PART 6

Digitalisation of the built environment

Stimulating the demand for skill

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This is the final article in a series of six that have been specifically designed to inform, support and assist industry and individuals within the built environment to embrace, engage and map their individual digital transformation journey. In the first three articles we detailed the tools required by industry to build their digitalisation pathway. Articles four and five mapped the cardinal points on the sat nav for the journey, and in this article we look at how to stimulate demand for skills training to populate the journey, motivate industry and the learner, inspire engagement, ensure they continue the journey, and motivate and ensure that all the passengers stay the course.

Continuous Learning
In meeting the demands of today's forever-advancing technologies, it is more necessary now than ever that staff engage in a continuous learning process to remain skilled in their jobs and stay abreast of the technological advances. Continuous learning is made possible by the advances in digitalisation that enable the process to address the social and democratic parts of the learning process, thereby empowering the learner to engage.

Continuous learning is a process whereby the learner chooses where, when and how to engage. They are in charge of the process, deciding on their own engagement, developing their own learning pathway, and creating a learning paradigm in balance with their home and work life.

Stimulating demand
One of the most significant challenges faced on this skills journey is how to stimulate industry and the individual learner so that both enjoy the benefits from differing perspectives of the results spectrum. For industry, the results of a better-skilled and better-equipped workforce can be measured in enhanced competitiveness, reduced downtime, increased productivity and significant agility. For the individual learner, the results of upskilling must be apparent, satisfying and meet a need.

The challenge is to ensure that industry and participants are stimulated, stay engaged, and consequently secure and share the skills advantages and opportunities presented. Industry and the workforce need to navigate the digitalisation pathway together to ensure commercial growth, individual gains and shared success.

Continuous learning is key both for industry and the learner and is critical if industry is to remain competitive with staff effectively deployed. In today's world, the learning process takes place outside of the traditional classroom. As developed in the BIMcert (https:// energybimcert.eu/) and ARISE (https:// www.ariseproject.eu/) projects, comprehensive engagement with the learner is paramount. Digital learning, micromodules and micro credentials are the new pathways employed to achieve this level of interaction, facilitating acknowledgment and recognition of the achievements and specific task-based skills of the learner.

Digitalised training
Digitalisation has facilitated the process of continuous learning and ensured that it is now an important part of a person's life journey, helping to ensure that learners are continuously upskilled in the latest techniques and, in turn, ensuring that their company remains internationally competitive.

The development of "chunking down" courses into micro modules of short duration, developing gamification techniques that reward the learner's progress with credits, including CERTcoin (the crypto currency of learning) that can be exchanged for digital badges or micro credentials, creates a demand/ reward window that maintains learner engagement and avoids the learner becoming distanced.

In short, the application of digitalisation is revolutionising the learning process. It allows companies to deliver learning in a box.

Democratised learning
"Democratising" the learning process allows the learner to set the pace and direction, improve their skills and maintain continual engagement.

By adapting a new learning approach where the learner is in charge, we enable the learner to transition to a new normal. They are now leading their own journey and, as such, are proactive in taking short career-orientated courses at their own time and pace.

Social learning
This new social learning process is an alternative to the traditional upskilling of professionals. The aim is to engage with the learner on their own terms. To meet the needs of the learner it is critical to ensure learning is integrated into their work/life balance, enabling them to fit it into their own time and location frames. This means it is no longer an "add on" that becomes a burden.

While this flexible learning process lessens the time and location burdens of learning, it also overcomes the financial barriers that prohibit learners from engaging. Just as the modules are broken down into micro parts, the costs are also split. This micro approach overcomes many of the previous time, location and cost barriers that previously prohibited learners from engaging. It also meets with support from industry. No longer do they have to "release" staff for days or weeks on end to attend courses or training. The learner selects the task-based modules they need in delivering their work, the learning process is integrative and, as such, designed to achieve a work/life/ learning balance.

Through continuous industry alignment via the Skills Strategy Compass, the ARISE project is developing a skills training/job requirements architecture where the courses are not only task-based but will be further enhanced to allow for user-generated content, thus bringing the construction lessons directly from the site into the learning.

Engagement and motivation
The ARISE project is designing content and the learning process to activate and stimulate learning behaviour, including steps to:
1. Stimulate engagement through ease of access financially and in commitment terms;
2. Use gamification, develop processes that are aligned to the learner's behaviours;
3. Give learners every reason to return, ensure and include self-fulfilment;
4. Ensure that the process is not a "sheep dip", a one-off;
5. Develop user-generated content (UGC or learner-generated content) to help influence engagement and increase conversations and platform traffic;
6. Question-based learner reinforcement enabling users' expectations and information-seeking activities to co-evolve with the increasing sophistication of the digital learning resources;
7. Tailor learning recommendations and provide tailored feedback to help reduce the "learning friction" and psychological barriers that prevent learners from continual engagement.

Conclusion
Identifying the main problems faced by the construction sector – including hesitancy to engage in the digitalisation process, diffidence to innovate and resultant skills shortages – are part of addressing the issues. However, finding solutions to the issues is more important and difficult to execute, especially when the issues have associated solutions.

It is vital in addressing these issues that the proposed solution engages with all actors in the process, and creates a skills environment that provides a methodology that recognises the need to address the differences.

The ARISE skills process engages and stimulates the demand for skills in construction across the audience spectrum. Through the development, up-scaling and combination of a range of digital tools and initiatives, the project is revolutionising the skills process utilising digitalisation to remove any barriers to continual upskilling, and also enabling the user to take charge of their learning journey. In short, the project is about enhancing the skills taxonomy and creating a new skills pathway for all. ∎