

Toyota Research Institute's Kelly Kay Is Transforming Mobility

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Toyota Research Institute (TRI) Executive Vice President and Chief Financial Officer, Kelly Kay, is a proponent of change. So much so, she's centered her entire career around helping companies transform and grow. Early in her career, which began in the banking industry, she helped move the company online at a time when no one else in her office had a computer on their desk. Now, she's working on the technology that will power the future of mobility and benefit society.

"My life has always been about transformation," she says. "I love change and I think that's really what TRI is about — the tip of the spear from a research perspective at Toyota. And we were created to help Toyota find out what's next."

TRI's work focuses on applying artificial intelligence to robotics, automated driving, and exploratory research — such as Machine Assisted Cognition (MAC) and Advanced Materials Design and Discovery (AMDD) – in a manner that strengthens and refines the interaction between human and machine. The TRI approach is designed to amplify human ability rather than replace it. Kay is working to help Toyota innovate to create a future that is safer, more accessible and more environmentally friendly. In fact, Toyota holds more than 1,400 patents on autonomous-vehicle technologies.

As the second-in-command to CEO Dr. Gill Pratt, Kay plays many roles within the company including serving as both chief financial officer and chief safety officer. Her role includes overseeing Finance, Human Resources, IT, Legal/Compliance, Facilities and the overall operation of TRI. Kay has guided TRI's journey from a Toyota startup to an organization with more than 300 team members who are creating the technologies that are helping to transform Toyota into a mobility company.

“We're the people who are asking, ‘How can we do things better? How can we look at things from a different angle? How can we transform our ways of thinking and doing things?’” she says. “The things that we're working on here at TRI will help people be mobile for the rest of their lives.”

A Mission-Driven Approach

Drawn to Toyota's mission to create universal, inclusive and accessible mobility solutions, Kay had a personal and professional connection to the work.

Kay was not searching for a new job when she first heard from a recruiter about an opportunity at TRI. Her stepmother had just suffered two strokes and her father had fallen down when trying to help her up, and Kay knew it was time for a change. While she was exploring ways to take care of her older parents from afar, she began to think about aging in place. Her family's experience inspired Kay to accept the role as TRI's chief operations officer in 2017.

“The mission of TRI really struck a chord with me at the time, because I was dealing with issues with my dad,” she says. “It became not about what the role was, but that Toyota allowed me to move more into a mission-driven approach for my work, which mattered to me a lot.”

“At TRI we do not think mobility is just about driving across the city, but we think mobility is about helping people move across the room and enhancing people's capabilities.” she says. “That's what we mean when we say we're transforming into an overall mobility company — it goes beyond cars.”



Bringing a New Perspective

Despite running a diverse team made up primarily of engineers, Kay's background isn't exclusively in tech. She has, however, always worked with transformative technology and it is the marriage of the strands of her experience that inform her approach. Synergy, synthesis and firing synapses are key components of innovation.

After law school in the 90's, she helped engineers at a bank develop some of the first online banking services by designing technology products that took traditional banking regulations and transformed them in conjunction with the federal Office of the Comptroller of the Currency (OCC) to reflect the changing technical environment. Most recently, Kay was at Lyft, helping the company scale its business across America while addressing the evolving regulations applicable to ride-share businesses.

"At the time that I started working with these innovative companies, their business models did not fit clearly into any regulation," she says. "My reputation in the industry is really about taking innovative technologies and working with regulators and engineers to build something that communities will accept as safe."

Kay is excited that there are still many opportunities to help transform businesses as industries continue to evolve, from educating the market about what technology can do, to working with others in the automotive industry through the Society of Automotive Engineers (SAE) working groups or regulators like in her past to ensure today's innovations consider tomorrow's realities. Kay also believes that her experience brings the

ability to see technology through multiple lenses, a counterintuitive concept.

“Bringing the sparks of transformation to TRI really relies on a balance of business needs and technology,” she says. “You need to do both. Throughout my career I have learned to look at things in different ways and examine all sides of every argument to consider the benefits and risks of both sides. That perspective has helped me work with our researchers so we can have the largest impact.”

Diversify and Conquer

Tasked with developing and maintaining a culture of innovation at TRI, Kay is looking to fill her team with people who share the change management ethos.

“I’m looking for folks who can also be leaders,” says Kay. “That means risk takers, decision makers and people who will help us transform the company.”

In addition to looking for innovators, Kay is focused on increasing diversity at TRI. As a woman in a male-dominated field, she knows firsthand that the world of tech needs to evolve. While she has seen an increase in the number of female Ph.D. candidates and referrals applying to tech jobs, she acknowledges there is still a long way to go to ensure there are enough to have a fair level of diversity in interview pools.

“I spend a lot of time working with hiring managers, recruiters, and management trying to ensure diversity at TRI, but unfortunately, due to our industry we’re pulling from a pool of candidates that’s not very diverse,” she says. “So, we really make an effort to ensure that our interview pools have diverse candidates in them. That helps increase diversity throughout the organization.”

Kay is also hoping to dispel the perceived stereotypes of the automotive industry because it can hamper TRI’s efforts to recruit talented, diverse employees. Kay herself bucks those stereotypes. A self-described automotive geek, Kay helped her dad work on cars from the age of five years old.

“I think we need to change how people think about the industry,” she says. “It’s open to men, women, anyone who wants to be part of it, by increasing diversity at Toyota we can better serve our customers.”

Adds Kay, “Diversity is important to me, but it’s also important for business.”