How IT Professionals Can Stay Relevant in a Mobile Landscape

Rhonda Chicone, School of Business and Information Technology, 2014

Originally published on the “Industry Insights” section of the Kaplan University website.

How IT Professionals Can Stay Relevant in a Mobile Landscape

Education, flexibility, and imagination are the ingredients to future IT success.

There is frequently a lot of talk about the “Internet of Things,” but it’s hard to pin a definition to somewhat nebulous jargon.

Instead, consider its implications for day-to-day life, urges Dr. Jacob Sharony, principal of mobile and wireless technology management consulting firm **Mobius Consulting** and an adjunct professor of electrical engineering at Columbia University, who spoke with Kaplan University.

“By the Internet of Things, we mean the connected home, the connected car — by the year 2020, connected devices will increase ten-fold,” Dr. Sharony explained. “Smart utility meters, cars, even warehouse forklifts are going to optimized through the use of wireless connectivity.”

These day-to-day implications are even more pronounced in the information technology sector. IT professionals have already been made to adapt to a rapidly changing wireless landscape. As fast, effective wireless becomes ubiquitous, it is going to become even more crucial for the IT professional to evolve, especially amid this ongoing proliferation of boundary-pushing technological advancement.

“We haven’t seen anything yet,” said Dr. Sharony, who informed Kaplan University that “mobility will only increase over time. When you are mobile, you are connected and can know anything wherever you go, and furthering education is easy and accessible.”

Traditional IT Evaporates Into the Cloud

In the past, workers used devices provided to them by their employers. Because implementing such technologies required additional manpower, many IT jobs were created from the contracts forged between companies and the third-party vendors from which they purchased such devices.

These vendor contracts were enterprise wide; many business principals would use, for example, corporate-owned BlackBerry devices on various cellular networks. Under such an arrangement, the BlackBerry Enterprise Server (BES) would reside behind the customer’s corporate firewall. It would interface to the corporate email server, syncing email and PIM (calendar, contacts, and tasks) in a secure way, which resulted in an end-to-end secure solution.

Yet, soon thereafter other vendors penetrated the enterprise wireless space, enabling corporate principals to access confidential email through their personally owned devices such as smartphones. This trend trickled down to every level of employee. As a result, IT was given the challenge of managing both corporate- and employee-owned devices and the data that resided on them. This created an opportunity that was seized upon by mobile device management (MDM) vendors like AirWatch and MaaS360, whichentered the wireless space with solutions to help IT. To make matters more interesting, their offerings were not sitting behind the corporate firewall but rather in the cloud, with price points hard to resist.

Flash forward to today and BYOD — “bring your own device” — is standard operating practice at many corporations.

Though the traditional IT professional was a vendor specialist, their role quickly changed, explained Dr. Sharony. “Before, IT was managing securing the device to administer passwords and establishing a connection with the device to the internal network. Today, IT is managing securing the *data* that employees have access to.”

There are many challenges that come with a BYOD enterprise mobility strategy that includes policy, owner, security, legal, and access issues. To help with the BYOD issues, you’ll soon start to see CYOD — “choose your own device” — as a way to solve many of the BYOD problems. The IT staff will have their work cut out for them.

The takeaway? As content moves to the cloud, these enterprise wireless systems now have two flavors of systems: on premise and in the cloud (sometimes referred to as “On Demand”). Nevertheless, there will continue to be a strong need for IT to make sure the cloud infrastructure is secure, scalable, and robust and that the user experience is consistently positive.

Why Education Matters

There's no one-size-fits-all approach to staying ahead of the curve. That's why having the right education is key for any IT worker, regardless of the industry where they eventually work.

For example, IT professionals in the finance industry must be able to ensure the transfer of information through brokers and banks with bulletproof security at every point along the way. Recent **data breaches** at some of the world's most prominent financial institutions underscore the need for IT professionals to be versed in all aspects of a modern data center, from security best practices to resource provisioning.

It's not just about learning the skills you'll need today — a good education prepares you to be a lifetime learner and gives you the tools to keep up with a field that evolves at the speed of business.

"In all of these examples," explained Dr. Sharony, "solutions are sophisticated. IT professionals need to be educated about all the possibilities, and have an outward-looking view."

The right education also imparts innumerable intangibles and soft skills, like the ability to lead projects with authority grounded in knowledge, and the confidence to communicate succinctly in a professional setting. These are skills that are critically important for IT workers, Dr. Sharony stressed.

"Technology is changing so fast, and at the end of the day employers want their IT to suggest a best-of-breed, customized solution," he said "That's how IT will continue to add value."