

Chapter 11

In the Pipeline: The New Generations of IT Professionals

Jannie M. Buitenhuis
bITa Center, The Netherlands

ABSTRACT

New generations of Information Technology (IT) professionals are entering and preparing to enter the pipeline for a challenging IT career. This chapter will present their characteristics, compare them to the previous generations, and discuss how the different generations can be effectively deployed in IT organizations. The four key characteristics of the new generations are: First of all, the new generations of IT professionals realize that the globe has become an open and connected system. Their organization should operate as a holistic brain as well, with information-processing as the center. Second, they wonder why Information Technology should stand alone. They want to talk about Community Technology. In other words: all of the technologies needed to support communities. Sharing, creating, and utilizing knowledge in an all-embracing 'space' determined by location and time, is the third aspect that characterizes the new generations. They do not let knowledge flow only virtually, or physically or mentally. They let it flow in all those 'spaces'. Fourth, they want their organization to take care of the planet: their planet. They are non wasteful, and they still keep in mind people and profit. The effective IT department understands the differences in generations and how to adapt and leverage the above characteristics.

INTRODUCTION

Of all the IT resources, the human IT resources are the most significant for the success of IT

DOI: 10.4018/978-1-60960-535-3.ch011

departments. It is these IT professionals who decide which technology to use to achieve the business objectives. And even more important: how to leverage that technology. Daily they align IT and the business. They know and understand well the needs (and don't needs) of the business.

In the Pipeline

They bring in innovative ideas to the business to support and enhance the business.

Unfortunately this might sound like the perfect IT department with the perfect IT professionals. In reality it seems that the business wants something and IT is tasked with making it happen. There tends to be too little or bad communication between IT and business during the entire life cycle, from strategy to operational support. Too often, when the IT project is finished (delayed and over budget) the business partners are not satisfied.

Where are those perfect IT professionals to create that perfect IT department? There still are not enough of them in the current labor market. Looking into the pipeline does not give us much more hope. Education still focuses on technology and processes. There is frequently too little attention placed on the skills students will need when aligning IT and business.

New generations of Information Technology (IT) professionals are entering and preparing to enter the pipeline for a challenging IT career. They do have characteristics that can help create the perfect IT department; if organizations are prepared and willing to adapt them as the organizational innovators.

What are these characteristics? How will the effective IT department attract and retain these young promising IT professionals?

In this chapter two main questions will be answered:

What are the important characteristics of the new generations of IT professionals, compared to the previous generations?

This question will be supported with the following sub questions:

What is a generation? Which generations can be distinguished?

What is an IT professional?

Which classification of perspectives can be used to sort related values of generations of IT professionals into generation characteristics?

How will the effective IT department attract and retain the new generations of IT professionals?

Among others the Solutions & Recommendations sections in this chapter might inspire CIOs, IT managers, HR managers, education program makers and others to take action. In the Conclusion section four tips will be given to build the pipeline for the new generations of IT professionals. Also four tips will be given to attract and retain these new generations into IT departments.

In the next section the need for awareness of the new generations of IT professionals, and their influence on organizations, will be underpinned.

BACKGROUND

The practical, social, and scientific considerations of becoming aware of the generational characteristics of IT professionals are presented below. CIOs and IT managers work with four kinds of IT resources daily. It is important to begin by explaining what managing human IT resources could mean, and what is understood to be an IT professional.

In the economic sciences the production resources labor, capital, materials, and entrepreneurship are distinguished. In Figure 1 these economic producing resources have been translated into IT resources. IT resources can be subdivided into IT professionals (labor), budget (capital), IT assets like hardware, software, networks, and data (materials), and IT management (entrepreneurship). IT management combines the first three kinds of resources which results into deliverables for the business.

The way production resources are translated into IT resources results into four views on how to look at resources. These views are the human

26 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:
www.igi-global.com/chapter/pipeline-new-generations-professionals/53111

Related Content

HR Shared Service Centers: From Brand Management Towards Success

Mitchell van Balen and Tanya Bondarouk (2009). *Handbook of Research on E-Transformation and Human Resources Management Technologies: Organizational Outcomes and Challenges* (pp. 419-434).

www.irma-international.org/chapter/shared-service-centers/20075

Web-Based Organizing in Traditional Brick-and-Mortar Companies: The Impact on HR

Jaap Paauwe, Elaine Farndale and Roger Williams (2005). *e-Human Resources Management: Managing Knowledge People* (pp. 1-30).

www.irma-international.org/chapter/web-based-organizing-traditional-brick/9052

Innovation through Diversity: We Aren't Post-Politics

Samantha Szczur (2014). *Approaches to Managing Organizational Diversity and Innovation* (pp. 24-41).

www.irma-international.org/chapter/innovation-through-diversity/108468

Employer Brand Image Review and Future Strategies

Crystal M. Harold and Kevin P. Nolan (2009). *Encyclopedia of Human Resources Information Systems: Challenges in e-HRM* (pp. 334-339).

www.irma-international.org/chapter/employer-brand-image-review-future/13250

Using Integrative Development to Create a Coaching Culture in a Professional Services Firm

David B. Drake (2019). *Evidence-Based Initiatives for Organizational Change and Development* (pp. 506-514).

www.irma-international.org/chapter/using-integrative-development-to-create-a-coaching-culture-in-a-professional-services-firm/225177