

I have OCD but my desk is a mess



I'm Proud to Be Deaf



From Intern to Manager: Lessons from a 23-Year Cisco Journey







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Brice Achkir and the Power of Innovation

2021-March-08

When COVID-19 struck early last year, most of us retreated to our homes, waiting for a return to some semblance of a normal workflow, while searching the internet in vain for Clorox wipes.

Cisco Fellow Brice Achkir returned daily to the Cisco office. And invented a critical piece of personal protective equipment (PPE) for first responders.

"I never thought I would be in the business of making anything that has to do with the medical devices," Brice says in a video you may have seen during last May's Cisco Check-In.

"But we have this 3D printing lab with machines that were idle because people were working from home. And I began thinking that maybe we could do something useful with the printers."

And with that, over six weeks, the senior engineering director, along with a few committed colleagues and lots of enthusiastic support, continually refined his invention of a protective face shield.

With help and support from Irving Tan and Ginita Taylor, they quickly set up a manufacturing cell and ramped up production to thousands of units daily. The team shipped them off to healthcare professionals across North America, where effective PPE was in short supply.

While an extraordinary achievement, it's part of a methodical work process that has earned Brice numerous industry accolades, including our own Cisco Fellow title.



Brice wearing his protective face shield invention.

Steeped in Science

Growing up in French-speaking Quebec and France, Brice rose quickly through the academic ranks at three different engineering schools and universities. A self-professed "top nerd," Brice earned degrees in Physics, Mathematics, Electrical Engineering, and Computer Science.

"I don't regret earning all of those degrees – they're very complementary to engineering," he explains. "They provide me with different perspectives that are well aligned with the evolution of the engineering discipline."

Since joining Cisco more than two decades ago, Brice has been involved in countless products at every stage of development, including ideation, development, and production. When asked which accomplishment he's most proud of, he starts by directing the attention outward.



Brice (third from left) along with Cisco partners who participated in the build of one of his innovations – the first-ever large hybrid opto-electronic circuit board.

"Foremost is working for a great organization with top professionals," Brice notes. "But if I had to pick one, it would be when I started a business around high-speed embedded modules and created a portfolio of more than 120 products used across the company. They changed the industry, which adopted these methodologies."

Note: High-speed embedded modules emulate optical products and integrate many unique intellectual properties to test and validate Cisco products.

Brice, who works in the Supply Chain organization, recently became a Cisco Fellow, a reflection of his ongoing contributions to the company's complex, diverse, and rapidly expanding field.

"My role focuses on crafting technical solutions for complex problems," he says. "I also translate business problems into technical innovating opportunities that have a major impact on business."

For instance, Brice currently heads two initiatives: One is developing high-speed interconnect technologies and power delivery solutions for next-generation architectures. The other is finalizing a set of blockchain technologies that have the potential to further optimize Cisco's supply chain.

Our Supply Chain organization is ranked number one by Gartner, a recognition that Brice directs – again – to others. "Our differentiation is having the top technical talent, which drives innovation throughout our entire ecosystem and across all business units," he says.

Industry Leadership

Brice holds influential leadership roles, chairing industry associations, international standards organizations, academia, and conferences.

"Although each has unique characteristics, they all work to achieve common goals for the industry," he shares.

While his participation helps promote consistent industry standards, it also stimulates his need for ongoing education.

"They push me to keep learning, exploring, and investigating different types of technologies, businesses, and business models. And they challenge the way I think by confronting me with different views and concepts."



Brice holding up one of his innovations – integration of optical waveguides into large ASIC chip substrate.

In recognition of his career achievements, Brice was the 2020 recipient of the Richard Stoddart Award, which is the highest award of the EMC-SIPI (Electromagnetic Compatibility and Signal Integrity & Power Integrity) Society.

Given annually to a Fellow belonging to the Institute of Electrical and Electronics Engineers, it is the highest award in the engineering field. Some compare the award to a Nobel Prize in science – there is no Nobel Prize for engineering.

Risk and Reward

When reflecting on his work and the numerous solutions he has developed, Brice credits his personality – he never shies away from a challenge.

"I'm a big believer that success is related to taking advantage of risk," he says. "When I decide to take a

risk, I'm not afraid to fail. But if I must fail, I make sure that I fail fast, learn, and move to the next."

He also credits Cisco and its culture that accepts risk as necessary for innovation.

"I'm glad I'm supported by an organization that shares these values and has this culture of risk-taking and an environment that promotes that," he adds. "Part of our yearly budget has a category called Innovation and Experimentation. This is a well-designed program [Brice serves as one of its sponsors] that allows employees to experiment with new things that they believe have the potential to benefit Cisco."

Getting Past "No"

Commensurate with a bold approach to problem-solving is the confidence to say no.

"People who know me well will tell you the word 'no' for me is an acronym that stands for 'never obey,'" he explains. "That means I don't accept it as an answer, but rather as an opportunity to discover something new."

This resolute, never obey approach continues to spark innovation for Brice, the reflexive need to challenge the status quo while in the process, shattering expectations and achieving greatness.





Brice (center) and his teammates who continually refined his invention of a protective face shield.

Just like when COVID-19 struck, and healthcare professionals were pleading for PPE, and many directed their anger outwards. Brice took that as a personal challenge to address his community's collective needs - never looking to blame but to solve.

"Some people hear 'no' as a door that slams in their face and creates boundaries between them and great things to come," he concludes.

"I see it as an opportunity to change things."

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Share your thoughts!

WSZEBOR BOKSA

Thank you for emphasizing the role of diverse education and experience. I shared your story with couple young Cisco's Innovators who are the great inspiration for me. So are you Brice!

KISHORE KARIGHATTAM

Congratulations on this achievement Dr. Brice! Your perseverance and ingenuity is a shining example for us, both inside and outside Cisco.

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VENKATESH ANANTHANARAYANA

Congratulations on this achievement Dr. Brice, You have been an inspiration to many inside and outside Cisco. THANK YOU

STEPHEN SCEARCE

Great Job Brice!!

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