Powering the next generation of leaders in technology

The nonprofit i.c.stars emphasizes social equity and hard skills to equip underrepresented adults for careers in tech.

The employability nonprofit i.c.stars trains low-income adults in skills needed for technology-based careers, simultaneously preparing them for a future of community leadership. The program uses project-based learning, wrap-around services, and an emphasis on community building to prepare participants for entry jobs in technology after only 4 months. That initial intensive training is followed by a 20-month program providing ongoing support and mentorship, helping participants thrive in IT support, cybersecurity, app development, software engineering, and data analytics. i.c.stars has a 90% employment rate for alumni, and 92 percent of those jobs are technology-focused positions.

The challenge

When Dionne Woods was 29, she had just lost her job in a call center and wondered how she was going to support herself and her two children. Then she stumbled across a recruitment article for i.c.stars, a program that seemed too good to be true. She applied anyway.

Over the next four months, Dionne discovered a buried passion for technology. She felt even more determined to lead the world to a better place. And at the end of the program's initial training, she landed a paid internship at Aon, a professional services firm, in their Chicago office. Since then, she has been hired on, promoted to a full-time service transition analyst, and earned a college degree in business marketing.

Woods is just one example of adults who have disrupted a pattern of unrealized potential—both in personal fulfillment as well as economic potential. Too often, upward mobility can depend more on the neighborhood where you were born than your aptitude or perseverance[1].

Another side of the challenge: The growing skills gap. In the U.S., 40 percent of employers report that their businesses face skills shortages[2], and surveys estimate that between 700,000 and 900,000 tech jobs in the U.S. remain unfilled[3].

The Chicago-based nonprofit i.c.stars aims to bridge that gap.

"I get emotional thinking back on how far I've come," Woods says. "If you can conquer the trials and tribulations in your life, there's nothing that can stop you."

The fix

i.c.stars partners with businesses to identify in-demand tech jobs that companies struggle to fill. The nonprofit then adapts programming to teach the technical and soft skills needed for those positions to people who are typically unreached or underserved by the benefits and opportunities of technology—in particular, people who have had to overcome difficult life experiences, such as poverty, domestic abuse, or incarceration.

[1]Opportunity Atlas, www.opportunityatlas.org
[2]2018 Talent Shortage Survey, Manpower Group
[3]"America's Got Talent, Just not Enough in IT," Wall Street Journal, October 15, 2019

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i.c. stars brings together business leaders, who are often searching for qualified technologists, and program participants, who make up an untapped talent pool. For example, hiring managers, CTOs, and developers come to the Chicago and Milwaukee offices daily to mentor participants and do mock interviews.

Further, i.c.stars partners with companies to develop internship programs and curricula that meet in-demand skills for jobs with a lack of highly qualified applicants. One example: In the Chicago metro area alone, 10,000 cybersecurity positions remain unfilled. So i.c.stars partnered with Microsoft to customize a cybersecurity curriculum, equipping new cohorts with the competencies and confidence to jumpstart a career in this field.

The i.c.stars program begins with an intensive 4-month training, when participants learn technical skills such as data modeling, backend development, cybersecurity, and software testing in collaborative projects that mirror workplace scenarios. Groups of students create solutions to business challenges faced by a Fortune 500 company, which they then present to IT teams within that business.

Throughout, participants develop soft skills such as professional communication, adapting to workplace culture, and teamwork. These sometimes-overlooked proficiencies are just as important as technical know-how in order to land a job, says Sandee Kastrul, president and co-founder of i.c.stars.

The nonprofit continues its services after participants finish the intensive portion of the program by sharing job leads, ongoing technical training, and job search support. The result: Roughly 9 in 10 alumni find employment after finishing the program, earning on average 300% more than they did before joining.

Promising practices for deeper impact

Provide wraparound services. i.c.stars participants face challenges—coming from low-wage jobs, being a single parent, having an inconsistent employment history—that could derail career aspirations without consistent support. That's why i.c.stars employs case managers to ensure participants have what they need (including health care, housing, and childcare) to be successful.

Design for employer needs. The nonprofit adjusts programming to incorporate skills that meet current, local needs in the job market. That way, participants fill hard-to-hire openings, benefiting them, their communities, and employers. For example, i.c. stars has become a talent pipeline for the Chicago Apprentice Network, a collaboration of some of Chicago's largest employers (Aon, Accenture, McDonald's, Zurich Insurance, Walgreens, JPMorgan Chase, and others). These companies implement different forms of apprenticeship programs and share best practices.

Expand professional networks. Participants meet and interview leaders within the technology field every day. What's more, people who have completed the 4-month intensive or graduated from the program return, offering advice and encouragement. The constant interaction with technology professionals allows participants to learn about an array of careers, deepen relationships that could help them land a job, and reduce the intimidation participants may otherwise feel around their future colleagues and bosses.

> **"At i.c.stars, we cultivated amazing relationships that allowed us to take a peek into our future careers,"**
>
> *-Susie Spencer, Business Development Representative at Keeper Security, past i.c.stars participant.*

Learn by doing. At i.c.stars, lessons are driven by use cases that a client has asked participants to solve: Participants come up with a plan to address the business challenge, and instructors support them in figuring out how to execute their idea. "We mirror what happens in the business world. When you don't know how to do something, you have to go out and learn," Kastrul says.

Emphasize social equity. The people i.c.stars attracts care deeply about their communities and righting wrongs. It makes sense, then, that the nonprofit pushes participants to consider how they can leverage their skills and life experiences to lift up others. "We at i.c.stars love tech because social justice is inherent in it: Programmers get to write the rules," Kastrul says. "Moreover, tech is about solving problems and building solutions. It's a natural fit."

Look for an "I'll show you" mindset. i.c.stars takes the approach that they can train participants in technical knowledge and soft skills—but they can't teach grit. That's why during interviews, the nonprofit looks for a moment when applicants came up against an obstacle and responded by saying, "I'll show you."

As Kastrul says, "What others see as risk factors, we see as assets—as long as they've overcome adversity and come out the other side."

> Microsoft is working with nonprofits to ensure every person has the skills, knowledge, and opportunity they need to succeed in the digital economy. Learn more aka.ms/skills-employability

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