



Digital Power

BY PETER M. CURTIS

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Preparing the Nintendo Generation for the Mission Critical Industry

Sooner or later the kids will rule

When my generation grew up, a greater percentage of us were hands on compared to today's population. Many families did their own home and auto repairs just out of necessity. In doing so, we became mechanically inclined and attained an understanding of how systems operate. This experience provided today's mission critical professionals with a set of skills to build on.

Today's Nintendo generation is gaining a slightly different set of skills through computers, software, and video games. They are gaining valuable experience with IT systems and will have a solid foundation on which to continue to develop more advanced IT skills.

The next step for industry is to create a strong succession plan that includes teaching this Nintendo generation how critical infrastructure operates and connects their already abundant IT knowledge to engineering. Then professionals can show them how to apply that knowledge in the field.

Recently, I made several presentations to several different groups on training the Nintendo generation to work in the energy and mission critical industries. One particular group comprising electric utility professionals was distinctive because they have worked for the same companies for decades, while most other people change jobs every three to five years. An audience survey showed that at least 50 percent would be retiring in the next five years. The utility professionals were concerned that strategic succession and transition plans are taking longer to implement than expected.

Our power industry already has a worker shortage due to deregulation and has also scaled back or eliminated training programs to cut costs. Now, as professionals retire, the lack of experienced mentors available to train the new recruits will make this shortage worse. We need to begin transferring this knowledge to ensure that when the Nintendo generation takes the controls, it is prepared to meet the ultimate goals of decreasing operational risk, improving life safety, and enhancing the grid to meet the vast needs of today's society. A

recent survey of 100 senior executives from firms with revenues between \$10 million and \$1 billion found that the current skilled labor shortage will cost millions each year, on average. Companies with more than \$1 billion in annual revenue believe the shortage will cost up to \$100 million over a five-year period.

Some are suggesting plans to retain current staff nearing retirement, but this solution will only delay the inevitable. One good strategy may be to start training potential successors as early as possible so someone is available with the necessary experience to take on operational responsibilities when a retirement causes an opening.

New college programs that include internships should be developed and made attractive for young engineers. These programs need to show real career path options and align with corporate needs. From my experience, an education model that teaches theory reinforced with real-world applications works extremely well. It's great to observe young engineers come into a company as interns and steadily gain self-confidence while contributing to society. It's a triple win; for the student, company, and society.

It is time to invest in our future, so that the people who will be running the critical infrastructure of our country will have the necessary skill sets needed to meet and exceed our current standards. We need to constantly evolve and improve as professionals or risk becoming extinct. Imagine what will happen if, due to inadequate training, no one fully understands how to operate and maintain our critical infrastructure before all the experienced experts retire. So let's provide the right training and tools so the Nintendo generation can pick up engineering as comfortably as a game controller and continue to build on and advance the knowledge base from their predecessors. ■

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