

Reforge Industries

Vincent Rullo working independently on his startup project, discovered a major industry problem firsthand during a summer internship as a manufacturing engineer: the factory maintenance supervisors who keep aging production machinery running are up against a broken spare-parts supply chain. In conversations with the supervisors he worked alongside, Rullo learned that the critical components their teams need to keep high-value production lines running are often discontinued, backordered, or available only through a tangle of middlemen and custom fabricators. Even something as ordinary as a custom housing or bracket could take months to ship, and a single unscheduled stockout could shut a multi-million-dollar line down for days, costing the company millions in wasted labor and lost production.

Rullo pitched a solution: leverage emerging technologies to reverse-engineer those critical components, manufacture them on demand, and deliver them in hours, not weeks, sparing maintenance supervisors the threat of a missing spare ruining their company's quarter.

Rullo spent hours winnowing his pitch into the required three minutes. To make it compelling, he drew on lessons from conversations with Professor **Craig Forest**, co-founder and organizer of the InVenture Prize. "What makes an effective presentation is really hammering home how visceral the problem is," Rullo said. "Only after you establish how much the problem costs the customer will your solution make sense to investors."

Rullo is currently working with CREATE-X this summer to further develop his winning project, which has since pivoted toward leveraging advanced manufacturing and an online

instant-quoting engine to provide affordable, on-demand manufacturing services for individuals, startups, and small businesses.