Microsoft Leap
Apprenticeship Program

Forging new paths to tech careers

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Microsoft believes there are many pathways into the technology industry. Microsoft is constantly looking for new ways to create unconventional on-ramps for talent to leverage the skills and experiences of talent from outside of the traditional academic path. In September 2015, Microsoft Leap Apprenticeship Program was launched, providing a pathway that aims to welcome and train more people to work in the tech industry. The program offers a 16-week immersive apprenticeship with a combination of in-classroom learning of hands-on engineering apprenticeship projects (designed by Microsoft engineers). Apprentices work within real teams on real products—such as Azure, Xbox, Bing, Microsoft 365, Teams, and Mixed Reality—that reach millions of customers and partners around the world. Microsoft Leap's mission is to recruit, develop, and upskill non-traditional talent (without a 4- year computer science degree), creating a connection to employability in the tech industry. Apprentices come from all walks of life and range in age from 19 to 73. Some apprentices have held jobs as a barista, medical assistant, high school teacher, musician, filmmaker, and even a retired commercial airplane pilot. Apprentices come from economically disadvantaged communities, who are immigrants with no English literacy, or who are parents returning to the workforce. Regardless of their background, they all share a mutual passion for technology and demonstrate a growth mindset, resilience, grit, and perseverance.

Melissa's Story

Melissa Curry was a single mom employed as a casino dealer. After 10 years in the industry, she was laid off. "I decided to use that as an opportunity to go back to school and better myself. I had never considered working in technology. I didn't think it was something I was capable of doing. I thought that there would be barriers because I did not write my first line of code until I was in my 30s." Melissa was hired as a Program Manager at Microsoft after completing her apprenticeship with the Microsoft Leap Apprenticeship Program.

The Challenge

Address the skills gap in tech

Scientific America reports that the tech talent shortage is expected to reach one million engineers by 2024.[1] Machine learning and Artificial Intelligence (AI) are emerging subjects in this digital transformation. Companies in the tech industry as well as non-tech industries, such as automotive and architecture, are pivoting around this skillset and further exacerbating the skills shortage. There's a need to expand on multiple fronts concurrently. Current sources of rapid education include coding academies, online education, meet-ups, and peer support groups. Traditional four-year colleges and universities operate on time scales that may not be sufficient enough to teach new skills as they emerge, as digital skills are often needed within months.

Inclusive workforce

Technology innovation requires a more inclusive workforce. Far beyond gender and ethnic diversity, an increasing number of talented individuals will be joining the tech industry with varying academic backgrounds such as philosophy, arts, psychology, and literature. Inclusion of diverse knowledge and experiences will help businesses deeply understand market trends and customer scenarios. Consequently, companies will build closer relationships with consumers to address social and economic challenges through technological solutions.

The fix

Seek out differences and invite them in

Microsoft's mission is to empower every person and organization on the planet to achieve more. The ability to deliver innovative solutions for customers and partners worldwide begins with recruiting and developing talent from all walks of life. Each apprentice brings their unique talents and life experience to Microsoft along with their own perspective. Apprentices gain professional development and soft skills that accelerate their ability to make a meaningful impact at Microsoft and beyond.

Microsoft Leap seeks candidates who are passionate about technology and offer diverse perspectives. The three general candidate profiles include:

- **Career Relauncher:** Returning parents who had STEM careers years ago before they took time off to raise their families

- **Career Transformer:** Professionals who have non-technical industry experience, a passion for technology, and who have completed one year of coding academy or equivalent technology experience, before applying to the program

- **Community College:** Graduates with an associate's degree in a relevant technology field

Offer state-of-the-art engineering curricula

Microsoft Leap provides a unique integrated learning experience with in-classroom or virtual learning and on-the-job engineering projects (in-person or virtual), designed and customized by Microsoft engineers. The curricula not only teach apprentices engineering fundamentals and scenarios, but also complex problem solving, collaboration, creativity, effective communication, and a customer-obsessed mindset.

- Leap's initial 3-week program is designed for in-classroom or virtual learning with concept learning and knowledge application during group labs.
- Leap's 13-week apprenticeship is to further apply knowledge and engineering fundamentals on real engineering projects, working with world-class engineers in end-to-end engineering processes.

Develop skills for the jobs of future

The Fourth Industrial Revolution is creating a demand for millions of new jobs. A recent report by the World Economic Forum takes an in-depth look into new job creation, emerging professions of the future, and the skills that individuals need to develop to thrive in these emerging roles—and data and AI are at the top of the list.[2]

Microsoft Leap seeks to accelerate the societal benefits of AI and upskill talent to meet business demand while maintaining equity in participation at Microsoft and Microsoft ecosystem. The goal is to provide globally relevant skills that can drive increased employability

in AI. To meet this goal, Leap has partnered with Microsoft data science engineers to turn these opportunities into reality. In data analyst cohorts, apprentices will learn analytics, data visualization, and data science methodologies that will help drive business decisions. Leap has also partnered with enterprise customers in developing markets such as Nigeria to recruit, develop, and upskill talent for enterprise customers. The inaugural cohort in data science will launch in Lagos, Nigeria in late 2020.

The impact

Global reach

- The pilot cohort began in Redmond, WA, U.S.A. in September 2015 with only eight participants and has expanded internationally within the last year. Over the course of the last four years, the program has scaled to serve apprentices in 14 different cohorts in North America and three cohorts in Nigeria and Kenya—98% of whom are now working as full-time employees throughout Microsoft, as well as other companies throughout the tech industry. In Africa, Microsoft Leap engineers created farming technology solutions that directly impact their own communities.

- In March 2020, Microsoft Leap engineers in Kenya developed a Chatbot service which allows for the widespread dissemination of accurate information about the COVID-19 outbreak in multiple languages (English and Swahili). Local individuals can check on their own health status using the diagnosis tool via Chatbot service.

- In 2019, three cohorts launched in Nigeria, Africa to primarily serve the Microsoft ecosystem with 100% full-time tech employment. In support of Microsoft's mission of global talent empowerment, Microsoft Leap carries its mission to recruit and develop talent not only for Microsoft, but also for key strategic Microsoft enterprise partners.

Economic inclusion

With an immersive model, Microsoft Leap provides apprentices an opportunity to earn wages more quickly in an industry that averages $110,000 in base salary. No prerequisite work is necessary for apprentices to join the bootcamp, thus eliminating typical barriers to entry. The pathways—Software Engineering, Technical Program Management, User Experience Design,

Support Engineering, Business Program Management—provide the foundation for life-changing economic mobility where, for many, this wouldn't be possible otherwise.

Conclusion

As Microsoft Leap Apprenticeship Program continues its journey of talent innovation and expanding its global talent pool to increase professional opportunities, Microsoft Leap is also playing an integral leadership role in the tech industry, sharing best practices and learnings about non-traditional talent development.

Microsoft Leap participants are change catalysts and change multipliers. They bring a diverse set of personal experiences and cognitive abilities to their work as well as to their Microsoft colleagues and communities. They play a vital role in advancing engineering processes, accelerating innovation, and activating inclusion as a part of Microsoft's growth mindset culture.

Whether it's a stay-at-home parent interested in re-entering the workforce or someone who is ready for a "second act," the stories from current and former participants are truly inspiring. Not only is Microsoft Leap launching new cohorts across the country and the globe, but it's also relaunching the lives of countless individuals who are looking to make an impact via an aspiring career they've always dreamed about.

Sources:
1. Scientific America: How to Close the Tech Skills Gap (https://blogs.scientificamerican.com/observations/how-to-close-the-tech-skills-gap/)

2. World Economic Forum Jobs of Tomorrow: Mapping Opportunity in the New Economy (https://www.weforum.org/reports/jobs-of-tomorrow-mapping-opportunity-in-the-new-economy)