Disruption is a competitive reality for every business. As an organization evolves, its competitors react, if they can. If change is constant, then learning must be continual.

"It's Not Over When It's Over": The Case for Continual Learning

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Introduction: Nothing Will Stay the Same

It is almost trite to say that the business environment is highly competitive and in a state of constant change. Whether the "sharing economy," "freemium" relationships with customers, dynamic "platforms" that connect buyers and sellers, or the disruptive nature of cloud computing and web services that can make even a mom-and-pop start-up appear like a retail giant, disruption is a competitive reality for every business. Business models are changing to realign the customer value proposition and disrupt the profit formula, and competitors are either mimicking or evolving further:

> Amazon offers premium delivery services for a small annual fee and grocery delivery in under an hour. Trader Joe's responds with consistently excellent customer service and an increase in private label products.

> Netflix and Hulu offer subscriptions for unlimited access to advertisement-free video content. HBO and the major broadcast networks each respond with a mobile offering and subscription-free content. YouTube and Facebook go the other way and insert more advertisements into the video stream.

> Uber, Lyft, Bird, and Zapp offer varieties of transportation options (e.g., limos, electric scooters). Taxi companies respond by offering application-based scheduling and contactless payment options, and some are becoming full-service limousine companies. Self-driving taxis and trucks are on the horizon.

Beyond the customer value proposition and profit formula, technology is both an enabler and a driver of these changes — near ubiquitous internet connectivity, scalable architectures, robust security, and the ability to capture, analyze, and make sense of data that comes from the customer contact. To take advantage of these technologies, organizations must constantly evaluate and adjust their resources, adapt their business processes, and reskill their staff. As an organization evolves, its competitors react, if they can. Nothing will stay the same.
**Continual Adaptation: “Innovation Is a Muscle”**

Technology has moved from behind the glass-walled room of the IT department to the desktop, tablet, and phone in every pocket. As an organization senses an opportunity, it deploys a new approach, or improves an existing approach, using technology to help streamline, automate, discover, or connect. These innovations are often incremental and sometimes disruptive, but they always attempt to solve a business need. That need is identified by clients, partners, or employees who see the opportunity to apply technology in a new way. That continual awareness is a fundamental evolution in the relationship between stakeholders and the organization — only when everyone is committed to improving the way work gets done can the organization thrive in a competitive environment. Three trends of employment appear to be evolving: the importance of ubiquitous technology to nearly every role, the pressure to "do more with less," and the rapid innovation to processes and technologies.

**Ubiquitous Technology**

Cloud computing is changing how IT is delivered and supported. Cloud computing is also changing how lines of business are consuming technology — adopting more quickly, adding capability on-demand, changing processes more frequently. The change in the line of business is also changing who needs "tech skills." While not every accounts payable manager needs to understand hybrid cloud management, understanding where data is captured, how data flows, and what data is available is probably a foundational skill for every line-of-business manager or supervisor. Roles are changing quickly — an accounts payable clerk is evolving from the core ability to leverage Excel to being proficient in the finance modules of SAP or Oracle, understanding how to leverage SQL for data retrieval and manipulation and understanding the reliability (data quality) of the historical inventory data. More senior members of the finance staff must understand how to collect, analyze, interpret, and display small and large data sets to make sound decisions, in addition to the process tasks and controls that are central to a finance operation. Technology will continue to be increasingly important to every function within business.

"**Do More with Less**"

With historically low unemployment in many sectors, organizations are running lean. Even if they want to hire, "difficulty in finding employees who are ready to work and have the skill set is the biggest issue facing employers," according to one economic development administrator in California. (https://signalscv.com/2018/08/as-unemployment-falls-hiring-is-difficult/)

As a result, organizations are changing how responsibilities are assembled, assigning multiple jobs and multiple roles to individuals and teams. Roles are becoming more fluid or being combined. Employees need the skills to accomplish those new tasks. As one executive coach advises clients, it’s important to "figure out how you can accomplish [multiple tasks]. You can probably handle some of the new tasks without a problem, but others may require new skills." Employees and employers need to acknowledge that "A and B are in my wheelhouse, but if you want me to focus on C and D, I’m going to need support and training," she advises. This is a change to the way employees must see their employment — it has become a continuous evolution of capabilities, and not just along the same path. (http://fortune.com/2015/07/06/two-jobs-one-paycheck/)
Rapid Innovation

The insightful and sometimes breathless predictions regarding digital transformation (DX) are everywhere: "The unprecedented speed at which technologies are coming to market supporting DX strategies can only be described as frantic," a colleague of mine at IDC recently warned. We are right to be mindful of both the potential and the challenges posed by DX. But DX is a symptom of the real motivation: competitive pressure. As a competitor, or a partner, changes an approach, enterprises must respond. In an increasingly global economy, even local firms must respond to both local and global trends. This is increasing the rate of change in every business, in every line of business, and in every role. (https://www.idc.com/getdoc.jsp?containerId=prUS44440318)

Rapid innovation is a reinforcing cycle — as organizations innovate more quickly, they can innovate again, even more quickly. A former vice president of Product Strategy and Customer Engagement at GE Digital believes innovation is like a muscle that needs to be exercised: "With experience, business owners become more comfortable trying new ideas," he says. "Failing to continually innovate causes atrophy and is a missed opportunity." He adds, "As you learn how to implement new capabilities ... you will become more innovative." It's a virtuous cycle: "With practice, you can reduce the time it takes to innovate," he says.

Continual Adaptation

These three trends in employment — ubiquitous technology, "do more with less," and rapid innovation — combine to create a new reality for employees and their employers: the need for continual adaptation of skills.

Adaptation is similar to but somewhat different from transformation. Both adaptation and transformation refer to processes of change, but the motivation and the approach differ. Where transformation may be the introduction of change to achieve a specific objective, adaptation is more closely associated with the response to change. With regard to the evolution of skills, transformation seems less appropriate, because we don't have an "endpoint" — there is no final position or set of skills that will be then forever useful. For skills, it seems like adaptation is a more accurate description of what is needed.

As an organization transforms its technology or its business model, employees will also adapt. The transformed process may be launched and running for a group of employees or a business process, and the trained employees will help the organization adopt and efficiently use the new approach. "Training kick-starts the organization into using new technology," says the head of Healthcare Insights Data Engine at Merck KGaA. But even the most comprehensive training program built to support a "launch" or "go-live" will be incomplete if it stops when the new processes are launched.

Over Time, Organizational Knowledge/Skill Changes, Too

But why is that, you may ask? What if your company has just completed its most effective transformation ever. You fully trained the entire staff on the purpose and potential of new processes and how each person's role will now be different. Everyone was trained on time, and you feel ready. Isn't that enough?

Providing context for transformation efforts, including the potential uses of new technologies and the business expectations for the change, can increase adoption speed 4x with an immeasurable increase in business benefit (Train to Accelerate Your Cloud Strategy, IDC White Paper #US42932317, October 2017). However, because of the three trends described previously — the importance of ubiquitous technology, the pressure to "do more with less," and the rapid innovation to processes and technologies — change doesn't stop because the project has launched.
Combined with that are the more mundane but equally significant circumstances in every organization: People change jobs, people are promoted, new hires assume roles for which they don't have the same experience as the people they replace, or other employees absorb responsibilities to cover for a sick or transferred colleague. At any specific moment, the entire organization may be fully trained and be "smart" in every role, but at the very next moment, something will have changed to cause the organization to become a little less smart. Competitive pressure causes process change, new technologies are introduced, people change roles, and the organization is no longer as "smart" as it once was. The impact is pervasive.

If employees are not "fully trained" with all the knowledge, skills, and abilities in their new role as the people they are replacing, and with a typical amount of turnover, technology adoption, and process change, a team may lose more than 75% of its relevant skills in just six years.

This suggests the need not only to train new employees fully, but also to continually upgrade and enhance the skills of existing employees. Organizations cannot "fully train" new hires before they are expected to start work. No one has time for that. Moreover, organizations can't "train" existing employees on everything new they need to know (or may have forgotten) in a single course. Organizations need a mechanism that allows them to maintain the capabilities and upgrade the skills of every employee, all the time, as conveniently as possible.

If change is constant, then learning must be continual.

**Continual Learning**

Learning is like a personalized change management problem. The need for learning is ubiquitous, but properly accommodating each employee and ensuring "adoption" of the new learning requires change to be presented in a way that reflects the particular needs of the employee. That is a complex task because of at least three factors:

- **Diversity.** Employees are often dispersed geographically, have different levels of experience, and are increasingly generationally diverse.

- **Attitude.** Employees have different attitudes toward change and toward how the change will impact their roles and their willingness to "change."

- **Content.** The topics that are important to employees will be different, as will the depth of knowledge they need to be effective in their current roles or in their future roles.

Each circumstance influences the approach to learning: what must be learned, when it can be learned, how much can be learned, and how it will be learned. This suggests that learning must be presented in multiple ways. Circumstances strongly influence what approaches are likely to be consumed by employees, and IDC research has found that what is convenient is often most consumed. But what is convenient must consider self-motivation, time, level of current understanding, and many other factors. In short, what is convenient for one learner may be inconvenient for another learner. Research on learning consumption suggests several characteristics that should be part of any continual learning program:

- **Multiple modalities.** Offer live instructor-led classes both in person and online, self-paced instruction with audio and video, audio only, text based, simulation and practice based, and one-on-one mentoring. Many options should be available "anytime anywhere," and for some topics, microlearning modules help learners “fit training
into" their workday. Leverage multiple approaches to offer efficient and convenient delivery of high-quality content.

> **Language.** Learning experiences should be accessible for all learners in the language of preference.

> **Content coverage.** Content offerings should be sufficiently broad to reflect the current and ongoing needs of the business, often including business skills and acumen, technology, productivity tools, and certification and compliance reporting capability when necessary.

> **Content depth.** Content depth and breadth should be appropriate for each role or group of roles. Offering training relevant to each need will increase employee participation and consumption.

> **Guided learning.** The offerings and the management system should accommodate intrinsically motivated learners who self-select their own developmental paths ("pull learning") and learning programs prescribed by the employer/manager ("push learning").

> **Training for everyone.** Build a training program that can cover everyone. A quality continual learning experience helps ensure that all learners can contribute their best to organizational success. Training is a small incremental investment to ensure maximum business benefits. To achieve these benefits, organizations should establish a comprehensive program.

> **Performance monitoring.** Use tools to monitor user performance, adoption, and consumption and target appropriate interventions — training, support, or infrastructure improvements — when adoption or increases in performance stall.

**Conclusion: “It’s Not Over When It’s Over ...”**

Digital transformation is not the ultimate goal: Expanding revenue, reducing costs, and gaining efficiency and competitive advantage are the objectives. Technology evangelists, change leaders, and supervisors need to recognize that when the current project is finished, there is still work to be done. Soon, clients and customers will change their needs or preferences. Employees will need to be trained, retrained, or prepared for the next project. New hires must be developed so that they are fully functional in their new roles. New projects must be conceived and executed, and the process of continual training starts again.

Organizations must give technical staff and end users a training road map so that they can better prepare for the current project and the next project. The road map may help employees answer the following critical questions:

> What do I need to know to be successful?

> What will I need to know to advance or achieve my personal objectives?

> How will my role be different when the new transformation is in place?

By leveraging road maps or learning journeys, new hires and existing employees will have a clearer understanding of what is expected of them and how to meet those expectations. All employees will become more accustomed to change and be more comfortable responding to change and taking advantage of the opportunities that change can create.
A modern, comprehensive approach to training can help organizations achieve their digital imperatives. This includes focusing training on desired outcomes, adapting training to learning needs, and creating a continuous learning experience for all employees:

> **Focus training on desired outcomes.** Because the goal of digital transformation is improved business outcomes, it is essential for organizations to closely link training initiatives to business expectations. The intention is to be able to provide the right assistance to every employee. Measure or monitor both consumption and changing behaviors to better understand if the impacted learners are adopting new approaches as expected.

> **Adapt training offerings to the needs of the learner.** Individuals and teams have different training needs. Business and IT leaders, supervisors, and implementation team members each have different expectations and needs related to how much content is required, how content is best presented, and what kind of qualitative experience is important. Recognizing why learners are taking training can help digital transformation teams offer content that is more effective and relevant to the specific requirements of the situation and will more likely drive improved performance. Leverage learning content that directly meets the "learning needs" of the learners.

> **Create a continuous learning experience.** With constantly changing applications, processes, or user experiences, the need for personal development doesn't stop. Successful organizations create continuous learning experiences with appropriate interventions that consider the learner's need and development.

To be successful in this constantly changing business environment, partner with a training leader that provides the most relevant content, multiple modalities, localization, accessibility, 24 x 7 support, and the breadth and depth to match what you need.
Worksheet for Further Investigation

Answering these questions can create a road map for your training needs.

What is the strategic objective for IT?

> How does the strategy impact:

■ What your teams must be able to do now?
  ◆ Consider new technologies, new approaches, new behaviors.

■ What your teams must be able to do in the future?
  ◆ Consider new technologies, new approaches, new behaviors.

■ The composition of the IT organization? (Will there be a change in what roles will be important in the future?)
  ◆ Does the organization prefer to source new positions with internal candidates or hire from outside?
  ◆ What risks would there be if your current team with its current strengths and weaknesses was suddenly responsible for the "future" IT organization?

> What is your learning culture?

■ Does the organization set aside time for developing employees, or does it do only the minimum onboarding?

■ Does the organization
  ◆ Expect employees to "self-develop"?
  ◆ Accept the performance of IT employees as "the best they can do"?
  ◆ Have greater expectations for performance?

■ Would employees take training either during working hours or on their own time if it were available?

■ What would continuous learning look like for your teams?

> What competitive edge would your IT organization gain from a continuous learning mindset?
About the analyst:

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Mr. Anderson's research coverage ranges from the value certification provides to IT professionals to the selection criteria used when selecting transformation training for the IT organization. He conducts regular research on the views and experiences of IT professionals and IT education buyers. And he frequently evaluates the impact of various types of training and certification on IT organizational performance.