

THERE ISN'T A COMPANY ON EARTH THAT doesn't worry about talent – how to attract it, develop it and retain it. Take those concerns and magnify them if you're in the communications industry, where the playing field keeps shifting at warp speed.

Now imagine you're among the top 20 employers in the US and have no choice but to re-engineer your own massive workforce because there isn't enough talent to hire at the scale needed to stay ahead. I'm privileged to sit right at the eye of that storm as AT&T's Chief Learning Officer.

We're meeting the challenge with a massive initiative, investing a quarter of a billion dollars annually on employee education and professional development programs, and more than \$30 million annually on tuition assistance. We've worked hard to create incentives for employees to opt in to our re-skilling initiative. The goal is to inspire a culture of continuous learning at AT&T. In our online platform, an employee can enter her own experience and credentials, see which jobs are trending, what the qualifications are and identify gaps on her résumé that she can fill to help qualify for a position. She can even link directly to the training needed for a particular competency or job.

CALLING THE FUTURE

Starting about five years ago, the leadership of AT&T realized we needed to prepare our 273,000-person workforce for changes in our industry. It's a simple math problem: there aren't enough available bodies to hire for where we're headed. Our employees' skills have to adapt from what's needed today to what's needed tomorrow – with the same velocity as the many network changes taking place. That requires us to be as transparent as possible with our people so that they understand the bigger picture, and to create opportunities to help them grow.

If you don't work in communications, it's easy to take your wireless devices for granted. Behind the scenes, the technological challenges are staggering. Wireless communication and streaming video are driving an astonishing surge in traffic – more than 150,000 percent growth in mobile data since 2007. The rapid spread of the Internet of Things – connected cars, health monitoring, wearables and a range of other applications – is sending demand higher still. That kind of volume can't be managed efficiently with outdated technology.

By 2020, the vast majority of our network will be controlled by software-defined technology. It's a shift that demands different skills than those needed in the past, especially in big data analytics, cloud computing and data science.

There are various types of skills training, ranging from single courses, to bundles of courses that lead to certifications, to externally recognized credentials such as nanodegrees from Udacity or advanced online technical degrees from universities such as Georgia Tech, the University of Oklahoma and, soon, Notre Dame. Each employee determines the level that best suits their needs.

We are offering tuition support and incentives, and we've communicated clearly that employees have to complete at least some of the learning on their own time. We typically cover 100 percent of tuition for courses taken with our external partners.

For the training we design and deliver internally, we have created shorter lessons and modules – for example, a 10-minute video or podcast, making sure it's easy to access and use on employees' mobile devices. Participation is strong. We're seeing significant year-over-year growth in the number of employees accessing and completing the various

JOHN PALMER,
AT&T's Chief
Learning Officer,
describes the
challenges and
rewards of
re-skilling the
telcom's
workforce



JOHN PALMER

John Palmer is Senior Vice President and Chief Learning Officer of AT&T, roles he has held since February 2016. He was previously Vice President of AT&T University Operations Training, where he partnered with leaders in fulfilling their strategic and tactical goals, including training. He joined AT&T in 1999 and held numerous leadership roles including Mobility, Operations, Sales, Strategy and Care.

AT&T is a multinational telcom conglomerate with consolidated revenue of \$146.8 billion, headquartered in Dallas, Texas. Founded in 1877 as part of the Bell Telephone Company, it incorporated as the American Telephone & Telegraph Company in 1885. The business was renamed AT&T in 1994.

materials available. We track our employees' re-skilling efforts so that we can better determine ongoing training strategies, and help place them into desired and critical roles within the company.

The early results are promising. We're increasingly finding employees are able to immediately apply their new skills in their existing positions, or to use them to successfully transition into a new role. Each year we fill about 50,000 jobs – about 50 percent of them with candidates found internally. For our technology management jobs, our internal applicants who have completed training are twice as likely to be hired for one of those jobs as applicants who have not.

We highlight and celebrate our employees who are engaging in the re-skilling effort in internal town halls as an inspiration to others. Take Aaron McLean, who has worked for us for 17 years as a web developer and architect. In the fall of 2014 he signed up for the nanodegree program, completing Front End Web Developer and Full Stack Web Developer nanodegrees. He was immediately able to utilize some of that knowledge in his current job. And when he learned we needed open stack architects, he applied and was hired, specifically because of the knowledge he gained.

LEARNING GOES BOTH WAYS

In order to get buy-in from employees, it's crucial to allow your learners to play a role in rating the content. We are setting up a new process whereby employees can provide real-time feedback on the

materials as they go, so that we learn what works and what doesn't.

We're also hearing from some employees who have put up their hands to say, in effect, "I'm only here for another three years. I don't want to opt in – put me on a legacy product, and as that sunsets, I'll go with it." That's fine too. In fact that kind of honesty is welcome and reveals the beauty of transparency: there's full recognition that some jobs are trending down and will keep declining as our technology shifts. We've been as honest as we can with everyone, and it's really refreshing to see how honest employees have been with us in return.

At AT&T, we don't claim to have a perfect crystal ball. But we've seen that the better you can define what the future will look like, the more willing people are to run toward it instead of away from it.

We've put a huge amount of resources and energy into defining and mapping that future so that we're bringing as many people as we can along with it. You can't transform your technology unless you transform your people too. It's the right thing to do, for many reasons – not the least of which is providing those who have helped build AT&T an opportunity to fill the jobs of the future, and to grow and succeed along with the company.

John Palmer spoke with **SARAH LUBMAN**, a Partner in Brunswick's New York office specializing in telcom, media and technology.

AT&T OFFERS A RANGE of skill development choices for employees, who can decide for themselves the level they want to achieve.

1 FOUNDATIONAL LEARNING is designed as mostly mobile-based, short online videos, and offer an understanding of the fundamental elements of AT&T's evolving network, business products, services and the complicated topic of spectrum, the lifeblood of any telcom network. Our employees have completed more than 1.3 million of these courses.

2 CERTIFICATION TRAINING is mapped to specific roles that are expanding at the company. These involve emerging technologies, such as software-defined networking. As of October, AT&T employees had completed more than 2.5 million certification courses. About 57,000 employees have earned about 165,000 badges – visual indicators added to an employee's profile within the company's internal social networking platform signifying they have completed required coursework. Total learning hours have more than doubled year over year.

3 WAYS TO LEARN

AT&T offers a range of employee education materials, courses and programs. Employees can set their own goals and decide for themselves the level they want to achieve

3 ADVANCED LEVELS involve highly technical nanodegrees through Udacity and master's degrees through Georgia Tech, the University of Oklahoma and, starting in 2017, Notre Dame. Nanodegrees take anywhere from six to 12 months and cost \$200 a month, but AT&T refunds the tuition on completion.

Georgia Tech offers a fully accredited, online master's degree in computer science for \$6,600, a fraction of the roughly \$45,000 for a campus-based program. Annually, we offer up to \$8,000 in tuition aid, with a lifetime cap of \$25,000 for undergraduate degrees and \$30,000 for master's.

AT&T will take good talent wherever we can find and nurture it. To that end, the Georgia Tech master's degree is also available to people outside the company – Notre Dame's will be too. We recruit on more than 50 college campuses every year, and we're finding that students are impressed when they hear that they don't have to choose between entering the workforce and getting a graduate-level degree. With us, they can do both.