

Digital ‘Natives’ Invade the Workplace

Young people may be newcomers to the world of work, but it’s their bosses who are immigrants into the digital world

by Lee Rainie, Pew Internet & American Life Project
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As consultant Marc Prensky calculates it, the life arc of a typical 21-year-old entering the workforce today has, on average, included 5,000 hours of video game playing, exchange of 250,000 emails, instant messages, and phone text messages, 10,000 hours of cell phone use. To that you can add 3,500 hours of time online.

Our work at the Pew Internet Project shows that an American teen is more likely than her parents to own a digital music player like an iPod, to have posted writing, pictures or video on the internet, to have created a blog or profile on a social networking web site like MySpace, to have downloaded digital content such as songs, games, movies, or software, to have shared a remix or “mashup” creation with friends, and to have snapped a photo or video with a cell phone.

“Today’s younger workers are not ‘little us-es,’” argues Prensky, an educator, gaming expert, author of *Don’t Bother Me, Mom – I’m Learning*. “Their preference is for sharing, staying connected, instantaneity, multi-tasking, assembling random information into patterns, and using technology in new ways. Their challenge to the established way of doing things in the business world has already started.”

Those challenges often flow from young workers’ embrace of technologies that have grown up with them. Today’s 21-year-old was born in 1985 -- 10 years after the first consumer computers went on sale and the same year that the breakthrough “third generation” video game, Nintendo’s “Super Mario Brothers,” first went to market. When this young worker was a toddler, the basic format of instant messaging was developed. And at the time this young worker entered kindergarten in 1990, Tim Berners-Lee wrote a computer program called the World Wide Web. Upon entering middle school, our worker might have organized his schedule with a gadget called a Palm Pilot (first shipped in 1996). And at the dawn of high school for our worker in 1999, Sean Fanning created the Napster file-sharing service. When the worker graduated from high school four years later, his gifts might have included an iPod (patented in 2002) and a camera phone (first shipped in early 2003).

Our worker’s college career saw the rise of blogs (already two-years-old in 2000), RSS feeds (coded in 2000), Wikipedia (2001), social network sites (Friendster was launched in 2002), tagging (Del.icio.us was created in 2003), free online phone calling (Skype software was made available in 2003), podcasts (term coined in 2004), and the video explosion that has occurred as broadband internet connections become the norm in households (YouTube went live in 2005).

Now, we have a reversal of the normal situation, where young people migrate into a workplace manned by seasoned natives. Instead, in this digitalized age, this 21-year-old and his peers are showing up in human resources offices as digital natives in a workplace world dominated by digital immigrants – that is, elders who often feel less at ease with new technologies.

How different are they? David Cintz, 22, and a student at California State University, Chico, says his father is a highly accomplished technologist who worked for years at Hewlett-Packard, but father and son treat technology differently. "He can kick my butt on programming, but I'm the one who works all the time with two monitors on, listening to an internet radio station, with multiple IM screens on, or having online phone conversations simultaneously," notes the younger Cintz. "I'm the one living in the digital world, plugged into more devices. For him, it's work. For me, it's lifestyle."

Several years ago when she was interviewing a 17-year old girl named LaShonda for a project about the future of work, Rebecca Ryan, founder of a hip consulting firm named Next Generation Consulting, noted the difference between digital natives and their digital immigrant elders. In an email, she explains:

"We were at a food court in a mall outside Seattle. While I was interviewing her, she was IM'ing, had her PDA on, her cell phone, the whole thing.... I was so put off. I thought, 'She's not paying attention!' And so I asked her, 'LaShonda, what do you think will be the impact of technology on the future of work?' She looked me in the eye and asked, 'What do you mean by *technology*?' I looked at all of her gadgets on the table and said, 'Like this stuff!' She said, 'This is only *technology* for people who weren't raised with it.' Whoa. The point that came home to rest for me is that for LaShonda, IM'ing and texting are like breathing. Fish don't know they're in water. LaShonda didn't consider her gadgets *technology*."

This generational difference will inevitably pose challenges and create opportunities for the firms that hire them because natives have experiences and values that are different from digital immigrants. Herewith, five new realities of the digital natives' lives that should be understood by their new employers:

Reality 1 – They are video gamers and that gives them different expectations about how to learn, work, and pursue careers.

A host of experts have affirmed that today's young workers have internalized the new realities of work. "In contrast to a generation ago, job entrants now do not expect lifetime employment from a single employer; they do not expect a full menu of paid corporate benefits; they do not relish jobs in hierarchical bureaucracies," argues Edward Lawler, Director of the Center for Effective Organizations at the University of Southern California, and co-author of the forthcoming book, *The New American Workplace*. "To them, the word 'career' is plural."

These attitudes clearly reflect the larger realities of the changing nature of work. Yet there is also some evidence that the ethos of video gaming plays a role. Studies at the Pew Internet & American Life Project show that virtually all college students play video, computer or internet games and 73% of teens do so. John Beck and Mitchell Wade argue in their book, *Got Game: How the Gamer Generation is Reshaping Business Forever*, that games are the "training program" for young workers that helps form their attitudes about the way the work-world operates -- a world full of data-streams, where analysis and decisions come at twitch speed, where failure at first is the norm, where the game player is the hero, and where learning takes place informally.

For companies, this puts a premium on designing engaging work that allows workers to make a clear contribution and be rewarded for same. If "organization man" has become "gaming man," then the importance of worker morale is elevated -- as is the value of basing work on completed tasks, rather than other measures of work effort such as hours on the job. "Give them projects to complete and then stand out of the way," argues James Ware, who helps run *Future of Work*, an organization for facilities, information technology, and human resources professionals based in Prescott, Arizona. "These kids quit when they are frustrated trying to finish an effort that will 'get them to the next level.'"

Reality 2 –They are technologically literate, but that does not necessarily make them media literate.

Our research has found consistently that the dominant metaphor for the internet in users' minds is a vast encyclopedia – more than it is a playground, a commercial mall, a civic commons, a kaffee klatch, or a peep show. This is especially true for younger users, who have grown up relying on it to complete school assignments, perhaps too often clipping and pasting material from websites into term papers.

Sandra Gisin, who oversees knowledge and information management at reinsurance giant Swiss Re, says her colleagues marvel at the speed with which younger workers communicate and gather information. Still, she has had enough bad experiences with credulous younger workers accepting information from the top link on a Google search result that she says the firm will begin new training programs next year to teach workers how to evaluate information and to stress that “not all the best information is free.”

Dow Jones news organizations have similar worries. They have created programs for journalism educators and reporters-in-training to drive home the point that journalists should not rely on Web sources without checking its origin and confirming it in other ways. “We drive home the point that it’s not good enough to say, ‘I read it on the internet,’ without taking other steps to verify it,” notes Clare Hart, Executive Vice President of Dow Jones and President of the Enterprise Media Group.

At the same time, younger workers' comfort with online tools can be a boon to marketing departments. Hart, 45, says younger workers on the staff “convinced us Baby Boomers” to put more information from Dow Jones conference presentations online and to create podcasts of the best of them. Since then, email offering podcasts gets opened about 20% more frequently than traditional marketing email.

Reality 3 – They are content creators and that shapes their notions about privacy and property.

More than half of American teenagers have created a blog, posted an artistic or written creation online, helped build a website, created an online profile, or uploaded photos and videos to a website. They think of the internet as a place where they can express their passions, play out their identities, and gather up the raw material they use for their creations.

So, why shouldn't young employees think it clever and fun to post on their blogs pictures of Apple computers being delivered to the loading bay at Microsoft headquarters? That is what Michael Hanscom, a temp employee for a Microsoft vendor, did and was quickly fired for violating the company's non-disclosure rules. An even more benign episode ended the same way when Bill Poon, a database marketing manager for Collectors Universe, a sports memorabilia authenticating company in Los Angeles, posted a photo of his department's president on his MySpace profile. Poon also filed a few comments poking fun at the firm's dress code and cubicle culture and was axed based on the company's concerns about “identity theft.”

In the many-to-many broadcast environment of the internet, the prospects for data hemorrhage from companies have grown exponentially. The rise of consumer-creations online also means that outsiders have all manner of ways to record and report on the behavior of employees – as AOL discovered recently when a customer recorded and posted a frustrating telephone encounter with a customer service representative who refused his request to change his service plan and persistently pressed him with other options.

Clearly, firms need to create policies about how internal bloggers should treat company information, what kinds of intellectual property need to be protected, and basic norms of behavior that should guide people who want to create online material.

Reality 4 – They are product and people rankers and that informs their notions of propriety.

This is the wisdom-of-crowds generation that grew up rating peers' physical attributes (amihotornot.com), pop culture creations (metacritic.com reviews), teachers' style and grading practices (ratemyprofessors.com), products and services (epinions.com), and even weddings (bridezilla.com). No surprise, then, that there are websites drawing decent traffic for people to rate their bosses, their clients, and their customers. The tone of online commentary is often flame-oriented, racy, and retaliatory. This, too, is the generation that has given rise to cyber-bullying.

"My generation is really big on ranking and rating things and sharing all kinds of information online," agrees Cal State student Cintz. "Sometimes you look at the postings and think that [my peers] don't have enough discretion. For some people, it's showing off and trying to call attention to themselves. That worries me because they can hurt companies and hurt themselves."

Thus, organizations might ponder adding a new clause or two to the policy manual about online etiquette inside and outside the workplace. "Most companies have policies in place against harassment based on things like sex, race, and ethnicity," says Lynn Karoly, an economist at the RAND Corporation who has studied the 21st Century workplace. "But we should probably create new categories of policies to handle unacceptable online behaviors where liability might emerge."

Reality 5 – They are multi-taskers often living in a state of "continuous partial attention" and that means the boundary between work and leisure is quite permeable.

The ubiquity of gadgets and media allows younger workers to toggle back and forth quickly between tasks for work and chatter with their friends, research for projects and diversions on their screens. Many marvel at their capacity to juggle multiple tasks at once. An even sharper insight comes from Linda Stone, a technology consultant, who has noted that many technophiles function in a condition she calls "continuous partial attention," where they are scanning all available data sources for the optimum inputs.

Those who operate in such a state are not as productive as those who stay on task. They also do not make distinctions between the zones of work and leisure, consumer and producer, education and entertainment. "Their worlds bleed together," argues Charles Grantham, another principal at Future of Work. "It is pretty useless to try to draw borders around different spheres of life for them. It's better to let them shift among them at their own choosing as long as the work gets done."

Rebecca Ryan of Next Generation Consulting says she has recently gained a new appreciation for young workers' capacity to multi-task even when it seems rude and inattentive. In an email, she explained:

"We currently have an intern who's working on several critical projects. She's brilliant and a great fit for our team. At meetings, she's online the whole time. At first, I was totally put off by this -- Why isn't she looking me in the eye? But then I realized that our 'to do' lists were a LOT shorter after these meetings because she would locate the information we needed in real time, which eliminated the need for a lot of follow-up work. So, something that I initially perceived as 'poor manners' on her part actually ended up being a great efficiency in our team meetings."

Again, companies would be wise to spell out their tolerance levels for the amount of personal activity workers are allowed on the clock and their expectations about the availability of workers outside the office and after hours.

Many firms see no option but to embrace the world of digital natives. Agilent Technologies, a top global measurement company, began early this year to distribute iPod Nanos to new employees hired from U.S. college campuses. The Nanos were preloaded with podcasts

describing each of the benefits offered by the company, such as the 401(k) retirement plan and options for health insurance. “The college kids loved getting the benefit overviews preloaded on the iPod, while our older workers often preferred to read about these things on our web site,” notes human resources manager Cathy Taylor. “There are different generational learning styles.”

Still, the ethic of podcasting information has now begun to spread through the company and some of those older workers have caught the bug, too. For a recent retirement party, staffers from Agilent's far-flung offices collaborated on a podcast for the retiree. *You Raise Me Up* by Andrea Bocelli was dubbed over the voiced well wishes and the podcast was played over a WebEx teleconference. “It was a first for a virtual retirement party,” enthuses Taylor. “We’ll be doing it again.”

Lee Rainie is director of the Pew Internet & American Life Project. A shorter version of this article appeared in the Financial Times on September 20, 2006.