

Bob Galvin's Recipe for Transforming the Electricity Sector

From the 1950s through the 1980s, Bob Galvin can be credited with building Motorola into the international telecom powerhouse that would come to not only dominate the semiconductor and handheld communications industries, but also pioneer quality control methods that would improve how business is done worldwide. He did it honestly and with a genuine desire to help his fellow man.

Galvin comes from a generation of leaders that worked to create jobs by building businesses that provide innovative and useful products. These leaders wanted to provide others with a good life, a means to care for and educate their children, and a path for those children to create new enterprises that would serve others and fill needs not yet imagined. Think about how many times cell phones have saved lives in emergency situations.

After the electricity blackout in 2003 that left millions in the Northeast in the dark, Galvin embarked on a new enterprise. With the help of Kurt Yeager, the former CEO of the Electric Power Research Industry, he sought to catalyze the transformation of the electricity industry — an industry critical to both life safety and the nation's competitiveness. Galvin saw an opportunity to improve the quality of electricity service, unleash innovation and create jobs in the electricity sector — jobs that cannot be exported.

Electricity system leaders can learn a great deal from Galvin's life-long mission to innovate and create opportunity. First, he is driven by a tireless and boundless **quest for better ideas** that result in new products and services that serve others in a unique way. He sought out new products, improved company structure and implemented innovative approaches to operations. Nothing at Motorola was sacred or good enough. No idea was dismissed out of hand. This culture of "ideas" and "learning" created the environment that brought the portable phone into existence.

Second, Galvin throughout his career used "**rapid prototyping**" — the process of quickly building a small, full-scale working model that demonstrates all of the functionality and benefits of the envisioned product and then continuously and rapidly builds newer and better versions. To Galvin, rapid meant building a new version every day or week, constantly testing and refining the prototype. In this way, Motorola could show policymakers what the future could look like. The parallel in the electricity sector is the prototyping of microgrids, for example, local power systems that deliver the exact requirements of a specific set of constituents (development, city, college campus, etc.)— for example, outage-free, efficient, cost-competitive and/or environmentally benign.

Third was that he has **embraced quality and systems thinking** since the 1960s. Galvin recognized that repairs, returns and waste could lead to financial ruin and market decline. He also understood that the pursuit of perfection and quality would lead to improved products and innovation. Galvin knew it would serve Motorola to be the best at quality and to encourage its suppliers and competitors to embrace it as well. The seeds of quality planted by Galvin were refined and improved by other great executives such as Jack Welch at General Electric.

Fourth, Galvin knew that a great idea was not enough: **Rules would need to change**. Even though Motorola had a working portable phone and wireless network near Motorola's factory, the current telecommunications rules would not allow Motorola or any other company access to the airways.

Wisely, Motorola built a prototype wireless network in Washington, D.C., and Galvin set about unleashing this secret weapon. Upon being invited to the White House in 1982, he brought along a portable phone prototype. President Reagan asked Galvin what he was carrying around. In his usual modest tone, he said "Well, I am so glad you asked. This is a portable, wireless phone." He then asked President Reagan if he would like to make a wireless phone call. The president called his wife.

Recognizing the possibilities, the president next asked Galvin what it would take to make portable phones available to every American. Galvin shook his head and said that the Japanese would likely get to market first as the rules in the U.S. blocked large-scale deployment. President Reagan, with a smile, said he would make a few phone calls and see what he could do. The rest is history.

Galvin's stewardship of the portable phone from concept to market reveals his "recipe" for success, which consists of:

- a continuous quest for new ideas,
- rapid prototyping to learn and refine new ideas,
- the pursuit of perfection using quality methods and tools, and
- policy reforms that enable and attract entrepreneurs, innovation and investment.

Galvin's book, *The Idea of Ideas*, provides further insight into how he steered Motorola to greatness. In it, he chronicles his quest for knowledge and innovation along with his focus on rapid prototyping and quality. He calls this process "continuous renewal." The book is a glimpse into the thinking that could transform today's electricity sector.