There’s no better time than the depths of a global pandemic to step back and think hard about invention and innovation.

Entire industries have been upended by the coronavirus, while others have received a turbo boost. This year’s edition of Crain’s Most Innovative Companies is full of examples of businesses that have reinvented themselves—often more than once—to adapt to changes and emerge stronger than ever. There are some surprising upstarts that are reinventing existing industries, from consumer electronics to heavy industry, with cutting-edge innovation, especially the internet of things.

This is our ninth edition of the Most Innovative Companies list, compiled in partnership with Ocean Tomo, an intellectual property advisory, investment-banking and consulting firm, which evaluates the patents produced each year by Chicago-area companies and ranks them based on quality.

Stories by John Pletz

1. BRETFORD MANUFACTURING

Decades ago, Bretford Manufacturing made the audiovisual carts for film projectors and TVs in schools. Now it’s making carts to store and charge laptops. There’s been a lot of innovation in between.

The Franklin Park company was founded in 1948 as a contract manufacturer, spitting out everything from hair dryers to barbecue grills, before making its own products.

“We’re a U.S. manufacturer with a lot of challenges to compete. The only way we could survive is to innovate,” says Chris Petrick, third-generation CEO of Bretford, which employs about 200. “We can’t just be a metal bender or durable goods manufacturer. If you do that, you’re going to get whipped. We have to use technology to provide value and separate ourselves from the metal box and rolling cart.”

Bretford was good at providing power for AV equipment, and it evolved from carts to furniture, outfitting things like conference rooms and computer labs in schools.

Last year, it received patents for a power strip used in classrooms to allow multiple laptop users to plug in safely from a single outlet, as well as mobile lockers used by schools and companies to recharge and protect tablets and laptops.

The company claims to have begun selling the first commercial charging cart for laptops in 1999. The charging cart almost didn’t survive, but then the company landed a partnership with Apple in 2008. The carts have evolved, allowing for machines to be updated automatically and have data wiped between uses. Bretford developed software to allow customers to manage the devices remotely.

The coronavirus has schools focused less on carts needed to haul and store computers on-site, but Bretford is getting a lift from corporate users, such as hospitals and manufacturers. With more employees working from home, its lockers fill a different need: touchless tech support. “If a computer breaks, they can just drop off a computer for a no-touch swap,” Petrick says.