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Last month's column discussed the McAdams Theory of grid modernization. This is final in a series of discussions on how different mindsets look at grid modernization. With four generation "X" and "Y" children growing up in our house over the last 25 years, we had the opportunity to begin to understand how this next generation of consumers, leaders, designers, and builders view the electric system.

Briefly, generation X (GenX) are those who have grown up in the shadow of the Baby Boomers and are roughly 25 to 45 years old. Generation Y (GenY) are those who follow GenX. I would be the first to say that we do not completely understand where these next generations will take the grid. But, the Modern Grid team does have some interesting insights into the future possibilities.

The GenX / GenY Theory of Grid Modernization

Traveling through airports a lot, I see a distinct difference in the generations. Baby Boomers (78 million folks like me) have a briefcase full of paper, a Pullman full of clothes, and maybe a laptop. First, GenX and GenY travel with backpacks and duffels mostly full of electronic gear, a few clothes, and on occasion a couple pieces of paper. Second, there are a lot more GenX and GenY air travelers than when I was that age.

This newest group of industry leaders and consumers (yes, they are here now) typically do not own a landline, Ethernet cable, or radio, and rarely watch "TV shows". Instead, their news and entertainment comes from the Internet or items downloaded from the Internet. Summarizing some basic research on GenX and GenY, we see these characteristics of our future industry leaders and consumers:

GenX	GenY
48 million	71 million
Very mobile in their living and in their job; exec's will move a lot	Share culture with GenX, will be middle management for the next 20 years, but interested almost completely in "real" work
Distrust of corporations, "take the money and run" approach	Push norms, question process, expect to be part of "real" projects from day one
Not trained for leadership by Baby Boomers (BB)	Self-trained for leadership through MMO (massively multiplayer online) games and other tools – very interesting research on these developed skills; all positive
Seek flextime, part-time, and telecommute roles	Can focus on complex projects and issues for enormous periods of time
More family and community focused than BB	Share values of BB; high volunteerism; engaged in religious, creative, and cultural activities
On average, make less \$\$ than BB	Motivated like BB to make a lot of money, or will change jobs to enable this
Consumer driven and media savvy	Technology driven and media savvy
Technology-rich, un-tethered life	Technology-rich, un-tethered, communicate more, but in non-Baby Boomer ways
Services must be on-demand; don't pay when not actively using; plug and play expectations	

As consumers, GenX and GenY will expect more control over their energy selections and expenses. It will make no sense to them that their cell phone knows when there is no service, but the utility waits for the consumer to call the utility to identify an outage.

As industry employees, GenX and GenY will expect a technology rich environment in every aspect of their work. It will make no sense to these employees that their HR needs are served online, but they have to go to a substation to retrieve relay data.

How will GenX'ers Tackle the US grid modernization?

These generations will use very different decision models and norms than we are used to in the electric industry. For example, there is interesting research (Got Game: How the Gamer Generation is Reshaping Business Forever, Beck and Wade, Harvard Business School Press) that shows these generations have learned different approaches to problem solving, such as those learned through MMO gaming. “The skills that are required to become a guild master (a team leader) in an MMO game – attracting a diverse group of people, assigning them different roles, training people, constantly bringing in new members – are the same skills you need for quality middle and top managers in a company,” says John Seely Brown, former chief scientist of Xerox Corporation.

As consumers, GenX and GenY will push norms, demand technological solutions and enormous information. They will demand options, become more energy savvy not taking utility information as gospel, are more likely to go off-grid or occasionally-connected. They will more likely work through community action / advocacy groups for energy change than work with the industry directly. This means the utilities and vendors will face a more demanding, knowledgeable, and mobile (move-ins and move-outs) consumer.

As industry employees, GenX and GenY will gladly tackle complex automation issues, expect real-time information as norm for their job, and push for flexible design options and de-centralize decision support. They will require “real” work, or leave to become a competitor of the utility or vendor employer. They consider “trial and error” as an acceptable decision norm. This means the utilities and vendors will face a more demanding, knowledgeable, and mobile employee.

The Bottom Line

We need to spend a lot more time understanding the GenX and GenY influence on our industry, as consumers and as individual employees. We absolutely will experience a change in decision models, questioning of senior management decisions, tough expectations of technology solutions for everything, and a much more mobile consumer and employee environment. And, this will happen fast.

Next month, we will begin a new series of articles written by different members of the Modern Grid Strategy team. The first one will focus on the role of the regulator in modernizing the grid.

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