



The Challenges of Training for System Integrators

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During the last few vendor conferences I participated in, I had a strange feeling. Are we going to be able to keep our resources and companies up to date with the evolution of technology, or is it evolving too fast and becoming too complex?

I know this is not a new question—or a new challenge—so the first answer I gave myself was that I’m becoming too old to understand it, and that was the typical doubt of someone getting close to his working third age. Technology has always evolved fast and there has always been people that were not able to keep up. But are we really living the same experience? Is it really like it was in the past? My answer is yes and no! Yes: it has always happened and it’s the natural difficulty of all technical people to stay technologically relevant. No: it’s

happening much faster than in the past and this is the real problem. We are getting really close to the capability limit where one can absorb the evolution.

Even if it looks like a sociologic discussion, it's not. It's a very critical and business impacting point that needs to be quickly addressed—in partnership with technology vendors—in order to be able to continue to provide the services our client demands, and the quality they need.

In the past, the typical evolution of a tech guy was:

- Hired as a tech “guru.” Coming from a university, he had been exposed to the latest technologies. Even if the courses he attended were not on the most innovative platforms or technologies, the university environment trained him to learn fast and experiment. In the working environment, he was able to learn what he needed and quickly managed the technology.
- He grew up learning the technology more deeply and learning how to use it in order to solve problems. He started to develop some technological and functional experience that made him effective and more independent.
- Continuing to work on the technology, he became an expert and, while implementing it, he also became a system expert.
- Since the technology continued to evolve, he kept up to date until it was time to start adding new resources to the team, leveraging his experience in training to solve problems with the new tools that he was less comfortable to manage.

This cycle has progressively become shorter. When I started working, it lasted almost 15 years. Now it's probably less than five, but the feeling is that it's rapidly becoming much shorter.

The immediate effect is that technicians do not have enough time to become technology and functional experts, and this is reducing the quality and effectiveness of their outputs.

If working on product development, this issue can be addressed quite easily with a faster turnover and organization of the project. In the system integrators' business the impact is higher, because the project duration is shorter and each project practically starts from scratch. There's, of course, no way to stop or reduce the speed technology is evolving. So the problem needs to be addressed in terms of organization and collaboration with vendors. We need to develop new ways to train people, with a closer strategic collaboration between technology vendors and system integrators. We need to reorganize our teams in order to be able to leverage functional experience—that requires years to be developed—and technological knowledge of different people that have to learn how to effectively work together. Project teams will need more people in different stages of the development, and this will require a different, better way to document and split requirements and interfaces. We need to prepare for a higher turnover of technical people and find a way not to be impacted by it.

In my opinion, it's a critical challenge that needs to be addressed as soon as possible, because changes happen so rapidly. And if we aren't prepared, we will risk being too late to recover.