

Operations Practice

Everyone is within learning distance: Building skills remotely

With careful design and implementation, remote capability building provides an effective lifeline for organizations adapting to entirely new ways of working.

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Seemingly overnight, COVID-19 has triggered a radical reworking of work. Long-percolating digital transformation plans accelerated from months to days, as companies scrambled to move customer-facing operations online, reconfigure supply chains, set their people up to work from home, and create new protocols and practices for safety and productivity on the factory floor. The urgency, scope, and scale of the switch to a remote working environment have pushed many areas of organizations to the breaking point.

At the same time, navigating these breakneck-pace shifts has been something of a pleasant surprise, even a source of pride, for many companies, as they acknowledge the progress the crisis forced them to make. Now they're looking to take the lessons learned to raise the bar in operational performance—and bring end-to-end (E2E) digital transformation to fruition, which at many companies has been stuck in pilot mode. To do so, however, means focusing on new capabilities—not just fortifying those designed for crisis mode, but building those that will serve their strategies in the post-pandemic future: namely digital fluency, data literacy, and agile ways of working. Standard training and leadership-building programs, sidelined during the pandemic, cannot be postponed any longer.

The question is: How do companies accomplish this when they're still in remote mode? Can they achieve anywhere near the levels of trust, bonding, and team-building that are possible with in-person, hands-on experiential programs?

The answer is: yes. Our work with a variety of enterprises demonstrates that it's not only possible to replicate many tried-and-true learning methods in a remote environment, but that remote capability building offers a number of added benefits. Perhaps most important: employees can integrate learning into their day-to-day work—to acquire, apply, and sustain the new knowledge and skills in a more natural cadence.

Learning through a prism, remotely

Companies can successfully build new capabilities by adapting digital tools, technologies, and interactions to a set of five well-established

principles about how adults learn—principles grounded in learning, neurological, and behavioral-change science:

- *Practice and application:* Essentially, you give people opportunities to learn by doing (and by making mistakes). Then, they apply the new thinking in their work.
- *Reinforcement and spacing:* Learning begins in a forum setting; people then apply the lessons in the field. They return to the forum to keep improving, reapplying the lessons with increasing levels of difficulty and feedback.
- *Intense, immersive experiences:* Provide learning environments that involve the emotions, senses, and story-based experiences that capture the learners' attention—thus helping to boost retention.
- *Social learning and collaboration:* Let people practice and discuss lessons with others. This deepens their engagement, brings to light new perspectives and insights, and fosters a culture of continuous learning.
- *Motivation and mindsets:* When the learning content addresses people's needs, learners engage, gain self-confidence, and grow.

Many people question whether these “prism” principles (or any others, for that matter) can be applied effectively in a remote environment. Let's explore the misconceptions surrounding each principle, along with the bonus benefits that remote capability building offers.

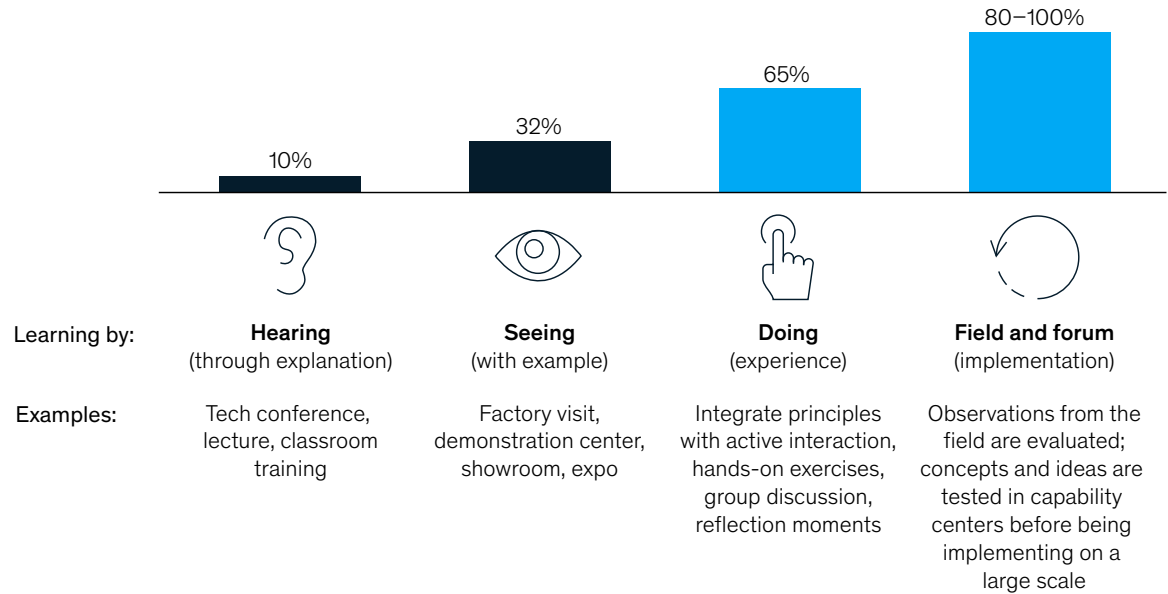
Misconception #1: People must learn by doing, which can only happen in person

Reality: There's no question that for adults, learning by doing beats learning by listening alone (exhibit). Adults can recall almost seven times more content by doing, and when those exercises are held in an environment where people can make mistakes without consequences. And doing is indeed possible in a remote environment, with activities relevant to their learning objectives.

Exhibit

Experiential learning is the leading approach for adult capability building.

Recall rate 3 months after learning simple content¹



¹Numbers determined in concrete example by teaching small, simple pieces of information to three groups
Source: Whitmore, *Coaching for Performance*, 2002, based on IBM and Royal Mail (UK) research; McKinsey interviews

Remote solution: A good deal of the simulations and interactions that make in-person learning valuable can be recreated through internet-based videoconferencing.

The traditional in-person training course starts with the presentation of theory, followed by group exercises, and finally an output that the groups present and discuss in plenary session. Even when conducted face-to-face, the approach is often too disconnected from participants' actual work, providing little opportunity for the type of trial and error that's essential to real learning. It's even less effective for remote learning. Instead, web-based videoconference applications—with their screen-sharing, whiteboards for collaborating, annotation functions, group chat, and breakout rooms—allow people to carry out realistic learn-by-doing tasks in group settings that heighten engagement and reinforce skill retention.

Example: Live-streaming diagnostic exercises in a simulation environment. Ordinarily, teams of participants would be on-site, observing and interacting with machine operators on the shop floor (or with workers in an office setting). They would gather around a whiteboard to analyze the matter at hand, and then reconvene to share insights. Today, operations can be live-streamed from the model work setting, as participants watch on their computer screens and interview the onsite operators. They can then meet in online breakout rooms, later reuniting for an online plenary discussion. The experience is more guided and less hands-on (and the peer networking less intense) than in a physical setting, but they can still focus deeply.

Certain types of training lessons require wholesale changes to adapt them to a remote setting. To figure out how best to redesign, you must ask

two questions: “What is the learning outcome we are aiming for?” and “How can we make this as engaging as possible and as close as possible to participants’ daily activities?”

Suppose you wanted to demonstrate how to resolve a workflow bottleneck in a production line. In a physical setting, you would bring participants to the shop floor for a live demonstration of the problem; maybe show a coworker’s improvised remedy, and then discuss why such a quick-fix would be counterproductive. You might have the group brainstorm solutions before walking through the best one. For a remote training environment, you would also need to set up video cameras and microphones to live-stream the supervisor, worker, and facilitator for participants observing on their home computers. You would need to script the situation more precisely and guide the exercise more than in a live setting, where participants can explore an entire production environment at will. Instead, they must observe through a camera, and trainers can only present one scene at a time. To keep the audience actively involved, trainers could add more visuals, polls, and questions, reinforcing a sense of continual stimulation.

Research shows that learning activities that, in context and practice, resemble the participants’ day job are much more effective than abstract learning, which requires participants to translate lessons to their own situation. In-person training courses are often designed this way. Remote training, when properly designed, can do the same. In the weeks following formal training, participants can introduce some of the tools, templates, and solutions to their assigned work setting and involve their colleagues in applying them—and in developing new digital applications.

Misconception #2: Intensive, immersive learning experiences are hard to create through a computer screen

Reality: Videoconferencing fatigue can be a real occupational hazard in the COVID-19 era, but that is no reason to abandon intensive learning

sessions. Physical offsites may have an innate advantage—no barking dogs or other distractions in participants’ environments—but through careful design, companies can achieve strong engagement levels that foster intensive learning in a virtual setting.

Remote solution: To start with, be mindful of the flow of a course. Vary the pace. Alternate between passive and active participation; for example, instead of clustering exercises, scatter them throughout. Break up presentations of theory with polls; ask questions through the chat function; use on-screen annotation and the whiteboard just as you would use a flip chart or sticky notes on a wall. The goal is to reach participants through as many human senses as possible. It’s also important to alternate facilitators, in order to provide (or elicit) varied perspectives (including from peers who have already gone through the learning journey), and to prevent monotony. Different voices and delivery styles change the energy level and help maintain engagement, especially with content-heavy courses.

The more that people participate, the more immersive the experience can be. Inviting discussions and questions in plenary is important. Initially, participants may hesitate to join in, but by crowdsourcing responses (via polls and whiteboards) you can break the ice. You might start each day with a “show and tell” moment: for example, asking participants to spend two minutes each talking about a technology that has changed their life, or pairing people up to get acquainted and then introduce one another to the group.

Example: Bootcamp for a digital transformation effort generates a record number of ideas for the factory floor. Before launching a digital transformation project, a global food and beverage company needed to train its change agents in a bootcamp setting. The goal was to have them “explore, try, and apply” the four phases of a transformation project: diagnostic, design, implementation, and sustainability. Every theory lesson block (such as “explore”) was followed with an exercise where participants “tried

and applied” what they had just learned. In an immersive environment like a model factory, a scale reproduction of manufacturing processes serves as a safe place for participants to learn and experiment without consequences.

To adapt the bootcamp structure to a remote format, the company held it over five half-days rather than the usual three full days of an in-person program. The company live-streamed video to production lines and had participants engage through diagnostic observations and interactions with operators. In breakout “rooms” they designed digital use cases. To the company’s surprise, participants ended up identifying twice as many opportunities for digital applications in their plant than they had in past programs.

Misconception #3: With remote learning you can’t simulate a risk-free environment, which is essential for learning from mistakes

Reality: Simulations allow participants to comfortably make mistakes without risk. And it is indeed possible to create simulations in a remote environment.

Remote solution: Flight simulators for pilots in training are perhaps the best example of the value of physical simulation. By setting up a realistic environment and realistic situations that resemble day-to-day work, participants are better prepared to respond effectively on the job and when back in the real world.

In normal times, a model factory or model office offers an ideal simulated environment. Virtual learning, with real-time and interactive videoconferencing capability, is the next best thing. Participants can engage virtually with the facilitator or instructor on the shop floor, interacting with operators and with each other through the platform tools such as annotations, whiteboards, and post-its. Remote simulations may be even more advantageous than model physical settings, as they are less expensive and involve fewer logistics.

Misconception #4: Collaborative learning can only really happen when people are in the same room

Reality: Collaborative learning offers many proven benefits—including enhanced critical-thinking skills, an understanding of different perspectives, and greater motivation and self-esteem. And people can collaborate when physically separate and in different time zones—and even at different times, where they work at their own pace.

The creative use of technology and careful course design can go a long way toward fostering a social, collaborative experience remotely, through the mix of session formats and the many tools that enable discussion, exercises, and team problem-solving. In fact, remote courses offer an advantage over in-person learning: people who are less comfortable with public speaking or group activities—or who may be wary about broaching a sensitive but important issue—may be more comfortable participating at a distance. Remote learning can thus trigger more participation and surface issues that might not otherwise come up. Indeed, once companies experience the benefits of remote learning programs, they may see the value of combining remote and in-person workshops after the pandemic winds down. By encouraging lively interaction during training, companies can foster strong remote communities that continue past the training program.

Remote solution: Start with an emotion pulse check. First, consider which lessons need to happen when participants are together, and which are best left to asynchronous learning. Set the tone with regular check-ins to establish whether participants are emotionally present and “on board.” Ask them: “What are you feeling now?” “What is holding you back from being 100 percent present?” and “What would make this day a successful one for you?” It’s important to cultivate a strong social connection among

physically separated colleagues and get them more attuned to each other—not just to foster engagement, but because energy levels and emotions affect performance and on-the-job safety. Research shows that the leading indicator for high-performing teams is “psychological safety,” and emotion check-ins help lay the groundwork for a safe environment in learning programs.

Once established, every training session or module can make use of these techniques, as well as the full range of collaborative functions on the web-conference platform—such as group chat, collaborating on a document or whiteboard, breakout rooms, polls, and passing along screen control.

Go light on the visuals. With videoconferencing, the temptation to rely heavily on visual aids is powerful. However, to promote a social and collaborative environment, remember that less is more. To spark discussion, visuals should be used judiciously. Instead, think carefully about the kinds of questions that can prompt substantive discussion from as many participants as possible.

Offer a variety of response mechanisms. To accommodate individuals' different preferences and comfort levels, incorporate multiple response features, such as the chat function, whiteboard, and cloud, even in the same module or lesson. To tackle exercises, try using a virtual flip chart or sharing the screen-grab function and asking participants to turn their video on so you can better “read” the audience.

Create a comfortable atmosphere. Consider setting ground rules. These can be as wide-ranging as requiring everyone to use the appropriate technology—or agreeing to accept the occasional background distractions of participants' households. The goal is to ensure that people are comfortable turning their cameras on.

Facilitators always need to be able to adjust course on the fly, and to keep their eye on the different participant feedback flows. This is more challenging in a remote environment,

but the techniques described here provide a pulse reading of the team's mood can help the facilitator adapt the speed of the content flow and the depth of content, while adapting to the group's preferred mode or modes of engagement.

Misconception #5: You can't effectively practice and reinforce lessons remotely

Reality: Practicing lessons—at progressively more difficult levels—and providing feedback is at least as effective via remote learning, and possibly even more so. You can still create a full learning journey, including preparation and homework, as well as line-manager coaching and feedback.

Remote solution: Remote learning has an advantage. Research shows that breaking up extended learning journeys into increasingly challenging modules enables better retention. Moreover, learning that is spread out over several weeks or months, where the content is repeated in different contexts, has higher retention rates. Often the primary reason for holding courses offsite is practicality. If many participants are coming from distant locations, companies tend to want to minimize trips and the disruption caused by employees' absence. The intensity that springs from these logistical considerations doesn't allow for the degree of reinforcement that's possible when learning is ongoing and spread out.

Remote learning allows companies to confine sessions to more digestible three- to four-hour blocks, a practice that doesn't sap people's energy, attention, or retention levels and that minimizes work disruptions. Companies can combine facilitated courses with self-paced modules for the entire learning journey. And because participants integrate the learning program into their daily routine, they can more readily and more naturally apply those lessons in their day-to-day work. They can share their learning with their colleagues, thus seeding new practices that can improve performance department-wide.

Example: Integrating weekly skill-building sessions into the working day. A global steel manufacturer adapted a skill-development program into an eight-week remote training program. Every week, participants logged on to a three-hour remote session to explore a single skill in depth. Each session included presentations of theory, discussions about the use of the tool and how participants could apply it in their teams, and structured activities that allowed small teams to practice the skill. After each session, participants were assigned tasks which required using the new tool on the job. The following week, they would discuss their results at the online session. Each week's topic built on the previous week's, and in the final two sessions, participants had to integrate the multiple tools they had learned about throughout the program.

Misconception #6: Motivating people to learn and change is hard enough—and harder still without the behavioral influences and context of the conventional work environment

Reality: To take root, organizational change of any kind—whether it's leadership development or inculcating a new customer-first orientation throughout functions—requires a change in mind-set as much as in skill-building. But people will willingly engage when they believe the program is relevant to them personally, will fulfill their needs, and will enhance their self-confidence—regardless of how it is delivered.

Remote solution: We know that learning programs that confer autonomy and give people the wherewithal to sense their progress (through personalization, assessment, and self-inquiry) build intrinsic motivation. As a result, they ultimately have more impact. But it's not enough to embed motivation and mind-set elements into the learning programs; these elements must also figure into the design of the steps participants will carry out after the course. This is as important in remote learning environments as it is in in-person settings.

Example: Senior managers at a utility identify personal improvement goals pre- and post-program. At the beginning of a remote leadership-training program, participants wrote

down their reflections on each program topic, noting how they wished to use the tools to become better leaders. At the end of the program, these statements were returned to participants so that they could write a personal leadership "vision statement." For instance, they were asked to identify the approach they planned to take to establish trust among their team members or to coach up-and-coming managers. In this way, each participant left the training with a tailored action plan for how they would incorporate the tools they'd learned about into their normal routine. The vision statement thus served to make participants more invested in the program and more likely to apply the concepts in their day-to-day-work lives.

How to achieve digital

Today, perhaps more than ever, organizations around the world are changing how they operate. And though many leaders recognize the imperative of E2E digital transformation, many organizations remain stuck in pilot mode. They are struggling to become digital in a holistic and integrated sense—from the factory floor to the supply chain to business support functions.

Many organizations have put training on hold during the pandemic. But they cannot afford to postpone it any longer. Ironically, COVID-19 forced people to use digital tools they were reluctant to use on road to digital transformation. Now it's time to consolidate what they've achieved. The need for learning programs to develop and deepen employees' and managers' digital fluency has never been more urgent. And training is the only way to achieve scale solutions. As companies expand their digital adoption, they must also expand their use of digital tools to bridge the gaps created by social distancing and remote working.

More broadly, the shifts COVID-19 has unleashed have fueled a slew of new learning needs—about how organizations operate, how they lead, how they get people to work together. These needs should be embedded into course design from the outset. But although COVID may have changed the way we look at designing and delivering capability-building courses, the same guiding principles still apply. Technology can enable the full set of

learning principles for remote training—and even provide added benefits, from easing participation for some individuals to amplifying the ability to integrate learning into daily work.



While there is no substitute for the personal interaction and 360-degree experience of

in-person programs, remote capability building can serve companies well while they continue navigating through the pandemic. Because it requires no travel or special logistics, remote learning can be launched more readily and integrated more seamlessly into people's everyday work lives. Ultimately, remote capability building can—and should—become an integral component and complement to traditional in-person programs, long after the pandemic is over.

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