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# In a Highly Outsourced Environment, What are Companies Doing Around Staff Development or Their IT Workforce?

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## Abstract

[Excerpt] IT skills are more necessary than ever for competitive strategic initiatives. With the rise of shadow IT (unauthorized IT within organizations) and the ever-increasing skills gap in the IT labor market, companies need to invest in training and developing their IT technicians' skills, no matter where they sit. With IT workers being a large part of the contingent workforce, they are susceptible to becoming underdeveloped and often lack the skills required to succeed in their positions. Typically, organizations have been focused on hard skills, but soft skills have become a requirement for IT departments. In typical working arrangements, soft IT skills are learned through on the job experience. Experiences such as relevant training and mentoring mechanisms offer opportunities for IT professionals to develop and refine their soft and hard skills. However, in highly outsourced environments these skills are less likely to be developed. Furthermore, with the development of new and exciting fields such as cloud, AI, and blockchain, IT technicians must develop new, rare, and difficult skills. According to Gartner, 20% of companies will need to allocate 10% of their IT staff on AI-related projects by 2020. With very little available talent in this space, this need will be difficult to fill.

## Keywords

human resource, HR, IT, mentorship, micro-learning, portable technologies, gamification, oversight, remote workers, self-learning, dojos, digital badge, open-source learning, talent development, hackathons, stretch assignments, micro-certification programs

## Comments

# Executive Summary

## Research Question

In a highly outsourced environment, what are companies doing around staff development for their IT workforce?

## Introduction

IT skills are more necessary than ever for competitive strategic initiatives.[1] With the rise of shadow IT (unauthorized IT within organizations) and the ever-increasing skills gap in the IT labor market, companies need to invest in training and developing their IT technicians' skills, no matter where they sit. With IT workers being a large part of the contingent workforce, they are susceptible to becoming underdeveloped and often lack the skills required to succeed in their positions. Typically, organizations have been focused on hard skills, but soft skills have become a requirement for IT departments.[2] In typical working arrangements, soft IT skills are learned through on the job experience.[3] Experiences such as relevant training and mentoring mechanisms offer opportunities for IT professionals to develop and refine their soft and hard skills. However, in highly outsourced environments these skills are less likely to be developed. Furthermore, with the development of new and exciting fields such as cloud, AI, and blockchain, IT technicians must develop new, rare, and difficult skills. According to Gartner, 20% of companies will need to allocate 10% of their IT staff on AI-related projects by 2020.[4] With very little available talent in this space, this need will be difficult to fill.

## Portable Staff Development Best Practices

In order to develop these skills a portable development program is needed. Below are listed best practices for developing staff within outsourced and remote environments.

**Utilize Personas to offer a range of development opportunities.** Not every employee's career path is the same. Creating more than one template for employee skills (and career) progressions can help to build a better fitting program for all employees.[5] This will also help individuals to gain control of their own development.[6]

**Offer micro-learning opportunities through portable technologies.** Employees need to be able to access learning when they have time.[7] Many companies offer learning opportunities through mobile devices. Mobile learning can be just as effective as other forms of e-learning.

**Utilize gamification.** Gamification can help to motivate employees to be excited about development.[8] It allows them to visualize development paths and move through them. They can keep tabs on themselves. This makes major milestones in their journey more tangible.

**Enable Oversight.** Leaders should understand what learning opportunities exist, so as to suggest them based on individual needs.[9] Furthermore, managers should be able to see what trainings their constituents undergo. Autonomy of self-learning is only effective if it aligns with leaders' goals.

**Encourage remote workers to advocate for themselves.** Oftentimes employees are simply thrown into career-developing projects, but remote workers do not typically get these same opportunities.[10] If an employee does not readily get the projects they need to develop, they need to be encouraged to ask for them. Encourage remote or isolated employees to identify stretch assignments and learning programs that they would like to be a part of.

## Case Studies

Based on these best practices there are several things that companies of all sizes are doing to ensure success for their IT organization.

**Bootcamps, Self-learning and Dojos.** At Songkick, a New York-based high-growth digital concert services delivery firm, development initiatives take four stages: bootcamps, mentorship, personal improvement time, and coding dojos.[11] New IT employees are encouraged to undergo a bootcamp where on their first day they both undergo training on the firm's systems, but also are tasked with suggesting one formal change to the system. They are paired with a formal mentor who will help them to develop strategically relevant skills. Next, they are given eleven paid days in which they are asked to work on anything technology-related they choose. Some choose to work on open-source projects or internal hack days, while many team up to take online courses in artificial intelligence or cryptography from Stanford or MIT. Finally, dojos are utilized to challenge employees with real business problems. This allows IT professionals to tackle stretch assignments in a safe place and to potentially lead to greater interest in tackling bigger problems at work.

**Democratizing skills learning.** In the past couple of years IBM has seen their IT program go from centralized to decentralized.[12] In order to compete in the skills market, IBM has developed a cloud-based platform, which utilizes cloud technology and artificial intelligence to enable employees to complete learning initiatives without the use of company infrastructure. This allows employees to interact with skills learning wherever they are. The program makes suggestions on skills to develop in the future once a particular skill is mastered. Furthermore, IBM has built a badge program based around skills they would like their IT professionals to learn.[13] IT professionals are responsible for studying and learning using IBM's open-source learning platform, which is also open to external parties. Employees and external partners are rewarded with a digital badge which they are able to share online to signify proficiency in a particular skill.

**Aligning with New Strategies.** In order to align Microsoft's AI-empowered cloud strategy with its HR strategy, Microsoft needed to take measures to turn around its talent strategy.[14] Microsoft implemented three new tools into its development strategy: hackathons, high-risk projects, and redefined its talent programs. Through the use of hackathons, which can be done remotely, IT skills are challenged by allowing employees to advocate for ideas and work on business understanding and skills. By allowing new kinds of leaders to take risks and see a project through, Microsoft developed the HoloLens, a moonshot project which taught employees new skills and solved a business need. Finally, the talent development team redid their talent strategy, by allowing employees to make lateral moves to work on teams they have never worked on before, allowing them to accrue new skills and gather enough information to tackle any future problem.

## Conclusion

Development of IT workers can be quite tricky; there are many required skills in the field and the highly-outsourced model makes it difficult to acquire these skills. Portable learning is a popular and versatile solution. By making multiple learning development pathways clear to both employees and their leaders and ensuring that IT workers can advocate for their learning wherever they are is extremely important. Other development solutions include: hackathons, stretch assignments, formal mentorship programs, and micro-certification (badge) programs.

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