



Blog > A Word From Our CEO



The Power of “Five-Tool Inventors” in Driving Innovation

A Word From Our CEO

Date January 31, 2025

Est. Reading Time 4 mins

As I reflect on 2024, I remain inspired by the transformative power of invention — a force that continuously reshapes our world and fuels remarkable growth within our organization.

This power is exemplified by the extraordinary accomplishments of our **National Inventors Hall of Fame® Inductees** and reminds me of a rare phenomenon in sports: the five-tool professional baseball player. These elite athletes excel in every aspect of the game – blazing speed on the basepaths, the ability to hit for both average and power, Gold Glove-worthy fielding and a strong, precise throwing arm.

Similarly, **five-tool inventors** are exceedingly rare, even among the greatest minds in innovation. These exceptional individuals possess a unique combination of abilities that distinguish them as true game-changers. I believe five-tool inventors stand out for their mastery of five critical skills:





2. Creating **inventions** that are not only novel enough to receive one or more U.S. patent(s) but also groundbreaking enough to stand alongside the 639 luminaries in the National Inventors Hall of Fame.
3. Demonstrating go-to-market **entrepreneurial** resilience and expertise in risk management and failing fast.
4. **Commercializing** inventions into real-world customer solutions while adapting, evolving, and sustaining their products and businesses.
5. Mastering their **academic** field with a deep understanding of its principles and advancements, and paying that forward through educating, training and inspiring the next generation.

This rare blend of skills empowers inventors to transform ideas into innovations that often solve real-world challenges while creating lasting, widespread impact in multiple industries.

Eric R. Fossum: A Five-Tool Inventor

Take, for example, 2011 Inductee **Eric R. Fossum**. His CMOS image sensor camera-on-a-chip technology has revolutionized how we capture and share images. Through commercialization, his invention has become ubiquitous, powering everything from smartphone cameras and medical imaging devices to automotive safety systems, security and even space exploration.

Fossum's journey exemplifies the essence of a five-tool inventor - a visionary who not only conceived and developed groundbreaking technology but also maximized its potential, transforming it into an innovation that impacts billions of lives today.

Inspiring the Next Generation of Five-Tool Inventors

Stories like Fossum's are embedded throughout our education programs serving as powerful examples for the next generation of innovators. At the **National Inventors Hall of Fame**, we recognize that inspiring young minds to follow in the footsteps of these trailblazers requires constant evolution.

In recent years, we have reinvented our processes, products and services to better serve students, parents, educators and school districts nationwide. By transforming our distribution systems, product development cycles and customer-enabling software, we now deliver customized learning solutions with unprecedented speed and precision.

The results speak for themselves. In 2024, we inspired over 406,000 students and educators through programs like Camp Invention® and Invention Project®. These experiences are now more interactive and engaging than ever, equipping students with the creativity, problem-solving skills and confidence needed to tackle challenges head-on. Independent research consistently reinforces their impact, showing that participants gain greater interest in science, technology, engineering and math; have their science and math anxieties reduced; and demonstrate improved academic performance and attendance - laying a strong foundation for lifelong learning and long-term success.



out of necessity alone – it is a mindset. As we emphasize in all our ITEX 12 programs, innovation is a way of thinking that drives continuous reinvention and progress. The I Can Invent® Mindset, informed by the National Inventors Hall of Fame Inductees, is cultivated in all of our participants.

In the near future, the young innovators we inspire today will become five-tool inventors of tomorrow - mastering their disciplines, pioneering new technologies, and navigating the complex journey from idea to market with the same resilience, ingenuity and impact as the Hall of Famers who preceded and inspired them. Join us, at the National Inventors Hall of Fame, in ensuring that the future of American innovation thrives by **bringing our programs into your community** and supporting our mission through **philanthropic giving**.

A handwritten signature in black ink, appearing to read "A. Pietsch".



*A Word From Our
CEO*
Preparing Today's
Students for the
Unknown

*A Word From Our
CEO*
Supporting Our
Teachers and
Students Through
Volatility, Uncertainty
and Complexity
Utilizing Invention
Education

*A Word From Our
CEO*
1 Million Days of
Invention Education

*A Word From Our
CEO*
Camp Invention is
Adapting to Fit Your
Needs

