

# Designing for the Next Generation: Generation-Y Expectations

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**Abstract.** In designing applications for the next-generation workforce, we considered the requirements of future workforce members (Generation Y). A study was conducted using a wants and needs analysis to analyze a consumer trend toward the use of social networking tools. A significant proportion of future workforce members expected to see consumer social-networking style features in their enterprise applications. The data highlighted specific requirements that provided some further insight into the expectations of future enterprise application users.

**Keywords:** Design, User Experience, Generation-Y, Enterprise Applications.

## 1 Introduction

McKinsey and Forrester, two noteworthy high technology industry analysts, conducted studies of workplaces worldwide in 2005, 2007, and 2008, and found that the very nature of work has changed dramatically, as technology has become a central point in people's lives, both at work and at home [1, 2, 3, 4]. The increasing use of personal computers (PCs) and mobile devices outside the workplace, namely at home, has changed the expectations of all end users in recent years. Attempting to accurately classify today's users vs. future users is likely to be controversial – we may never arrive at an answer that is satisfactory to everyone [5, 6]. But what is clear from studies by McKinsey and Forrester is that today's users, however they may be classified and to whatever generation they may belong, collectively expect much more from their enterprise applications than they did just 15 years ago [1, 7, 4].

This commonality among user expectations across multiple generations has motivated us to seek answers to questions around the future direction of enterprise applications.

## 2 The Changing Face of Work

Just twelve years ago, less than 25% of adults in the United States used the internet at home, work, or school [8]. Today, the number of “wired adults”<sup>1</sup> in the United States

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<sup>1</sup> Pew Internet & American Life Project refers to these “wired adults” as those making use of one or more new communications technologies, including internet, email, and mobile phone. A full 73% utilize all three basic tools regularly.

alone is a staggering 96% of all working adults (156 million), of which more than 55% have broadband access in the home [9].

When enterprise applications emerged in 1995, most end users were exposed to computers only in the workplace. And these early enterprise applications had one important and common goal: to provide more control for management over things such as employee benefits, cost of operations, and overall corporate expenses – what McKinsey calls “transactional work” [7]. Today, almost half (45%) of those employed work at least sometime from their home [9]. And, unlike the early enterprise applications, most popular consumer applications today turn “command and control” on its edge. They instead focus on empowering end users to do more, take greater ownership of their methods as well as their results, and do things such as “share” and “relate” with one another [10, 11]. McKinsey refers to this kind of work as “tacit work” [7]. In this study McKinsey determined that: “... *the way companies deploy technology to improve the performance of the tacit workforce is very different from the way they have used it to streamline transactions or improve manufacturing.*” [7]

Will the increased use of consumer internet applications in the home, and the reality that companies are deploying different tacit technologies at work, have a direct impact on the enterprise applications expectations of these users? If this is true, in just a few short years, these gaps may grow even greater, as even more students from colleges and universities across the world enter the workforce for the first time – expecting their enterprise applications to look, feel, and behave more like their everyday consumer applications. It seems appropriate for us to understand the true expectations of these users and determine what impact (if any) their expectations might have for future considerations in enterprise application design.

## 2.2 Generation Y

In considering these shifts in the workplace [2, 11], we asked these questions: How do we design for the next generation? Have users’ core requirements and expectations changed so much that we need to start looking closely at the consumer space for indications of what to do in the enterprise?

In order to address these questions, we needed to first take a closer look at this future workforce and understand what their expectations might be. If we can understand what this future workforce will want and need in their enterprise applications, we will be able to design for the *majority* of the next generation of enterprise users<sup>2</sup>. As a result, we conducted a wants and needs analysis of Generation-Y users – those born between 1978 and 1986 [12] – to better understand what their true expectations are in terms of enterprise applications.

The way that Generation Y views and uses technology is different from the way earlier generations have used technology. Generation Y is an example of a primarily tacit workforce [7]. Characteristics of this cohort include a sense of entitlement, a desire for customization, a team orientation, and a high value on peer opinion. Many in this generation are natural multitaskers, capable of efficiently using multiple technologies at the same time [13]. They are constantly surrounded by technology and

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<sup>2</sup> This in turn assumes we will see similar trends in common expectations of both future users and today’s users, as McKinsey outlines in its changing workplace studies 2005-2008.

desire immediacy. They also want and expect access to tools that will fill those needs: cell phones, Facebook, and instant messaging [3]. Generation Y expects to communicate within the workplace across a flattened hierarchy, in the same way they communicate outside the workplace. They want to not just inform, but to increase engagement. This generation expects not just directions, but dialog [14].

Workplaces are generationally diverse, and different generations have different values and needs in the workplace [12]. The sheer size of Generation Y, with 70 million members (compared to 76 million for baby boomers), will certainly have a strong influence on the future workplace [15].

### 3 Generation-Y Social Networking Case Study

One technology trend, social networking, will have a tremendous impact on the workplace as Generation-Y workers enter the workforce. According to the Wall Street Journal, “social networking is just one of many consumer technologies, including blogs, wikis, and virtual worlds, to cross over into the corporate world” [16]. The entry of Generation Y into the workforce has pressured employers to enable communication tools such as online social networks in the workplace. In response to this trend, enterprise software companies have introduced social networking products such as KickApps, Passenger, and hi5 [17]. The market intelligence firm IDC predicts that the market for enterprise social networking applications will grow to \$428.3 million in 2009 [18].

To understand the requirements of the Generation-Y worker population, particularly with respect to social networking, the Oracle Application User Experience team conducted a study targeting this group. A wants and needs study was conducted in December 2007 and involved Generation-Y participants from three geographic locations. Wants and needs analysis is a structured brainstorming method used to elicit user requirements for a product or service [19]. Our findings revealed that there is indeed an impact of social networking technology in the workplace. Generation-Y workers want and need some of the same social networking features that they are accustomed to using outside of work. They often expect these same features and functions to be available in their enterprise applications.

#### 3.1 Participants

Three wants and needs sessions were conducted (Denver, Colorado; Redwood City, California; and Reading, UK). Four to eight people participated in each session, and a total of nineteen people participated in the study overall. To qualify for the study, participants had to:

- Be adults under 30 years of age (members of Generation Y) who use consumer social networking sites or applications.
- Use a self-service human resources (HR) application.

Each session lasted two hours, and participants were compensated for their time with a \$100 value gift card.

### 3.2 Procedures

Participants were asked to sign informed consent and nondisclosure forms, then the scope of the study was explained: a brainstorming session regarding social networking in a work context. Social networking was defined as the “creation of an online community where a person can gather information, build contacts, and interact with others.” After social networking was defined, participants were asked what consumer social networking Web sites they currently use and how they use these products.

Participants performed a brief 5-minute practice brainstorm, regarding the characteristics of their ideal toaster. This practice session accustomed participants to the flow of brainstorming.

Each brainstorming question concerned a different aspect of social networking: tasks, features, information, and system characteristics (see Table 1). Participants were given the first brainstorming question. After the participants had run out of ideas for the first brainstorming question, they were given the second brainstorming question. This process was repeated for the remaining questions. The ideas generated were recorded in a text document, which was projected onto the screen in the front of the session room for all to see.

**Table 1.** Brainstorming Questions

Number	Question
1	What kinds of social networking / collaboration <b>tasks</b> would you like to perform in a work context?
2	What social networking <b>features and information</b> would you want?
3	What are the <b>characteristics</b> of your ideal system?

After participants completed the brainstorming for all questions, they were asked to individually pick their top five items from the pool of brainstormed ideas and identify the social networking characteristics, features, and tasks they personally would like to have in a work context. After all of the participants had identified the five items that they wanted most in a work context, the process was repeated to identify the top five social networking characteristics, features, or tasks that participants would like to have in their HR applications.

### 3.3 Analysis

Data from the three sessions were pooled, and each of the items in the top five worksheets for the work context exercise was given a participant identifier and sorted into groups based on verbatim content. If two or more of these groups were similar or used different wording for the same idea, they were combined into one group. Duplicate

items were removed to avoid counting multiple votes from a participant. The percentage of participants wanting or needing each item was calculated.

This process was repeated for the top five worksheets from the HR prioritization exercise. Items were ranked to produce two prioritized lists, one for social networking items desired in a work context and another for social networking items desired in HR applications.

### 3.4 Results

**Top Wants and Needs for Social Networking Features in the Workplace.** The following items were identified as desirable features to have in a work context by greater than 35% of all participants:

- The ability to see skills and qualifications of colleagues
- The ability to view and schedule meetings
- Mini-feeds (RSS feeds<sup>3</sup>)—information of interest to the employee in his or her role, that is, “what’s new” information, training information, and project updates

**Top Wants and Needs for Social Networking Features in HR Applications.** The following items were identified as desirable features to have in HR applications by greater than 35% of all participants:

- A personal profile (including data such as contact information, skill set, role in the company, and personal interests or hobbies)
- Security—the ability to secure information from unauthorized individuals or parties outside the company
- Training recommendations—the ability to view training that others have taken
- Reminders and updates

Based on the study and the findings, Oracle Application User Experience confirmed that a crossover of personal technology use to the workplace will indeed occur. We determined that Generation-Y workers expect and want to have the same features and functionalities in enterprise applications that they are accustomed to using for their social interactions and connections outside of work.

## 4 Implications for Enterprise Applications

The next-generation workforce is accustomed to always being connected to peers and expects to have the same technology available in the workplace that they have outside of work. In order to enable knowledge workers to work smarter, they need to have access to the right information to complete their tasks and need to be able to identify the right people to collaborate with to meet their objectives. The findings of the wants and needs study indicated that participants wanted to have access to the information and people they needed to complete work both in the workplace and outside work.

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<sup>3</sup> RSS (Really-Simple Syndication) is a family of Web feed formats used to publish frequently updated works—such as blog entries, news headlines, audio, and video—in a standardized format. (From: [http://en.wikipedia.org/wiki/RSS\\_feeds](http://en.wikipedia.org/wiki/RSS_feeds))

Specifically, participants wanted their tools to not just provide more information, but to provide the right information based on context. They wanted to see who was best qualified and available to help them complete a task, and wanted tools that enabled them to easily collaborate with others. Applications that provide easy access to these capabilities could benefit not just members of Generation Y, but also baby boomers and other demographic groups.

#### 4.1 Next Steps

One area for future research is identifying enterprise social networking features that users would want to have available from a mobile device. Some participants in the wants and needs study indicated that a key characteristic of their ideal enterprise social networking application would be mobile capability. Oracle plans to investigate potential mobile applications user requirements as part of a set of ongoing studies on mobile device use in the workplace.

Another question that could be addressed with future research is whether the results of the Generation-Y wants and needs study, which was conducted in the United States and United Kingdom, apply across cultures. A recent global study predicts that within just a few years China will surpass the United States as the “most wired” country on the planet [20]. Perhaps, after all, we may see similar patterns of interaction across much of the world.

### 5 Conclusions

End-user expectations of enterprise applications have dramatically changed in the last two decades. The changing work landscape throughout the world, brought on primarily by the increasing use of PCs, the internet, and mobile devices at home as well as at work, has created a major shift towards more consumer-driven experiences. The main questions here have been: Who is this shift really affecting the most? Is this shift impacting the requirements for designing next-generation enterprise application user experiences? Our own studies of Generation-Y users utilizing social networking capabilities indicate that the landscape for all users has indeed changed the design requirements for enterprise applications. The enterprise is now playing catch-up to the consumer space, as end users of all kinds are expecting similar experiences in their everyday enterprise applications.

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