learning’ – Forbes

Michelle Weise ‘The Real Revolution in Online Education is not MOOCs’ – HBR

Harry Walker ‘UK Education Trends and Insights’ – Google

Rawn Shah – ‘Corporate Learning in a Volatile, Uncertain, Complex, Ambiguous World’ - Forbes

### Companies Websites

Simon Cormarty ‘Our Personal Development Manifesto’ – Redgate

Anders Ivarsson ‘Personal Development at Spotify’ – Spotify

Google Digital Academy – thinkwithgoogle.com

(Linkedin, 2015 – Masie Conference) – focus on quality rather than quantity

(“Maximizing learning impact: aligning Experience, Exposure and Education” - EFMD 2014

Professor Stephen Heppell - Opening Address - “eyes on the horizon, feet on the ground” (2012)

### Videos


https://www.youtube.com/watch?v=y-e9WMWcdl

‘2020 Shaping Ideas’ – Don Tapscott – Ericsson

https://www.youtube.com/watch?v=6ddyaktyIPU

Seth Godin on Education Reform

https://www.youtube.com/watch?v=UNPOzlWIHA

University of California - Lynda Weinman and the Future of Education in the Digital Age

https://www.youtube.com/watch?v=Ddrmotq0jMQ

(BCG 2015): https://www.bcgperspectives.com/content/articles/financial_institutions_business_uni_strategy_five_trends_disrupting_corporate_banking_landscape/


Schwarmüller, Brosi & Welpe, 2016


Ernst & Young, (2015)– The digitalisation of everything.

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