

Progress Through Innovation

An Interview with
Beth Comstock, Vice Chair, GE

EDITORS' NOTE Beth Comstock was named Vice Chair in August 2015. In this capacity, she leads GE's efforts to accelerate new growth. She operates GE Business Innovations, which develops new businesses, markets and service models; drives brand value and partners to enhance GE's inventive culture. This unit includes GE Lighting, GE Ventures & Licensing, and GE sales, marketing and communications. Since 2008, she served as GE's chief marketing and commercial officer. From 2006, she was President of Integrated Media at NBC Universal overseeing ad revenue and the company's digital efforts, including early development of *bulu.com*, *Peacock Equity*, and acquiring *ivillage.com*. In 2003, she was named the company's first chief marketing officer in more than 20 years. Previously, she held a succession of roles at GE, NBC, CBS, and Turner Broadcasting. Comstock is a member Nike's Board of Directors and Trustee president of the Cooper-Hewitt Smithsonian Design Museum. She graduated from the College of William and Mary with a degree in biology.



Beth Comstock

COMPANY BRIEF GE (*ge.com*) is the world's digital industrial company, transforming industry with software-defined machines and solutions that are connected, responsive, and predictive. GE is organized around a global exchange of knowledge, the "GE Store," through which each business shares and accesses the same technology, markets, structure, and intellect. Each invention further fuels innovation and application across our industrial sectors. With people, services, technology, and scale, GE delivers better outcomes for customers by speaking the language of industry.

How critical is innovation to GE and how important is it to retain an innovative edge as you grow in size and scale?

Innovation is what GE is all about. The word we always come back to is "progress." When we look at GE's 130-plus years of being a company, it has always been about progress – how to move toward what the world needs.

Right now, the company is focused on solving big problems with big technology. The world needs a focus right now on energy, healthcare, and transportation challenges. At GE, we believe we have to continually innovate the materials that go into these technologies.

This also holds true with regard to the data and analytics that surround these technologies so they can perform better, and so our customers can perform better. It even impacts the way we partner with our customers and with others, be it startups or other global companies. We have to be fast, and we have to understand what our customers and the world needs. This is what is fun about a company like GE – we're in these big industries where we have to keep moving forward.

At GE's size, is it difficult to avoid building silos by business unit in different areas and to make sure innovation crosses the entire company?

One of the great things about GE is that the sum is greater than the parts, and that is our secret sauce. It's about how we share that intellect so that every business and every industry we're in can compete faster.

It starts with technology. Many people don't realize that jet engine technology, in one case, actually powers energy generation in another case. Ultrasound technology that comes out of healthcare actually helps the oil and gas industry understand that its pipes are safe and if they're corroding or not.

There is a lot of technology sharing that happens across our businesses that fosters innovation and new application – we call this the "GE Store." If we start with the belief that we're going to come up with a great idea from within our company that we can apply outside, then this is also a great way to think about applying innovation internally through horizontal connections.

This also requires that we commit to this culturally. For the past three or four years, we have been looking at how we can think more entrepreneurially and how we can create a message that encourages doing things faster in a smaller environment. We can then share this globally and it becomes something every one of our businesses participates in.

For a company like ours, if we just left an innovation alone in a business unit silo, we would be missing the opportunity to help everyone get there faster with a great insight from healthcare, for instance. Who would have believed that it would be that industry that would make the power of modern business better?

So intellect sharing is a core concept behind innovation and requires leaders who are always concerned that there has to be a better answer either inside or outside the company.

What type of metrics can you put around this innovation focus? Is it harder to track or evaluate impact?

No. We can start to track core investment and how well we leverage it to develop new revenue sources in different industries.

3D printing and advanced materials, for instance, is really sexy, and at an exciting stage for GE right now. A great deal of core innovation in these fields is occurring in our research lab right now.

We know what this costs and we want to understand how to deploy it in aviation. Once we've deployed it in aviation with something like printing titanium parts, it becomes about how quickly we can get that to power and water, and start applying it into some of their energy generation parts.

Pretty quickly, we can start to measure the speed at which we can do that and the effectiveness by which it scales. Ultimately, it ladders up to new sources of revenue or reduced cost in how we produce things.

We can put metrics on pretty much any part of innovation – it's all about knowing where we're going and testing our assumptions.

How important is it to be aware of what trends are occurring outside of the company and to bring this knowledge back into the company?

That's the role of someone like me in the company, and there are many people in our company whose job it is to live outside the company, understand the trends, and to translate it back to us in a way that is relevant.

It's the same with our global organization where we have embedded people in markets so they can understand what happens when we're using an ultrasound in, say, Indonesia as opposed to India.

Over the past 10 years, we've made significant moves toward becoming a company that believes we have to be where the action is with our customers in the market. We have to understand the trends, and the biggest trend happening right now is speed – things are happening so much faster that, when we see something, we have to be quick and agile in getting something out there to try out.

We're not just innovating for innovation's sake but verifying that there is a real need there and that we have the capability to solve it.

This is where partners come in because we're sharing a lot of risks and rewards. Many of these partnerships are with start-ups because they tend to be incredibly focused, they're very nimble, and they give us a window into something.

Is it also important to have a leadership and a culture at the company that is willing to make those long-term investments?

We need to have both. We're a publicly traded company and we have obligations to hold to certain financial rigors for our investors. We have to be a company that functions well, but we also have to plan for tomorrow.

We have to allocate capital to position ourselves for if and when these things take off. We've used our venture capability to do that, meaning we don't just invest in start-ups looking for the return, although that is important, but it's as much about the strategic insight and the ability to position ourselves in evolving markets so we're there when they take off. Often, the small investment plus a commercial partnership gives us that kind of flexibility in the market.

The healthcare space is a really good example. It's very vibrant in New York. We have joined with funding partners there like StartUp Health, which is an incubator for digital health applications. There is no way we're going to be able to grow all that or even know a lot about it initially within GE, but by funding an incubator like StartUp Health, we have an access to learn from potentially new ideas coming out of 15 or 20 start-ups being incubated at once.

These kind of partnerships in a city like ours are very important.

How are you able to juggle all of the different roles this job requires?

They all relate to the position GE is in and the kind of industries we're involved with, but the role makes perfect sense from a marketing perspective. Marketing is about positioning ourselves at that intersection of change and what people need. It's about what is happening in the market, and it quickly leads to evaluating those trends and insights, and understanding what is important. This means we're not just innovating for innovation's sake but verifying that there is a real need there, and that we have the capability to solve it. It also means we have to understand our partners because we can't do it alone.

We have the kind of people that have their radars set for this. In any company, I hope leaders recognize the value of marketing almost as a geo-positioning satellite. It helps to tell the company where to go, what is happening, and what we need to pay attention to.

Many people think marketing is about an external message, but with the size, scale, and global footprint of GE, and the innovation and exciting things happening inside, how critical is the internal communication to engage the company's people in these efforts across all levels?

Engaging the employees and external partners is critically important as we're developing the market opportunity because it often comes back to insights, trends, and relevance, and what we are going to do to understand and then scale. At the same time, we have to paint a vision of where we're going – and we don't even know if we're going to get there – but we have to tell a compelling story about why people should care, and explain the opportunity.

I find the storytelling component goes hand-in-hand with that insight and discovery, because people, both internally and externally, have to get excited by good storytelling and think it's worth their time, or challenge the assumption.

Is what GE can offer young people in their careers well understood and how important is it that the message gets to them that this is no longer the GE of the past?

It's critically important that we get the message out that GE is more than can be seen or known.

We are having some success but there is a lot more we need to do, and our move forward into the Industrial Internet and more analytics gives people a way to start to think about this.

There is a core set of skills in building consumer applications for the consumer Internet, but we need people to understand that those same skills can be used on the industrial side, and it's really mission-based.

Most entrepreneurs and people looking to build their careers are also attracted by a big mission. We tell people to bring their skills to us related to things like affordable health-care – like taking an ultrasound that can fit in

a pocket and apply it to maternal infant care in India. We're talking about energy efficiency and saving the environment by the better use of renewable energy through the application of data.

We start to connect the dots of technology for these engineers and that's the backbone of our company that helps us create jet engines and hardware. We're also starting to appeal to software people by telling them that their skills that have been used in the consumer space also work really well on the industrial front, and there is a big mission attached to that. Perhaps we haven't connected the dots enough yet but we're trying to develop partnerships to give people exposure to the opportunity.

When people are exposed to what we do, more than just us telling them, that is where they start to make those connections, so that's why it's important to open up these partnerships.

There is such diversity across all business lines. Does this come naturally or do you need to put an effort around that, and in terms of inclusion, is that the next step?

If a company is connected to its customers and markets, it's going to be diverse because customers are diverse, and they want to interact with a company that knows how to develop and sell products for people like them from people like them.

As GE has become more global, we have become more diverse, and as an innovation company, we have a core belief that diversity leads to innovation. This requires diversity of thought, and people with different experiences and perspectives.

What role does New York play in terms of attracting the best and brightest talent?

New York is an incredibly exciting city. It's also recognizing a trend that is happening around the world – the movement to cities – which is growing. People want to be in cities because of the community, the opportunity, and the services. Also, for really good entrepreneurs to try to get good financing they need people willing to take a chance, and we see that in New York City. The growth of start-ups, not just in Manhattan over years but also in Brooklyn, and what is now happening on Roosevelt Island, at Columbia, and in Harlem is certainly very attractive to the entrepreneurs we have worked with. ●