

# Strategies for Technology Training

Will Your Tech Skills Be Good Enough Six Months from Now?

## Introduction

It's important to understand that technology has changed the way we learn. What do you typically do when you want to learn something? Whether it's how to cook an omelet or how to migrate from Small Business Server 2003 to Windows 2008 R2 with Exchange 2010, you Google it. Or you ask a friend or colleague, or query an online forum.

[Moore's Law](#) says technology is getting exponentially faster while [Wirth's Law](#) (a.k.a Page's Law) says newer software slows technology down. What does that mean for IT professionals?

The IT department optimist would say "job security," but a realist might say it creates a job that is consistently challenging and not for the faint of heart. Obviously both are true. The breakneck speed at which technology is evolving, combined with the fact that constant software updates complicate things as much as they improve things, make the field of IT very secure and lucrative. But this challenge also means that a job in technology comes with another often-unspoken expectation: the burden of staying current.

It's no wonder a 2012 [CompTIA](#) study of over 1,000 organizations found 93% report a gap in the skills of their IT department, and 80% feel their business operations are impacted by the gap.

This begs the questions: How do you stay current? And what's the best, most efficient way to close that gap?

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# 68%

Research shows that 68% of knowledge workers now feel that their biggest learning problem is an overwhelming volume information

## Learning Redefined

People today want their question answered or their problem resolved immediately so they can move on. They don't have time for a long lecture on French cooking or Windows database architecture. Are they still learning? Yes. And even better, they are learning while doing, which substantially increases their chances of retaining the knowledge.

In fact, in the corporate world, most fortune 500 companies experience the **70:20:10 Model** for Learning and Development, which states that 70% of managers' learning and development stems from on-the-job experience and problem solving, 20% from feedback from other people (peers and supervisors), and 10% from formal courses and reading. Simply put, business professionals learn by tackling the task at hand and enlisting help when they need it.

More recently, these sentiments have been echoed by informal learning champion, author Jay Cross who said, "Workers learn more in the coffee room than in the classroom. They discover how to do their jobs through informal learning: talking, observing others, trial-and-error, and simply working with people in the know. Formal learning—classes and workshops—is the source of only 10 to 20 percent of what people learn at work."

## Opportunities for Extended Learning

Massive Open Online Courses ("MOOCs"), search engines, certification courses, blogs, forums—there are literally thousands of learning options available in today's world, most of which, thankfully, are a far cry from the night and weekend courses offered by your local community college.

Maybe you are a seasoned professional looking to fill in some gaps in your personal knowledgebase, or maybe you are new to technology, and want to round out your skillset. Either way you'll want something flexible; you'll want to get your information directly from people in the trenches that know the material in practice, not just in theory. You'll want current information; and you'll want information that relates to what you are actually doing in the real world. While this may sound obvious, not all available learning options meet those criteria.

## Options Through the 70:20:10 Lens

On average 10% of professional learning and development should come from formal guided or self-guided courses like MOOCs, certification courses, or training offered by other companies and organizations.

If you have the luxury of time, or are new to your field and need to gain a broad overview of the technology, these types of courses are a good option. MOOCs, like those offered by EdX, Udacity, Coursera, and others are generally free, taught by knowledgeable professors, and provide classes from introductory to advanced level. Udacity

# 70:20:10

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**/Jay Cross**

courses, for example, average 20 hours of video instruction broken into one to two-hour chapters, while EdX and Coursera follow a more formal university model, requiring a 6-10 week commitment with roughly 10 hours of instruction per week.

Lynda.com, a subscription-based learning service, delivers video courses via a more flexible, self-guided model. Developer courses through Lynda range from 1-10 hours, with an average of about three hours. Other subscription services like PluralSight are geared toward the IT professional, with their courses running anywhere from one to eight hours.

MOOCs and subscription-based video learning are nice resources for the more experienced professional, and are a golden opportunity for those just entering a new field. However, for the professional who realistically has only 10% of their workday to commit to that kind of formal learning, a 10 or 20-hour course may not be a viable option.

Additionally, [studies show](#) that information retention rates in a passive learning environment are pretty dismal, dropping below 50% in just 24 hours and to about 20% within a month. So, if you do decide to take advantage of these options, make sure you are also making time to practice what you learn, so you don't have to relearn the same material down the road when you need to use it. And you will want to make sure the courses you have enrolled in are regularly updated to stay current with the rapid changes found in many technologies.

## The Other 90%

Outside of the 10% formal coursework, the other 90% of informal learning should be directed by the challenges at hand. These informal methods for learning include social learning, peer-to-peer discussions, Q & A forums, and consulting reputable blogs and professional articles that provide instruction on handling specific issues (e.g. how to configure a shared mailbox in Exchange 2010).

[According to Forrester Research](#), "Over the next five years, social learning will become the new norm, turning classroom and online learning into relics of the past."

The trend is moving in that direction for several reasons. First, as technology makes it possible to find and share information quickly and easily, workers would rather spend five minutes pinging a friend for a solution or locating it online, than tens of hours memorizing every possible solution they might need. Second, the rate of change is so fast that most conventional learning models simply can't keep pace. While online classes can be invaluable to someone learning an entirely new concept, a collaborative, on-demand learning environment is more practical and useful to those who know the basics and simply want to do their job better.



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Yet the abundance of information and expertise that fuels social learning is also one of its greatest challenges. A Google search, for example, of “How to configure a shared mailbox in Exchange 2010” produces 9,580,000 results. Which one has the right information?

A 2012 Bersin study found the shift in information volume “has created tremendous challenges for the corporate training department.” Research shows that 68% of knowledge workers now feel that their biggest learning problem is an ‘overwhelming volume of information.’ This information exists in many formats, it is often out of date, and they are not sure how to find what they need.” (Source: The Corporate Learning Factbook® 2013: Benchmarks, Trends, and Analysis of the U.S. Training Market, Bersin by Deloitte)

But help is out there. Companies like Experts Exchange, CNet, NetTuts+, and others are bridging this gap for businesses by offering hands-on training, tutorials and advice written and curated by technology experts. Features like Q & A forums that provide personal feedback and answers directly to users, and content filters that save the information relevant to them for future reference, allow tech professionals to create a useful knowledgebase of real-world skills. These resources make real-time learning and problem solving more effective because they do the information filtering for users, and the hands-on knowledge comes from like-minded professionals who have dealt with the same issues as the those who are learning.

It is this type of fast and effective collaborative learning that has forecasters predicting a big future for social learning. After all, there’s not enough time in the day for most professionals to get their work tasks done. And while scheduling time for long-format training (that may or may not be relevant to work responsibilities) is a positive investment, in most cases, learning can be better accomplished by simply providing access to a more fluid, collaborative learning resource.

## Conclusion

Technology managers and professionals must consider the changing learning landscape if they want to stay competitive. While there is a time and a place for more formal learning, 70 to 90 percent of job skills development should be accomplished in a less formal way: through doing, asking questions, and self-directed skill building.

As the authors of How Managers Develop Proficiency published in Human Resource Development Quarterly: “companies should harness and leverage informal learning and cultivate the metacognitive abilities of managers, as opposed to increasing spending on formal training programs. By applying these strategies, companies may save money, develop more proficient managers, and gain a competitive advantage.” (Informal Learning and the Transfer of Learning: How Managers Develop Proficiency, 2003, Michael D. Enos, Marijke Thamm Kehrhahn, Alexandra Bell)



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