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CORPORATE RESEARCH FORUM

# BUILDING CAPABILITY THROUGH LEARNING INNOVATION

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# BUILDING CAPABILITY THROUGH LEARNING INNOVATION

The world of learning is undergoing rapid change, driven by:

- The proliferation of new technology such as Generative AI (GenAI), virtual and extended reality, gaming and social media that promise to transform the experience of corporate learning.
- A resurgence in the pedagogical sciences which is providing new insights into how adults learn and how to harness emerging technologies to make learning a more engaging, meaningful and impactful experience.

This paper, sponsored by [IMD](#) and [RHR International](#), provides a summary of CRF events held at IMD Business School on 28-29 April and online on 7 May:

- Explores key trends that underpin innovations in the learning space.
- Considers how we can harness innovation to ensure investments in learning to deliver positive business impact.
- Considers the implications for governance and skills of the learning profession.



## KEY TAKEAWAYS

01

**Technology is rapidly evolving, though the way humans learn is not necessarily adapting at the same pace.** Learning functions need to balance the possibilities offered by technology with the realities of how adults learn, which requires repetition and practice, and the needs of their business.

02

Whilst it's easy to get caught up in the possibilities offered by shiny new technology, it's essential to first ask the question: **what is the business issue we are trying to solve, and how does the technology help us achieve that goal?**

03

**Whilst considering new technologies is important, practitioners should not overlook the recent explosion in pedagogical research.** CRF research shows that effective learning has five key features: it is personalised, experiential, integrated in the flow of work, social and data-enabled.

04

**The more personalised a learning experience is, the more likely that learning will stick.** Developments in learning technology (e.g. learning platforms which use AI to create content tailored to a learner's needs and interests) are bringing the personalisation of learning at scale within reach. The development of GenAI will accelerate this personalisation trend.

05

**The integration of learning tools into day-to-day work and enterprise management systems is a trend that will likely become more widespread.** Microsoft's case study showed how its Copilot AI assistant can be used to support learning and enhance productivity.

06

**Innovation does not necessarily mean technology and AI-enablement is always the optimal choice.** For example, AI-enabled coaching may not be appropriate if the information discussed is particularly private or sensitive.

07

**Organisations should avoid using AI to scale current ineffective or inefficient learning practices** (such as churning out vast amounts of lecture style learnings). The adoption of AI can therefore be an opportunity to return to first principles and focus on redesigning learning approaches.

08

**Adopt a mindset of experimentation.** Consider how to play with emerging technology on a small scale to assess how it might support you in achieving your business goals and to gather evidence to evaluate its impact.

09

**Games and simulations can play an important part in effective learning as they promote interactivity and deliberate practice.** Effective games should be grounded in pedagogical principles, build in adaptive feedback and have a convincing narrative.

10

**When determining their approaches to AI, ethics and governance, organisations should consider the future regulatory landscape of where they operate as well as how they can support employees to maintain relevant skills through moving into different skills areas.** The team who makes decisions about your organisation's approach to AI should also be broader than only including technical specialists.





## BUILDING CAPABILITY THROUGH LEARNING INNOVATION

COMMENTARY

### IMD

The landscape of learning is undergoing its most significant transformation in generations towards learner-centric approaches that are driven by groundbreaking advancements in technology. Artificial Intelligence (AI), Extended Reality (XR), and the capacity for hyper-personalisation and interactivity at scale are not just reshaping educational paradigms; they are redefining the very essence of how knowledge is imparted and absorbed.

At the heart of this revolution is the potential to unlock unprecedented levels of engagement, understanding, and application for learners worldwide.

IMD is at the forefront of the global revolution in education, trailblazing novel approaches to interactivity and hyper-personalisation – principles that are scientifically rooted to achieve the most engaging and impactful learning. Hyper-personalisation tailors learning experiences to the individual's needs, abilities, and interests, making the learning more meaningful and thus significantly enhancing engagement, comprehension, and retention. Interactivity engages individuals in digital environments where they can practice the concepts IMD teaches in classrooms, providing opportunities to foster deeper understanding, hone critical thinking, and gain practical know-how of theoretical knowledge.

To remain competitive, organisations are under tremendous pressure to close skill gaps while attracting and retaining top talent. A major shift in executive education is to empower employees to drive much of their own upskilling through micro-learning opportunities (tools and information) that integrate into the flow of work. Organisations also see the value in interactivity, like games and interactive exercises, with larger percentages of overall learning investment going into games-based options.

A 2023 Deloitte study underscores the emerging trend in executive education to prioritise these learner-centric principles: *"In the future the person acquiring new skills will be at the center of the learning process, with a focus on personalised, integrated, hybrid and lifelong learning."*

At IMD, we believe this future vision for lifelong learning is within reach on a near horizon through accelerated innovation in technology-mediated capabilities.

**Sarah Toms**, Chief Learning Innovation Officer, IMD

COMMENTARY

### rhr

In a recent [webinar](#) with the heads of talent and learning of large, multinational organisations, I brought up the topic of AI in the workplace as it relates to upskilling and training. Michael Ehret, Head of Global Talent Management at Johnson & Johnson, talked about the reality of engaging, managing, and leading a workforce made up of bots, gig workers, and full-time employees. While that reality is a part of many large organisations today, we did have some uncomfortable laughs and deep breaths as we explored the near- and medium-term implications of an organisation that has more artificial and part-time workers than full-time employees.

That is the fundamental question right now regarding the implications of AI in the workplace. The AI context that this paper finds is itself breathtaking. As an advisor to CEOs, senior executives, and boards, I have the privilege of helping our clients explore their most uncomfortable leadership issues. AI is at the top of the list. Just download the apps that are available right now. On my phone, I have ChatGPT (OpenAI), Anthropic's Claude, Pi (Inflection AI), PerplexityAI, Google Gemini, and Sonia (AI cognitive behavioral therapy that is quite good). Start to play with them, as I encourage my clients to do, and you quickly grasp the implications. Of course, many of our clients are forming use cases for AI, especially in areas such as learning and development, marketing insights, customer service areas, and (in the early days) using AI to mine proprietary data. There are many other immediate use cases. But it is more the implications of AI for the medium (three- to five-year) horizon and the longer (10-year) term where the discomfort really sets in. There are questions such as: How fast is it moving? How quickly will any algorithmic role be replaced? When will I be replaced? (Yes, that's a CEO asking that last question.)

Reid Hoffman, founder of LinkedIn, Microsoft board member, and technology investor recently released a conversation he had with his ReidAI, an AI he created with ChatGPT that was also trained on all of Reid's books, articles, blogs, and videos. Here's the link: [ReidAI](#).

Everyone who sees this immediately understands the implications: We are in the presence, for the first time in our evolutionary history, of a new form of intelligence. Every other dramatic historical breakthrough, from the printing press to the internet, served the purpose of democratising information. Now we have a technology that processes and interprets new information at mind-bending rates while simultaneously accessing almost all knowable information. Such a co-intelligence is profound, with many implications, both positive and negative. We can imagine the near-term use cases for training, development, and learning in organisations.

The research that follows in this paper contributes to the now: How do we leverage these profound technologies in the near term to enable efficient and effective learning within our organisations? And stay tuned, since by the time the ink dries on this 'printing,' your AI assistant will have more ways than ever to accelerate your learning journey.

**David Astorino**, Senior Partner, RHR International



## BUILDING CAPABILITY THROUGH LEARNING INNOVATION



### 1.0 LEARNING INNOVATION: PRINCIPLES AND APPROACHES

While learning technology is evolving extremely fast, the way humans learn is not necessarily adapting at the same pace. One of the challenges for learning functions is to balance the possibilities offered by technology with the realities of how adults learn, which requires layering, repetition and practice.

Corporate learning has always had to grapple with the forgetting curve. Unless we make deliberate attempts to retain information or put it into practice, only very small proportions of what we learn is retained for long enough to become embedded in long-term memory.

According to David Astorino, Senior Partner at RHR International: *“Even though AI may get us there quicker, our brains still scaffold knowledge and learning in the same way we always have, and you can’t short-circuit that process. You still have to build the architecture of the brain and that can only be done through practice and repetition. So we end up with a dichotomy: technology can do increasingly sophisticated things, but the way we learn as humans is the same.”*

CRF research shows that effective learning has five key features:

- 1 it is **personalised**,
- 2 **experiential**,
- 3 **integrated in the flow of work**,
- 4 **social** and
- 5 **data-enabled**.



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**BUILDING CAPABILITY THROUGH LEARNING INNOVATION**



Underpinning all of this is the imperative to begin by answering a key question: **“What is the business issue we are trying to solve through learning innovation?”** In an era of rapidly advancing technology, it is easy to get caught up in the excitement of shiny new technology. However, it is our responsibility as learning professionals to make sure our choices about where to invest in learning are driven from the business strategy and support the organisation in developing capabilities needed for future success. Investing in learning innovation should in turn support the business in becoming more innovative and able to successfully deliver its strategy.



**GAVIN MCQUILLAN** is the Head of Learning at NatWest Bank and is based in Edinburgh. Responsible for all aspects of the learning proposition he leads a team focused on unlocking the potential of the organisation by developing and delivering a transformational learning strategy focused on developing colleagues both for the job they do today and the career they want tomorrow. Gavin and the team like to keep things simple and engaging with a clear focus on enabling a culture where people at NatWest are learning and sharing every day.





# BUILDING CAPABILITY THROUGH LEARNING INNOVATION

CASE STUDY 1



## NATWEST GROUP'S APPROACH TO LEARNING INNOVATION

**Gavin McQuillan**, Head of Learning at NatWest, outlined the organisation's learning strategy and how this is driving their approach to learning innovation.

### NATWEST GROUP LEARNING STRATEGY



The overall aim of NatWest's Learning Strategy is to grow the skills to thrive in a rapidly changing world. It has four areas of focus:

- Experience.** Simple, easily findable personalised learning experiences.
- Culture.** Create a culture where colleagues are empowered to learn (rather than just doing what is pushed to them) and share what they have learned.
- Skills.** Focus on skills critical to future business transformation, such as AI.
- NatWest thrive.** Sharing what they have learned by supporting young people in the wider community to build financial capability.

Three principles guide everything the learning function does:

- 1 Impact** – do we actually understand the business impact, or are we just jumping to solutions?
- 2 Quality** – what's the right quality for the right impact?
- 3 Less** – moving away from learning teams focusing on creating new content and overwhelming learners with information, towards helping people find what they actually need.

### LEARNING INNOVATION AT NATWEST GROUP

Examples of learning innovation that NatWest is undertaking, or will soon begin, include:

- Identifying ways of bringing learning to where people are doing their work, rather than sending people to Learning Experience Platforms (LEPs). For example, experimenting with bots that act as the interface to learning systems and people use to search for content.
- Working with a range of partners, including Microsoft, Workday and MindTools, based on the assumption that they cannot do this work alone. They are also working with Filtered, a content curation platform, who are helping NatWest to identify what content they already have which is most relevant (with the aim to save time and money and improve impact).
- Regarding future skills, focusing on the 'why' by communicating with employees why certain skills will be important and encouraging a focus on autonomy and elective learning.
- Using an AI-driven avatar technology that allows users to practise difficult conversations.
- Putting content creation tools such as Synthesia in the hands of subject matter experts so they can create their own learning content.

### RECOMMENDATIONS FOR LEARNING INNOVATIONS

- Consider where new technologies will fit within the organisation's ecosystem.
- Innovation is not only about technology. For example, NatWest has also been implementing reskilling bootcamps to support people to change their skillsets.
- When experimenting with innovative learning approaches, begin with prioritisation – is it going to help us move forward in our key areas of focus? Also acknowledge that it's ok to stop doing things and have conversations with partners about ways they can help you identify solutions.

#### **Q Did you tie elective learning into any reward programmes?**

**A** We considered this, but ultimately decided not to. Instead, we focused on explaining the 'why', which has worked well. This involved going into different areas of the business and having conversations about the direction of future skills, including concrete examples. Role modelling and leadership buy-in were also important.



## BUILDING CAPABILITY THROUGH LEARNING INNOVATION



### 1.1 EFFECTIVE LEARNING IS PERSONALISED

Malcolm Knowles' work on adult learning demonstrated that adults learn best when they focus on subjects that are immediately relevant to them, when learning is self-directed and builds on what they already know. In other words, the more personalised a learning experience is, the more likely that learning is to stick.

Developments in learning technology are bringing the personalisation of learning at scale within reach. For example, learning platforms offer adaptive learning pathways using AI to interpret a learner's needs and interests and serve up relevant content. As RHR's David Astorino observed: "Learning platforms are no longer just providing your learning experience, they are also guiding your learning by recommending a learning path that's unique to you". CRF's recent research on [Coaching: Maximising Business Impact](#) found coaching technology platforms are enabling the democratisation of coaching, making coaching, which is a highly personalised learning modality, accessible and affordable at scale.

We can expect this trend towards personalisation of learning to accelerate with the development of GenAI.



**SARAH TOMS** is Chief Learning Innovation Officer at IMD where she leads the Learning Innovation and AI strategy. Sarah previously co-founded Wharton Interactive, an initiative at the Wharton School that has scaled globally. A demonstrated thought-leader in the educational technology field, she is fuelled by a passion to develop innovative ways to make learning environments active, engaging, more impactful, and learner-centric. Sarah is an AWS Education Champion, and has been on the Executive Committee of Reimagine Education for 8 years. She is co-author of *The Customer Centricity Playbook* – the Digital Book Awards 2019 Best Business Book. She is also dedicated to supporting women and girls in the technology field through her work with the Women in Tech Summit and techgirlz.org.

- ✉ EMAIL
- 📄 SLIDES

#### CASE STUDY 2

## IMD

INNOVATION AND AI AT IMD

**Sarah Toms**, Chief Learning Innovation Office at IMD, emphasised how successful innovation requires effective strategy execution, yet research shows 60-90% of strategies fail due to poor execution. Therefore, it is critical to first be clear how you will execute your strategy before entering the AI or innovation space. For IMD, their learning innovation mission includes 'pedagogical innovation that enables personalised, highly interactive, and deeply engaging learning'.

In 2023, IMD created an app which allows learners to access faculty expertise after their classroom learning had finished, using AI to drive personalisation and interactivity.

In order to meet these objectives, the app included the following features:

- Users can access the broader corpus of IMD knowledge, such as research, webinars and podcasts. This adds depth to classroom topics and centralised expertise which is often siloed.
- The IMD ChatGPT function answers follow-up questions using information from both faculty-led sessions and broader institutional knowledge. This supports continuous engagement and prevents learning from being a one-time event.
- Based on the pedagogical sciences, IMD added an AI-driven art reflection activity to the app. This guided learners through a reflection process, after which they could use AI to create an image representing their learning to support long-term recall.
- Users can share links and collaborate with each other through the chat interface, supporting social learning.

This tool has led to longer-term engagement with classroom learning and has been globally recognised. IMD are also now scaling this AI-enablement to their entire MBA, EMBA and Open Enrolment programmes.

#### KEY TAKEAWAYS

- Be agile, starting with small pilots to test and learn. IMD rapidly experimented, designing several versions of the app before creating one that was successful. This approach allowed IMD to create the app in six weeks.
- AI-enablement is not always the best choice; IMD decided not to make certain sessions AI-enabled, such as where personal information is shared or for coaching sessions.
- Learning and perfecting as you go is important. IMD are continuing to improve the app, such as developing nudging journeys with simple AI coaching to encourage post-event follow-up.





## BUILDING CAPABILITY THROUGH LEARNING INNOVATION



### 1.2 EFFECTIVE LEARNING IS EXPERIENTIAL

A key principle of learning is that adults learn most effectively through experience. Learning that provides people with opportunities to apply their learning immediately or experience situations in visceral ways is more likely to overcome the forgetting curve. Kolb's learning cycle explains how this works: people have a concrete experience of learning; through a process of observation and reflection they derive meaning from the experience and conceptualise how to apply their learning in a novel situation; active experimentation allows them to apply and reinforce the learning in practice.

Engaging learners in multiple ways, creating a degree of discomfort or challenge and putting learners in unfamiliar situations which replicate real-life scenarios are all ways of

stimulating learning. Some organisations are using virtual reality to recreate real-life scenarios. For example, a UK water company's corporate university uses VR headsets to put water engineers in typical scenarios they will face on the job. This allows them to practise and hone their skills in a low-risk environment.



### 1.3 EFFECTIVE LEARNING IS INTEGRATED

CRF's research finds that one of the biggest barriers to learning is carving out the time and space for learning. Finding ways of integrating learning in the flow of work is one way to overcome this challenge.

CRF's research *Reskilling for Sustainable Growth* found that successful reskilling programmes combine learning modalities such as formal, structured and self-directed learning as well as practice including individual work experience and group projects. They tend to use jobs and other work opportunities in a planned and deliberate way as a vehicle for learning.

Innovations in talent technology are supporting this approach. For example, some organisations are using their internal talent marketplace platforms to offer relevant jobs or project roles to learners who are following a defined learning pathway to develop the skills required in a new role or achieve accreditation in a new field. ABN AMRO's Smart Jobs allow people to experience a new position on a temporary basis before committing to a full-time move. Smart Jobs tend to be project-based roles that give people an experience of what a job in that part of the business would entail.

Another trend that we expect to become more widespread is the integration of learning tools into day-to-day work and enterprise management systems. Microsoft's case study showed how its Copilot AI assistant can be used to support learning and enhance productivity (see below).

CASE STUDY 3

IMD

SPHERICO2 GAME AT IMD

IMD is already using augmented reality in some of their learning programmes, such as SpheriCO2 – a game which supports organisational and team leadership development. In this immersive game, players assume the role of Greentech scientists working to avert an environmental disaster. The use of augmented reality helps the game to be both memorable and impactful.

The game mechanics have been carefully designed to uncover critical lessons in areas such as organisational excellence, high-performing teams and individual leadership. Through safely putting users in a crisis situation, the game can be used to identify what personality traits participants display when responding to stressful situations.

The next step for the game will be to leverage Large Language Models (LLMs) in the game development process. LLMs are capable of understanding and generating text, and could be used to create a more adaptive game where users' personalities and knowledge inform a game designed for a particular learner.

## BUILDING CAPABILITY THROUGH LEARNING INNOVATION

CASE STUDY 4



### BUILDING CAPABILITY THROUGH LEARNING INNOVATION AT MICROSOFT



**BRIAN MURPHY** joined Microsoft in 2022, leading efforts to re-imagine career development for Microsoft's Commercial Sales organisation (60,000 globally) – supporting colleagues to adapt and thrive by harnessing the power of skills and a pervasive learning culture. Previously as the Global Head of Learning & Enterprise Capabilities at AstraZeneca, he led a Learning Transformation programme, built an Enterprise Learning team, and led the implementation of a new approach to Performance Development. This coincided with the company's journey to develop and manufacture a global vaccine for COVID-19.



**ANCA IORDACHE** is an experienced Learning and OD professional, in charge of Career Development Programmes as part of the Microsoft Employee Skilling Team. Anca supports leaders and teams to reimagine the way we connect, work and learn. She creates value by co-creating human-centered experiences and learning environments that enable knowledge flows and people growth. Anca previously led the Future of Work Global Practice for Citi Learning.



**Brian Murphy**, Senior Director, Employee Skilling at Microsoft and **Anca Iordache**, Career Development Programs & Activation Lead at Microsoft, outlined how Microsoft are building capability through learning innovation, beginning with outlining Microsoft's mission: *to empower every person and every organisation on the planet to achieve more*. Internally, Microsoft wants to support 'thriving employees', defined as employees who are energised and empowered to do meaningful work.

#### DIGITAL DEBT – THE FUTURE OF WORK?

As part of their [2023 Work Trend Index](#), Microsoft interviewed 30,000 professionals and used billions of data points across Microsoft 365 to explore what the modern world of work looks like. The research found that the largest productivity disruptor for workers is inefficient meetings. Additionally, nearly 2 in 3 people said that they do not have the time or energy to do their jobs, which is impacting their ability to think innovatively. We are all carrying digital debt – the inflow of data, emails, meetings and notifications which have outpaced humans' ability to process all this information. In summary, workers need to be more innovative than ever, and yet work design is blocking people's ability to be innovative.

#### COPILOT: DEFINITION AND APPLICATIONS

Microsoft hopes that Copilot – a new AI-powered interface – will help address digital debt at organisations. Copilot differs from ChatGPT and similar tools in that it has access to up-to-date internal information.

Copilot interactions are private to the individual and Microsoft emphasises that it is 'Copilot not Auto-Pilot'; the human user is ultimately in control. Tasks that Copilot can help with include:

- 1 Prepare for a meeting through summarising customer communications across different mediums and creating a meeting brief.
- 2 Summarise a meeting, including key points and action items.
- 3 Generate a presentation on a given topic, using logical flow and branded templates.
- 4 Send a follow up email to a meeting.

Initial data shows that Copilot has had a positive impact on productivity, creativity and use of time. A study across a range of early adopters found that 70% said they were more productive and 77% said they didn't want to give it up. It also took around 11 weeks of consistent utilisation for users to see improvement in productivity, meeting relief, work enjoyment and work-life balance. Access to the tool can also assist talent attraction and retention: after 11 weeks of using Copilot, 54% of early-in-career employees said that access to Copilot would affect their choice of employer.

#### COPILOT AND EARLY-IN-CAREER EMPLOYEES

Early-in-career employees have not experienced the workplace without AI-powered tools such as Copilot. Therefore, focusing on their experiences and use cases can help illuminate the future of work and ways that it can be re-designed.

For example, Microsoft Copilot M365 and Copilot for Sales adoption are currently top priorities for Microsoft's Digital Sales leaders, who want to increase seller productivity and are in the early stages of measuring the impact of AI solutions on productivity. Microsoft wants to build a talent pipeline of Microsoft AI-enabled champions and, through examining early-in-career employees, have identified three potential steps to support this:

- 1 Drive Copilot AI adoption and embed a seller mindset across early-in-career employees by disrupting the status quo and enabling new ways of working.
- 2 Identify the skills required at each career stage and understand what that means for working with Copilot and AI.
- 3 Provide feedback to the product team so they can continue to evolve and optimise seller AI experiences.

#### KEY TAKEAWAYS

- 1 Generative AI is transforming work. Building a daily habit with Copilot (using appropriate guardrails, such as starting small and focusing on low-risk tasks) can help employees to keep on top of their digital debt.
- 2 Copilot can be a competitive talent-attraction tool.
- 3 Focusing on the experience of early-in-career employees can help to redesign the workplace.



## BUILDING CAPABILITY THROUGH LEARNING INNOVATION



### 1.4 EFFECTIVE LEARNING IS SOCIAL

Learning has always been a social activity – we learn better when we can reflect and practise with others. One of the opportunities for innovation in learning is to use technology to design and facilitate learning communities, connect learners with each other and establish mentoring and peer networks to support people in consolidating their learning and to learn from each other.

For example, HP's skills communities enable people from different parts of the organisation and in different geographic locations to share best practices, collaborate on solving technical and sustainability challenges, and offer coaching and mentoring to help each other improve their practice.



### 1.5 EFFECTIVE LEARNING IS DATA-ENABLED

Organisations and learning functions are swimming in data. Both structured data (business performance data, course participation and completion rates, etc) and unstructured data (social media posts, meeting transcripts) can be mined to improve the process of developing and executing the learning strategy. Using data to understand business needs and predict demand, tailor offerings to business requirements and evaluate of the impact of learning on business results are all opportunities to improve the effectiveness of learning.

CRF's research on [The Future of Learning](#) argued that the future of learning needs to be evidence-based. It also found that only 15% of companies consistently evaluate the outcomes of all learning activities. Our research suggested four actions to become more evidence-based in learning:

- Start by diagnosing the business problem before offering a solution.
- Triangulate multiple data points when assessing business needs and evaluating impact.
- Use experiments as a way of collecting evidence about the effectiveness of interventions before rolling them out more widely.
- Engage with business stakeholders to get their buy-in and share results.

Advances in technology mean that every role in the learning field is now a tech job, and learning experts also need to develop data expertise. This is a key challenge for the future of the learning function.

#### KEY TAKEAWAYS

In considering the impact of innovation on the learning function, our session explored two key takeaways:

- ⚙️ Make sure you're not looking through the wrong end of the telescope. It's easy to get caught up in the possibilities offered by shiny new technology. However, it's essential to first ask the question: *what is the business issue we are trying to solve, and how does the technology help us achieve that goal?*
- ⚙️ Adopt a mindset of experimentation. Consider how to play with emerging technology on a small scale to assess how it might support you in achieving your business goals and to gather evidence to evaluate its impact.

## BUILDING CAPABILITY THROUGH LEARNING INNOVATION

### 2.0 LEARNING INNOVATION: PRACTICAL APPLICATIONS AND CONSIDERATIONS



### 2.1 INNOVATION, EXPERIMENTATION AND GEN AI

**Sarah Toms**, Chief Learning Innovation Office at IMD, provided an overview of GenAI, emphasising how it is rapidly changing the world of work and how it can be a driver of innovation and experimentation in learning:

- 1 Technology is becoming integral to all working roles; World Economic Forum research recently highlighted that every job is rapidly becoming a tech job.
- 2 The creation of GenAI is particularly significant as it is the first time that computers can create novel content such as text, video, images. This is one of the areas where GenAI currently excels, alongside other functions such as personalisation, language translation and localisation and innovation in creative fields – all of which can be applied to learning.
- 3 Whilst GenAI does not currently have good functionality in certain areas (e.g. understanding nuance, consistently generating factually accurate information and interpreting real world sensory data), this is a rapidly evolving field and GenAI is constantly improving.
- 4 A key challenge of GenAI is when it 'hallucinates'; generates responses that are factually incorrect, nonsensical or not grounded in reality. However, when used intentionally, AI hallucinations can be used to drive innovation through creating ideas that have not previously been considered.

#### WRITING AI PROMPTS

The following guidance, created by IMD's Professor Michael Watkins, can be used to more effectively leverage GenAI through writing effective prompts:

- 1 **Be clear and specific.** Think of yourself as a leader or coach who gives the model guidance and then checks their work.
- 2 **Provide relevant context.** E.g. rather than simply asking 'for an email about a conference', add the specific required details.
- 3 **Strike the right balance with length.** Whilst it is important not to be vague, providing excessive or redundant information can cause confusion.
- 4 **Iterate systematically.** Once you receive an initial response, you can ask for additional ideas or ask the tool to adjust its responses. Asking for an extensive list of responses (for example ask for 50 bullet points that the human user edits down to 10) can be a helpful way of creating more innovative ideas.
- 5 **Use the 'Act As' Method.** E.g. 'act as a marketing executive...' or 'act as an expert in...'
- 6 **Probe deeper through AI chat.** Ask it to elaborate and provide examples.
- 7 **Consider examples of case specific prompts.**

**Q** Is there a danger of AI causing people to get 'lazy' with learning?

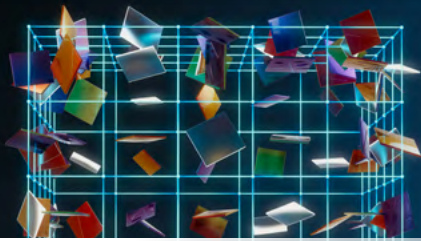
**A** I do have concerns about laziness; learning requires flow and concentration and we still need to push ourselves out of our comfort zone to learn. However, AI-enabled games will be much better at assessing where participants' learning 'lever' is and then moving them to the level they should be focusing on in order to increase their understanding.

**Q** E-learning is often used poorly, with outcomes measuring the completion of an activity, rather than learning itself. How will you ensure online learning leads to actual learning?

**A** This is where the intersection of tech and creativity is really important to make sure the way we consume education is engaging. This could include working with writers, artists or videographers in order to create learning activities. Learning should speak to all our senses and creating a narrative will make the information more memorable. Changing the modality of how you collect feedback from the user can also help (e.g. asking users to summarise their learnings out loud, which encourages users to start interacting in different ways, encourages recall and takes them away from repetitive clicking).



## BUILDING CAPABILITY THROUGH LEARNING INNOVATION



### 2.2 INNOVATION IN EDTECH: SWISS EDTECH COLLIDER

EdTech (Education Technology) leverages IT and technology to enhance learning outcomes. It is a booming market globally, with both the EdTech market and the AI in education sector witnessing rapid growth in recent years.

The European EdTech Alliance – which works with 2600 EdTech organisations across Europe – can help learning providers navigate this space. It provides a searchable database where users can find different EdTech solutions.

Swiss EdTech Collider is one example of an organisation in this growing space. It is a not-for profit association founded in 2017 with a mission to create 'new innovative technologies to shape the future of learning and to support the digital transformation in education in organisations and the society at large'. It creates 'collisions' between different stakeholders to create new innovations and – unlike an incubator or accelerator – acts as a long-term partner. Activities it offers include:

- EdTech focused co-working space
- Peer-based sharing of learning and expertise
- Demo and pitch days, pilot projects and academic validation of innovations.

To highlight what is possible in the EdTech space, two example EdTech startups who have worked with the Swiss EdTech Collider are outlined below.

Edisconet has partnered with an app (Memoro) which helps to process and document this silent information. Till Schneider, CEO of Memoro, outlined how Memoro transcribes and processes this information through audio recordings, helping users to document and analyse complex information. Use cases include tradespeople recording initial talks with customers to document their client's needs, or creating voice notes to help distil thoughts. The advantages of Memoro include:

- Listens more objectively than humans and therefore makes fewer mistakes.
- Helps users to focus and stay in the moment.
- Increases efficiency for employees who spend a lot of time documenting information.
- Aggregates data, which can drive greater personalisation.
- Provides top management with 'on-the-ground' knowledge.

The development of Memoro also highlighted the following insights about EdTech development:

- The importance of experimentation and testing on the user. User data can then also be used to inform decision-making.
- The creation of a low/no code front-end app which allows the team (including non-technical experts) to experiment with app functionality.
- Self-improving systems which can use collected data to improve the system.

For further information (including a trial QR code), please refer to the [event slides](#). A post-event collaborative workspace, where learning professionals can connect and reflect on topics emerging from edisconet's presentation at IMD Business School, is also available [here](#).

### HAZU Hazu

**Hazu** aims to counteract a key risk of the use of AI in learning – that AI will just scale current learning inefficiencies (such as vast libraries of content that are not well-utilised, or online training videos that users do not complete). Therefore, rather than just scaling analogue processes, Hazu supports way of rethinking the overall learning design. Hazu is a cloud platform that allows multiple educational processes and interactions within one tool, with features including:

- A highly visual and simplified way of sharing content. Through functioning as a live link, it can be updated in real time and users can easily switch between different modalities (e.g. text to a presentation). This saves times and means users can focus on what's really important, such as the content itself or how to engage people with the content.
- Several different experiences or tools (e.g. a word doc script, a presentation, or a video) are all combined in one place. Bringing together all content in one platform helps to increase engagement.
- Built in feedback loops where users can ask questions, view others' questions and vote on the most relevant questions.
- A chat function where users can ask questions of a LLM-powered chat bot. This is powered by ChatGPT as well as other AI models, allowing users to switch between the models which best meet their needs.

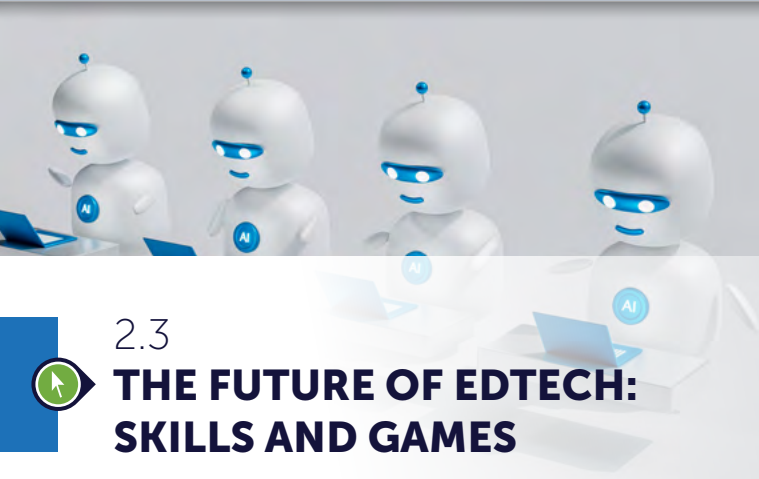
Click the [link](#) for further information and a demo of Hazu.

EDISCONET



Dirk Zimansky, CEO of **edisconet**, outlined how edisconet uses AI to promote collaboration and learning and simplify today's complex learning landscape. As well as working across virtual coaching, collaboration and tutoring, the platform also focuses on capturing 'silent knowledge'; the employee knowledge which is not written down or meaningfully documented. As employee knowledge determines much of an organisation's value, it is important to protect and document this silent knowledge. This is particularly critical in today's business context when job roles change quickly and employees have shorter terms at organisations.

## BUILDING CAPABILITY THROUGH LEARNING INNOVATION



### 2.3 THE FUTURE OF EDTECH: SKILLS AND GAMES

#### AI AND THE FUTURE OF JOBS

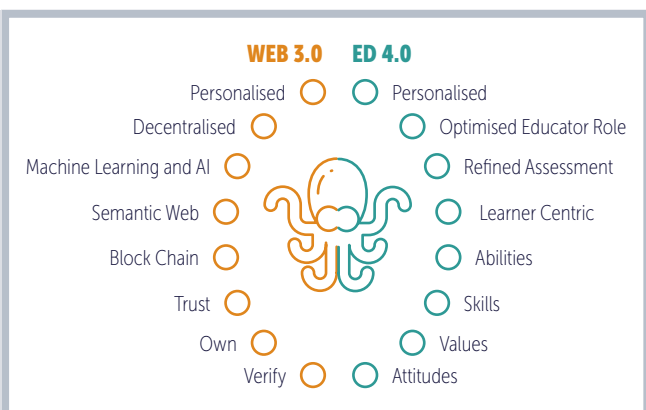
It's likely that AI will follow a similar job-creation pattern to the internet and personal computers – eliminating some jobs, but net creating a far larger amount. This re-imagining of jobs will not be immediate, with organisations needing now to consider what jobs will be created over the next 5-10 years and what skills will be needed.

#### EDUCATION 4.0 IN WEB 3.0

Education 4.0 is the next frontier of education. Whilst there is no universally accepted definition, it depends on decentralised applications and extensively uses blockchain technologies, including to provide secure and trusted storage of credentials and qualifications. The World Economic Forum defined Education 4.0 as "a teaching and learning approach that focuses on providing learners with the abilities, skills, attitudes and values fit for the future".

Web 3.0 has not yet been fully realised, but will make use of machine learning and AI to be more adaptive. Whereas Web 1.0 was based on reading text and Web 2.0 was based on personalisation, decentralisation, ownership and rewriting.

Education 4.0 and Web 3.0 have certain overlaps, such as personalisation. Combining the two should reduce manual processes and allow more time for community and relationship building.



#### USING GAMIFICATION TO SUPPORT LEARNING INNOVATION

Interactivity and the opportunity for deliberate practice are an important part of effective learning. Therefore, games, simulations and role playing can form an important part of the learning journey. Considerations for designing learning games include:

- 1 Rules and objectives should be clear so players are aware of the parameters of the game.
- 1 Consider appropriate fidelity – the concept that it is preferable to place participants in a completely different context to their role so that they are not distracted by minor details which do not reflect their reality.
- 1 Build in adaptive feedback.
- 1 Ensure the game is grounded in pedagogical principles.
- 1 Consider practice objectives as well as learning objectives – how is the learning physically represented so that learners will know better what to do when they encounter the same challenges in the real world?
- 1 Assessment and development are often viewed as separate, when really they are two sides of the same coin. Consider how tools can be leveraged in assessment.
- 1 Have fun!

#### LEARNER CENTRICITY PRINCIPLES

The growth in tech should not overshadow developments in pedagogical sciences. Over the last 10 years there has been explosive growth in pedagogical research. Integrating the below into learning journeys can all help to overcome the 'forgetting curve':

- 1 **Knowledge effect:** Learners can't build new knowledge into complex thinking without first having a fundamental understanding of the basics. Games should begin at a lower level, allowing those who are struggling to receive support and advanced players to quickly move up to a higher level.
- 2 **Personalised instruction.** Consider prior knowledge and challenges then calibrate support.
- 3 **Learning through story.** Creating narratives helps information to be more memorable.
- 4 **Evidence-based approach,** focusing on reflection and repetition.



## BUILDING CAPABILITY THROUGH LEARNING INNOVATION

**Sarah Toms** has developed nine learner centricity principles that underpin IMD's approach to learning innovation:

- 1 Fosters inclusive, accessible and representative learning environments
- 2 Has well articulated and measurable Pedagogical and Epistemological goals
- 3 Contains personalised and adaptive learning pathways
- 4 Provides safe environments to learn through struggle and failure
- 5 Incorporates the principles of deliberate practice
- 6 Prioritises active modes of learning over passive modes
- 7 Measures impact demonstrably with respect to improved behaviours, skills, knowledge and competencies
- 8 Drives engagement through agency, consent and playful immersion
- 9 Fosters peer-learning through team and community engagement.

### START-UP GAME

**Sarah Toms** led delegates through an interactive game as an example of applying gamification principles to learning. The game teaches entrepreneurship principles through giving learners the experience of being founders, employees or investors in a startup. This game was designed at Wharton Business School and has had nearly a million players. Click [here](#) for further information.

### CASE STUDY 5

## EZRA

### EZRA COACHING

**Nicolas Ceasar**, Head of Senior Leadership Development and Coaching Centre of Expertise, NatWest Group, as well as Board adviser for EZRA, outlined how learning innovation does not necessarily mean stopping established, 'analogue' learning methods. Instead, it can mean applying technology at scale and enhance analogue methodologies, such as coaching. As Ceasar said: *"in with the old and in with the new."*

EZRA Coaching is one example of this approach. It is a tech-enabled coaching platform that provides a consumer-grade user experience and allows organisations to quickly reach the end-user. This is particularly useful as current L&D approaches cannot keep pace with the rate of skills change – development and deployment time for traditional learning initiatives are slower than what is required. Leaders are also struggling to find time to do their jobs, let alone dedicate time to their development. A more agile and scalable approach is required to keep pace and deliver development where and when it's needed. An example of how EZRA coaching has been applied in practice is outlined below:

- A global financial services organisation wanted to develop coach-like behaviours within their leadership teams. Traditionally, coaching was used for their executive populations and the organisations aspired to take coaching deeper into their organisation.
- EZRA launched a three-month programme across six global locations. Of 160 senior leaders at a global bank, half were provided with tailored executive coaching for a period of three months. This included unlimited coaching and practising coaching skills with their direct reports. For the other 50%, it was business as usual. Both cohorts, each responsible for the performance of 1,000 employees, tracked and measured their business outcomes periodically throughout the coaching intervention.
- Both teams' performance showed minimal signs of improvement in the first month of implementation. However, after six weeks, leaders that received executive coaching had begun to outperform their peers.
- By the end of the programme, a productivity gap (focused on customer satisfaction) of 18% had emerged in teams led by coached leaders versus those led by their uncoached counterparts.



SLIDES

**NICOLAS CEASAR** is an executive and team coach and OD consultant. He has made his career helping leaders to learn, grow and succeed in times of personal, organisational and societal challenge and change. Currently he is Head of The Senior Leadership Development and Coaching Centre of Expertise for NatWest Group where he is responsible for the development of the most senior leaders and leadership groups in the organisation. He is a board adviser for Ezra, a tech enabled coaching democratisation service and platform. Prior to this he was a member of faculty and a consultant for Ashridge Business School.

## BUILDING CAPABILITY THROUGH LEARNING INNOVATION



### 2.4 AI ETHICS AND GOVERNANCE

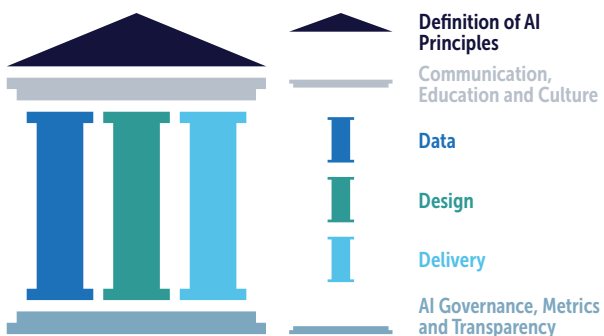
**Sarah Toms** emphasised the importance of ethics and governance considerations in using AI. For example, IMD undertook the following steps in developing its approach to AI:

- Before starting any AI implementation, IMD first created nine AI principles: Ethical & responsible; Secure & Private; Human Centric; Explainable & Transparent; Inclusive; Build vs Buy; Continuous Improvement; Be Brave; Sustainable.
- Nominated an AI Steering Committee which meets every month and has a clear mandate about what is in their scope and what is not.
- Created an AI Governance House Model which adapted their existing DEI house model.

Organisations should consider the following when designing their own approaches to AI, ethics and governance:

- Look at the future regulatory landscape of where you are based to ensure you are future ready.
- Don't only include tech specialists in conversations about AI. The team who makes decisions about your organisation's approach to AI should be broader than just technologists.
- Consider long-term talent development journeys – how will different skills develop and how can you support people to maintain relevant skills through moving into different skills areas?
- Don't overlook the environmental impact of technology. Technology is consuming 7% of the world's electricity and LLMs are using vast quantities of water to cool their infrastructure. Therefore, consider what is the right tool for the job, and whether it always needs to be an LLM. Remember that older technologies still exist and work well in many ways.

#### THE AI GOVERNANCE HOUSE MODEL



Source: Adapted from the DE&I House Model. AI = Accountability & Inclusion; Cairns-Lee, Işık, Toms, van Zanten, I by IMD March 2024



## BUILDING CAPABILITY THROUGH LEARNING INNOVATION

### crf UPCOMING EVENTS

 INTERNATIONAL CONFERENCE:  
**Applications and Implications of Emerging Technology**  
[Monday 7 – Wednesday 9 October](#)  
[In-Person, Valletta, Malta](#)



Register →

### crflearning

ON DEMAND COURSE  
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Unlock the revolutionary potential of AI that is transforming the way we live, work and learn. Embracing AI can enable greater efficiencies and an enhance employee experience. This course *Artificial Intelligence: Implications and Applications*, equips you with the knowledge and skills necessary to integrate AI into HR workflows, enabling better informed decisions, driving organisational growth and seizing the competitive edge.



PRE-EVENT MASTERCLASS:

**AI in Coaching: Exploring the Possibilities and Limitations**  
from [RHR International](#)

Were you unable to attend this masterclass or would like to access the materials, please contact [Mette Stern](#), CRF Partner Engagement Manager.



 LINKEDIN

For over 20 years, **DAVID ASTORINO** has applied expertise to complex client engagements, aiding CEOs and boards in navigating organisational change. A catalyst for creativity and transformation, David fosters leadership strategy and business resilience. He partners with CEOs to adapt leadership approaches to current needs, prioritising human performance. In today's world, with challenges like climate change, economic shifts, and AI, enlightened leadership is crucial. David aims to empower leaders with integrity and humility, guiding them to own their power within their organisations. Through his vision, David seeks to cultivate emotionally attuned leaders capable of driving positive change.

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