

Lisa Seacat DeLuca: The Power of Storytelling

By Margaret Popper

For Lisa Seacat DeLuca, an [IBM Master Inventor](#), the urge to create new things expressed itself early. Growing up in Montana, she loved storytelling, typing up scripts to be acted out by her stuffed animals and her younger sister.

"I spent a lot of time on the computer, typing on a keyboard that made a satisfying clicking noise," DeLuca recalls. "I loved the feeling of my fingers on the keys."

In college, working toward her computer science degree at Carnegie Mellon, DeLuca saw programming as "just another form of storytelling, with code as the language." She began working at IBM after graduating nearly 15 years ago, continuing to work full time while getting a master's in technology commercialization at the University of Texas, Austin's IC² Institute. "I wanted to understand how to take my technology skills and bring them to market," she says.



ROBERT JONES FOR IBM *Lisa Seacat DeLuca, an IBM Master Inventor.*

Chasing Challenges

At IBM, DeLuca has found the perfect environment for inventing things with a potential business payoff. "The sheer number of business units and tech IBM touches means as an employee, you are able to chase whatever industry and technology challenge you're interested in," DeLuca says.

That chase so far has landed more than 500 patents for DeLuca, 37, who works mainly from a home office in Baltimore. Last year alone, when she received 58, her patents involved [digital fingerprint IDs](#), [enterprise server loads](#), [natural language and AI search](#), [location software](#), [ad servers](#) and [automatic web page customization](#).

As director of IBM's Digital Internet of Things Transformation and Digital Twin teams and a Distinguished Engineer in the AI Applications business unit, she is a fan of the agile approach to programming. Being agile, she says, speeds the pace of invention, allowing ideas to fail fast or, alternatively, to push through roadblocks.

Her work for Digital Twin—a system that manages digital replicas of physical assets to help IBM's clients manage their plants and equipment—is a good example. Digital twins have been around for over a decade, but DeLuca and team continue to innovate on the concept, combining new technologies to improve the way engineers, contractors and technicians do their jobs. DeLuca's team plans to soon launch a commercial digital twin exchange service connecting companies that design and build factories and machinery with the people who own and operate them.

Connecting With the Next Generation

At IBM, where inventing is a group enterprise, DeLuca is intent on empowering her fellow inventors. She runs the Internet of Things (IoT) Invention Development Team, a review board for potential IoT patents. Once a week, inventors get 15 minutes to present an IoT idea to a group of subject area experts and Master Inventors from across IBM.

DeLuca stresses the value of narrative in these sessions. “When presenting their ideas,” she says, “it is so important for them to tell the story of why their invention is important and how it will improve the future of the underlying technology.” The board discusses the concept, shares any known technology in the space, and votes immediately on whether to push it to a formal search before the idea gets filed as a patent application.

“It’s great, because inventors can hear the discussion of their ideas,” DeLuca says, “and they learn what they can do differently for future ideas.”



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Mentoring is also important for DeLuca. IBM has a number of opportunities for new inventors to learn the process, including the Women Inventors Community, of which DeLuca is an active member. “Especially for young women,” DeLuca says, “it’s important to have support and the confidence to submit those first few ideas.”

To help encourage inventors to bring their inventions to market, DeLuca created Whitespace. It’s a business plan competition for IBM employees to take their patent pending ideas from inspiration to operation.

In the inaugural Whitespace competition last year, 250 ideas were submitted by 143 IBM inventors from 19 countries. The winner, Gofleetly, is a software courier matching system that optimizes same day delivery services, enabling local businesses to compete with Amazon. This year, submissions will address clients’ business pain points through quantum computing, hybrid cloud, blockchain and healthcare IoT.

DeLuca, a mother of four, believes inventors are responsible for sharing technology with the next generation. One way to do that is through her first love—storytelling. She has published two children’s books, “The Internet of Mysterious Things” and “A Robot Story,” which the Amazon review says is about “two robot brothers, who want to be nerdy just like their mother.”

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