

THE ROAD TO OMNI-LEARNING

How Digitalization Is Changing the Way Executives Learn

By GIUSEPPE AURICCHIO and EVGENY KÁGANER

ou rush to your office to log in to "Reaching New Heights," the online executive development program that your boss nominated you for. Unfortunately, the plug-in you need to run the program fails to download: your corporate firewall prevents access. You hurriedly switch to your personal iPad, but by the time you log in, you've missed part of the discussion. Not to worry: you're told a recording of the entire session will be made available afterward. In any case, the audio quality is poor, with lots of background noise.

Later in the day, you check the program site. To your surprise, the class roster is only a list of names, as most participants failed to upload their details. You look them up on LinkedIn and send them a note to say hello.

As part of the program, you're asked to state your learning objectives. You can't recall what your boss told you, so you open your Personal Development Plan and copy what's there. You also notice the program will involve a team project. "I hope it doesn't add too much work," you think. You print out the schedule. You see the executive coach assigned to the program has already posted feedback on one of the themes, "Managing Globally Distributed Teams." Your mind wanders off to a related article link.



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During your train commute home, you attempt to pick up the recording of the morning session, only to discover that the Web stream isn't compatible with your mobile device. You shrug your shoulders, figuring that if the content were that important, it wouldn't require such effort to access it.

This story may sound familiar. As technology pervades our lives, its use in professional development has steadily grown. Yet, for many learners, the reality can be frustrating, falling short of the seamless experiences they've grown accustomed to with other digital products and services. Technology undoubtedly affords new possibilities; at the same time it puts stress on existing systems and infrastructures. Unless companies learn how to make the most of the opportunities, situations like the one described will not improve.

In this article, we share the thinking that is guiding our experimentation at IESE to create new pedagogical models and approaches. At its core is a deep reflection about how digitalization – defined as the diffusion and assimilation of digital technologies into all aspects of daily life - is transforming industries in general, and learning and development in particular. We contrast these changes with research on current executive development experiences. This research suggests that companies must urgently upgrade their competence with respect to the latest tech-

EXECUTIVE SUMMARY

In the same way that technology is facilitating entirely new experiences from shopping to collaborative working - there is a growing realization that digitalization can enable a radically different way of learning with respect to executive development. To leverage this opportunity, we must move beyond merely adding an online component to traditional face-to-face learning (blended learning). Instead, we must embrace a more integrative approach that seamlessly links the contexts where

learning takes place - be it a classroom, the workplace or a customer's premises - to achieve a state the authors call omni-learning. This will disrupt many of the current systems in place, forcing a shift from instructional design to learning experience design. As such, professional development goes from being an aggregation of distinct activities to becoming a continuous journey guided by data-driven insights. For Chief Learning Officers, the effort will be considerable but infinitely more rewarding.

nologies if they are to meet learners' most basic expectations for a modern learning experience.

This is a bolder call than blended learning - merely integrating online with face-to-face learning. It's about leveraging digital tools to create a new conception of learning, which we refer to as omni-learning.

Omni-learning takes the idea of continuous education to a whole new level - whereby professional development occurs anywhere, anytime, as an everyday journey integrated into executives' daily activities and informed by personalized, data-driven insights. This vision goes beyond technology itself, implying a fundamental shift in the way learning is designed. As such, omni-learning represents another example of the transformative effect of digitalization on consumer experiences across all industries and contexts.

Despite Digital Transformation, Doubts Persist

From shopping for groceries, to controlling home heating, to staying in touch with family and friends, to collaborating on projects: our lives increasingly integrate two worlds, offline and online. As highlighted in Issue 18 of IESE *Insight*, the ever growing density of our digital connections and the "datafication" of our daily activities is blurring the boundary between these two worlds and, in some cases, removing it completely. Indeed, we are starting to live "blended" lives, where physical experiences are seamlessly intertwined with and enriched by digital interactions, creating new ways for people to relate to each other and their world.

The consequences of this are being felt across a wide range of industries. From transportation to banking to retail, companies are scrambling to rethink and retool their processes, skill sets, organizational charts and infrastructures to keep up with evolving customer behaviors and expectations.

In learning contexts, the idea of "blending" is not new. Combining traditional face-to-face classroom lectures with some form of technology-based training to enhance the learning experience has been around since at least the 1960s, first with cassettes, then with videotapes, television and, most recently, the Internet. Consequently, one might expect that the heads of learning and development in corporations today would be less panicked and more prepared than



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others to take advantage of the opportunities that digitalization offers.

Our research indicates otherwise. In 2014 we conducted in-depth interviews with senior learning-and-development professionals, inquiring how they used blended learning in executive leadership development. The sample included representatives from flagship global companies in North America and Europe. We found these leaders largely doubted the suitability of blended learning for executive-level courses, implying that many organizations either aren't inclined or are ill-prepared to change their existing learning models, for the following reasons.

NEGATIVE PRECONCEPTIONS. "E-learning carries a bad smell," said one, recalling poor quality, firstgeneration e-learning experiences. Even among those who recognized there had been vast improvements in technology in recent years, on $line\ learning\ was\ generally\ perceived\ as\ a\ tool\ to$ achieve greater scale at lower cost, rather than as a means of genuinely improving the pedagogy and its impact. Given that leadership development has traditionally justified its high investments on the basis that the programs are delivering excellence, this corner-cutting perception is damaging.

ORGANIZATIONAL HURDLES. Some said that convincing the existing corporate culture to accept online learning was an uphill battle. Others lacked the technological infrastructure to deliver the high quality expected by demanding executives. Still others lamented shortcomings in their teams, whether a lack of instructional design skills or deep-seated preferences for faceto-face models. All these factors undermined confidence to try new methodologies.

UNCERTAIN PARTICIPATION. Perhaps the biggest constraint was the sense that online learning models were simply not suitable for executives, either because unpredictable job demands made it difficult for them to focus on learning when they weren't confined to a classroom, or because their limited familiarity with technology made them less inclined to try.

THE PHYSICAL PRESENCE BIAS. Above all, there was an overriding sense that what executives treasured most was the opportunity to establish relationships, build trust and share perspectives with peers in person. Many believed this goal, which might best be described as "building social capital," was the main purpose of executive development. And that could only be achieved through face-to-face contact, they felt.

Admittedly, some concerns related to quality, as well as limited resources and capabilities, may be justified. Moreover, if the chief aim of doing a program is to meet other people, then a traditional forum may suffice. Where, then, are the advantages of digital learning for executive development?

Reconceptualizing the Learning Experience

Consider how most executive development is assembled. The starting point is usually a classroom-based core, augmented by some online component. Contrast that with how other product and service offerings are rendered today, as user-led experiences that span multiple channels and contexts, and which are characterized by individual empowerment. Perhaps we need to devise executive education along the same lines as breakthrough innovation, starting with a blank slate, rather than just tweaking the current offer.

This, we appreciate, is a provocative statement. Not only are we pitting ourselves against decades of established practice, but we're throwing down the gauntlet in a field whose default setting is analog.

Despite the reservations with digital learning, we believe they're largely misguided. Today's online learning technologies are markedly different – and better – than in the past. The number of organizations investing time and resources in alternative learning processes is growing fast. And even though some learning goals are better achieved the traditional way, we would argue that any experience today can be enhanced via an online component.

Do you believe that last statement to be true? This goes to the crux of the matter. As our research reveals, most treat online learning as an optional extra to gain efficiencies – saving the time that executives spend away from work, and reducing travel costs, so the organization saves money. Meanwhile, the true intention - to improve learning effectiveness – gets lost. Ultimately, it is this mentality that needs to change.



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It's Learning - But Not as We Know It

Learning leaders need to reengage with the belief that combining online with in-person learning can truly lead to better results. This does not invalidate existing theories developed over the past century on how adult learning unfolds. Nor does it do away with face-to-face learning for utilitarian purposes. Instead, we urge leaders to keep an open mind about how digitalization can optimize the learning process, affording new and exciting possibilities.

By relaxing some of the constraints and limitations of the analog world - those of time, space and situational awareness - digitalization can facilitate each step of the learning process in ways previously unimaginable, increasing the overall impact.

The **Minerva Project** is one example. Its founder, Ben Nelson, former president of the photo website Snapfish, describes Minerva as "the first elite American university to be launched in a century." Minerva's Dean, Stephen M. Kosslyn, left Stanford to lead a "radically new concept in higher education." So what's different about Minerva?

First is its approach to teaching. "Too much time at college is spent on disseminating knowledge which is already freely available," Nelson told The Independent. The answer is not to throw out lectures as a means of delivering knowledge, but to replace passive lectures with Minerva's proprietary technological platform - the Active Learning Forum – in keeping with the scientific principle that learning, to be effective, must be an active experience.

Classes are run as online seminars, with faculty conducting each session via live video feeds. Interactive features allow students to move flexibly from group discussion into other instruction modes - including breakout rooms, debates, quizzes and polls - and to document their co-creation activities and engage in real-time simulations. The platform continuously collects data on students' performance, allowing faculty to provide real-time feedback on each student.

Despite the fact that students take their classes and interact with faculty online, Minerva is *not* an online university. The students themselves live together in seven cities around the world, rotating through San Francisco, Berlin, Buenos Aires, Hong Kong, Mumbai, London and New York as a cohort over the four years of the program. This residential component recognizes that not all learning can be achieved online. Indeed, developing deep cultural understanding and a sense of global citizenship can only be achieved through immersive, location-based activities. Through these lived experiences, students are able to apply their knowledge to reallife situations in multiple contexts.

What stands out about Minerva is that it deliberately set out to redesign education. Likewise, in your organization, don't start by asking, "How can we do what we currently do better?" Instead ask, "What could be done at each key stage of the learning process to enhance or optimize the experience for learners, which integrates the respective strengths of online and in-person learning?" Allied to this, "What should we stop doing that is not facilitating the learning and development of our executives?"

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Getting It Right

A well-established base on which to build is the four-step cycle of experiential learning expounded by the American educational theorist David A. Kolb:

- engage in a concrete experience;
- reflect on the experience;
- form abstract concepts;
- test the concepts by applying them in new situ-

How might we heighten the experience for learners at each stage of this process, incorporating what we know is possible today?



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How might we rethink learning in light of digitalization, as something that permeates our lives, seamlessly bringing together different contexts and fostering new social practices?

One might start small. At IESE, we're updating case studies (our main pedagogical tool) to be multimedia artifacts, providing links to relevant news and analysis, embedded quizzes to improve retention of key facts, and adaptive storylines to increase engagement. To facilitate sense-making, we're extending reflection outside of the classroom through asynchronous discussions, social collaboration and community platforms. To support work on personal and team assignments, we're using advanced project management and video-conferencing technologies to facilitate rich virtual interactions.

Our work to date has revealed two things. First, while many of these possibilities existed before, current digital technologies are making it significantly easier to incorporate them into the learning cycle (both for faculty and learners), and to do so with a level of unprecedented quality.

Second, as one engages in the effort to get blending right, it soon becomes obvious that how the classroom is used needs to be rethought. For experiential learning that is inherently in-person, we are working with local businesses to design modules that leverage global locations such as Barcelona, Madrid, Munich, New York, São Paulo, Shanghai, Singapore and Silicon Valley, so as to provide executives with a learning moment that cannot be carried out online.

In short, an effective learning experience elevates the blended concept beyond a convenient mix of online/offline modes. The result is a set of complementary, integrated activities that span the entire learning cycle, using the most appropriate tool at each step, relative to the learning objectives being pursued. This is what we recognize as being "competent blended learning." But in today's digitalized world, is mere "competence" enough?

Aspiring to Omni-Learning

Earlier we argued that blended learning as the mere combination of two distinct modes is already a relic. By the same token, just using technology in a more sophisticated way, like Minerva does, is insufficient in that it still suggests a utilitarian view of technology as an instructional tool. How might we rethink learning in light of digitalization, as something that permeates our lives, seamlessly bringing together different contexts and fostering new social practices?

To answer this, let's consider another realm that is undergoing digital transformation: health and fitness. The parallels with executive development are apparent: keeping fit is a lifelong endeavor that requires us to commit to disparate programs and activities in multiple contexts; and though the spirit is willing, the flesh is sometimes weak, and our commitment to stay the course frequently wanes.

The reasons are similar: How do we carve time out of our busy schedules? How do we sustain our motivation when progress is slow, often painful and not visible, as daily progress is hard to measure? How do we create an overall development plan for the disparate activities that are spread out across time and space?

In the world of health and fitness, a new paradigm is emerging. There are numerous smart wearable devices that seamlessly track your activity; provide intuitive data dashboards and context-specific alerts and reminders; allow you to connect and interact easily with peers. These drastically lower the barriers for individuals to take control of their personal well-being. Behavioral change is driven as much by the ease-of-use and convenience of the tools as by the motivational boost stemming from the ability to visualize one's progress and to compete with others. Ultimately, this transforms the experience of staying fit from a fragmented set of difficult-tosustain personal commitments to a holistic, social journey integrated into one's everyday life.

Bringing to life a similar kind of learning journey, often referred to as "continuous learning," has been the age-old quest of learning-and-development practitioners. Perhaps our intuition has been right all along, but the tools available



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The learning moments embedded in everyday contexts will generate a data footprint. This will be captured, stored and analyzed to better understand a person's learning history and performance.

to us were not up to par. And maybe, just like those in the health-and-fitness industry, we are on the verge of a new paradigm in learning - to be brought about by digitalization.

We certainly believe so. We refer to this new paradigm as omni-learning, which we envisage as a continuous, cross-context, learner-led, datadriven endeavor. Let's consider each dimension in turn

CONTINUOUS & CROSS-CONTEXT. These are closely related and come down to a belief that learning, like fitness, must be integrated into one's everyday activities. The range of potentially relevant activities and, therefore, physical and situational contexts for executive development is vast-from the usual suspects of workplace and classroom, to customer premises, the negotiation table or even a sports event. In each of these contexts, the learner might encounter valuable "learning moments" that will need to be captured and integrated into the learning journey.

LEARNER-LED. Each person's omni-learning journey is unique. This will require the learner to take on a much more active role. In formal learning, experiences are preselected; reflection is guided; conceptualizations are often canned. In omni-learning, participants will have to remain mindful across contexts to identify the relevant learning moments, reflect upon them, and extract generalizable patterns. Like in fitness, it's up to the learner to put in the effort as well as to stay motivated.

DATA-DRIVEN. Data will be the foundation of omni-learning. The learning moments embedded in everyday contexts will generate a data footprint. This evolving footprint will be captured, stored and analyzed to better understand a person's learning history and performance. But data are not just outputs of past human activity. As put forth in Issue 24 of IESE Insight, data are also inputs that can be fed back to the learner, and possibly to his or her peers, in order to boost engagement and motivation. These data inputs can also be integrated into future learning experiences to make them richer and more personalized.

As yet, omni-learning is more aspirational than established practice. That said, many educational startups are experimenting with one or more of the dimensions outlined above. Some strive to operationalize the continuous, cross-context nature of learning. Brainspace, for example, is reinventing how people discover, curate and share information that matters to them in a continuous fashion, whatever the source. Another startup, Degreed, measures, tracks and validates all the learning individuals do throughout their lives.

Other educational tech companies aim to realize the promise of embedding learning into everyday contexts and activities. The Cognotion mobile app combines addictive gaming with interactive video to deliver contextual learning to entry-level employees, so they acquire skills to succeed on the job. Everwise uses data science to pair "virtual mentors" with individuals to work through a structured process, using lessons suggested by the Everwise global community for each specific growth area.

Other players are enriching learning through data by making the experience adaptive and personalized. Knewton personalizes educational content according to user data, identifying exactly what a student knows, what he or she is struggling with, and recommending the best activities for that student to work on next.

Learners in the Driver's Seat

None of the companies mentioned constitutes the next-generation, digital learning environment that's required to make omni-learning a reality. However, this should not imply that we adopt a wait-and-see approach. The tide of digital innovation means employees are being exposed to new and better ways of learning in their private lives. With this exposure come new expectations.





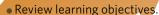
Four Steps Toward Omni-Learning

To start thinking about how to design omni-learning journeys in your organization, we suggest the following four steps. These steps should unfold in an iterative fashion, with future iterations informed by the data from earlier cycles. Above all, the learner needs to be directly involved in the design process.

ASSESS & **REVISE**



Capture and analyze data from the current learning cycle. Draw upon the insights to update and fine-tune the next cycle:



- Identify new learning contexts and moments.
- Consider whether and how to expand or adjust the data capture approach and instrumentation.
- Integrate key learning outcomes (e.g., concepts, models) into subsequent experiences (e.g., through smart notifications).

Be sure to engage the learner in the assessment and revision process.

DEFINE LEARNING **OBJECTIVES**

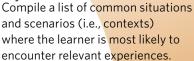


Establish learning goals for the first stretch of the journey. Express these goals in terms of new knowledge, capabilities, skills and attitudes tied to the demands of the learner's current and future role.









Identify learning moments, i.e., specific points in time when the learner goes through an experience that triggers reflection in relation to one or more learning objectives. These could involve everything from a conversation with a subordinate, to a sales presentation, to a visit to an overseas subsidiary.

Don't strive for an exhaustive set of learning moments, as these will be revised in subsequent iterations. Focus on the ones that are common and easily accessible to the learner.

ENABLE THE LEARNING CYCLE



Provide the learner with a toolkit to facilitate key phases of the learning cycle. For each phase, consider the following

- Experience: allowing data (text, image, audio, video) to be captured, organized and stored.
- Reflect: helping learners to detect and visualize patterns, so they can make sense of data, and share and discuss their insights with peers.
- Conceptualize: connecting the learner to a rich multimedia knowledge base, and providing intelligent search and rich linking capabilities.
- Apply: providing smart, context-aware notifications and on-demand social collaboration.

Choose the best-of-breed tools, and ensure their integration. Ease of use, frictionless data capture, visual progress reports and "gamification" are paramount to sustain engagement.





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It's only a matter of time till these employees start to demand similar experiences in their professional lives.

Whatever emerges will be the antithesis of what the executive went through at the beginning of this article. It might go something like this:

The kickoff for the "Reaching New Heights" executive development program is about to start and you're running late. Not to worry: you log in to the Web conference on your mobile phone from the airport lounge. The participants introduce themselves, and the host invites everyone to check the platform for details of the program, which appears as a pop-up.

Later on the plane, you log back on to the platform. The class roster automatically syncs with LinkedIn. Several participants are already part of your network. You send them messages, and chat with another who is also online, agreeing to meet up that weekend for a drink.

On your private page, you pull up your annual review. Your boss has posted a comment related to the recent learning activities you have engaged in. She has been doing this about once a week to check your progress and share advice. This week, her comments are about your executive coach's feedback.

Indeed, you're receiving coaching on one of the themes of the program, "Managing Globally Distributed Teams." Your learning log indicates you have completed 50 percent of the activities agreed to at the start of the year. Is that good or bad? Using the benchmarking app, you check yourself against the progress of your peers and see that most are at 30 percent, which makes you feel pretty good; but the team leaders for whom you have a major project due are at 70 percent, which makes you think you'll need to ramp up some learning opportunities to get to where you aspire to be. You make a note to discuss these with your Chief Learning Officer.

While waiting for your luggage at your destination, you reflect on the novel way this foreign airport organizes its logistics and the skillful way that the incredibly polite, multilingual workers expedited travelers through passport and immigration control. This reminds you of something. You open up the program's mobile app. Taking advantage of the wait time, you replay the morning's conference, listening out for a remark made by one of the participants about solving an operations dilemma he faced. Eureka!

You sketch a diagram on your electronic notepad and share it with the participant. He fires back a reply, suggesting that you hook up with a friend of his who works at a subsidiary in the same city where you've just arrived. Maybe you two could elaborate on this brainwave at the next session of the program?

You're excited as you grab your luggage and head for the taxi stand. If this idea comes off, you'll have hit your 70 percent development goal before this business trip is over!

Like the learners they serve, corporate learning leaders need to take the wheel, driving the transition to omni-learning rather than going along for the ride. There's a lot to be done, from updating the infrastructure to changing processes and skill sets. Most important, this transition requires the courage to step away from the old and proven ways of doing things, and joining the exciting, if uncertain, journey of experimentation to reimagine learning for a digitally blended world. \Box

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