

TACKLING THE WORKFORCE CRISIS: A Crucial Step for Successful Fiber and 5G Deployments

The telecom industry needs to work through a workforce drought to close the digital divide.

By Clark Stevenson / IQGeo

The telecom sector has undergone a series of innovations to keep up with society's ever-growing dependence on the internet. The COVID-19 pandemic ushered in an era of remote and hybrid working, making internet access imperative for many individuals and businesses. Recognizing this shift in demand, the telecom industry rose to the occasion by accelerating the rollout of fiber broadband and 5G internet.

Both fiber broadband and 5G are instrumental in bridging the digital divide. They ensure that individuals and communities have equitable access to reliable, fast internet connections. They also provide a solid foundation for enabling digital inclusion, empowering people to participate fully in the digital economy, access educational resources, and benefit from telehealth services, among many other possibilities. Coupled with ongoing advancements, the industry's commitment to pushing the boundaries of connectivity means it continues to shape the digital landscape and drive societal progress.

Though the industry has made significant progress in developing innovative technologies, considerable challenges in delivering these advancements to end consumers remain. Despite the potential of fiber broadband and 5G internet, their widespread availability is yet to be fully realized. Currently, only 43 percent of U.S. households have access to fiber broadband, and 5G internet coverage reaches only 53 percent of the country.

FIBER AND 5G DEPLOYMENT ISSUES

The existing gap between technology capability and consumer accessibility can be attributed to the challenges faced in the deployment process. Telecom operators possess the necessary infrastructure and expertise to provide fiber broadband and 5G services, but several obstacles hinder their deployment efforts.

One major challenge is the investment required for infrastructure development and network expansion. Deploying fiber optic cables and constructing 5G infrastructure demands substantial capital expenditure

and meticulous planning. The cost of implementing these technologies across vast geographic areas can be prohibitive, particularly in rural or underserved regions where population density is low.

Both public and private entities are making concerted efforts to address these obstacles. Governments are implementing policies and initiatives to incentivize and streamline the deployment of high-speed broadband and 5G networks, particularly in underserved areas. Public-private partnerships are being forged to share the costs and resources required for infrastructure development.

Despite solid funding opportunities aiding the deployment process, another issue still needs to be addressed. The industry is experiencing a workforce drought as older, more experienced workers retire or move to new roles. A strong workforce is needed to support planning, design, construction and ongoing maintenance activities, and telecom operators need to address this crisis to ensure they can supply consumers with innovative new technology.

How can telecom operators address the workforce crisis to increase the rollout of fiber and 5G technology?

RECRUITMENT, RETENTION OBSTACLES

The telecom sector relies heavily on a highly skilled workforce to deploy and manage the complex technological infrastructure necessary for providing consumers with high-speed internet.

Today, it's imperative that operators work on sustaining a robust workforce. Inflationary pressures entice workers to explore alternative job opportunities, and the disruptive effects of the pandemic accelerated the retirement of older employees. That left recruiters needing help finding suitable candidates, leading to prolonged periods of job vacancies needing to be filled.

This issue notably affects the tech space and the telecom industry. A global survey by McKinsey reveals that 90 percent of tech executives and managers acknowledge existing or anticipated skill gaps within their organizations in the next five years. In addition, a recent Veriforce study indicates

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that 86 percent of telecom company executives identify the shortage of skilled workers as the primary challenge the industry faces.

As telecom operators continue to implement focused training programs, additional attention is required to address the expanding skill gap effectively.

EMPOWERING THE DIGITAL NATIVE GENERATION

The telecom sector continuously evolved to meet consumer demands, resulting in changes to internal systems and required employee skill sets. A McKinsey study, “The Next Telco Battleground,” emphasizes this transformation, indicating that operators’ network engineering talent needs to expand beyond radio specialization. With the increasing prevalence of virtualization, differentiation now relies on a broader range of technological skills and capabilities.

This presents an opportunity for operators and recruiters to capitalize on. Instead of solely filling skill gaps left by retiring senior employees, they can harness the competencies of digitally native Gen Zers and millennials, creating new skill sets that align with their strengths and the demands of emerging technologies.

To initiate this process, operators can leverage digital twins – virtual models designed to reflect physical objects – that offer a comprehensive network overview while catering to the strengths of digital natives.

By prioritizing the recruitment of talent that aligns well with the

requirements of new technologies, telecom operators can unlock potential benefits such as enhanced operational efficiencies and increased revenue, helping mitigate the ongoing workforce crisis.

EMBRACING EMERGING TECHNOLOGY

Focusing on new talent is essential, but telecom operators should recognize the importance of considering existing employees. The successful deployment of 5G and fiber relies on obtaining buy-in from all stakeholders, ensuring everyone realizes the value of implementing new technology and feels actively engaged in achieving business objectives.

To achieve this, existing employees should be involved throughout the entire development process of new technology. Operators should consider current employees’ wealth of experience during the evaluation, selection and implementation stages.

Involving employees in the digital transformation process offers numerous benefits for operators. By actively participating, workers witness the tangible benefits of digital transformation firsthand. This creates a positive feedback loop in which employees recognize the significance of meaningful changes and become even more motivated to support digital transformations.

Existing employees form the foundation of company culture. By involving them in the digital transformation process, operators foster a culture of innovation and collaboration. By prioritizing the well-

being and involvement of employees, operators are more likely to cultivate an efficient, productive, motivated workforce of highly experienced and knowledgeable individuals.

COMMUNICATING MODERN TECHNOLOGY ADVANTAGES

The process of digital evolution can be intimidating for employees, particularly those from older generations. There is a concern that introducing a new generation of employees with more compatible skill sets for handling new technology might leave existing workers feeling marginalized. Telecom operators must take proactive steps to clarify the benefits of modern technology and provide assurance that its implementation is not intended to replace employees but to enhance their work lives.

One approach to achieving this is by emphasizing the added value technology brings to new and existing workers. Telecom operators can highlight the ways technology democratizes access to vital information, equipping employees with the necessary tools to perform their jobs to the best of their abilities.

Active involvement of the workforce is vital for a swift, seamless rollout of 5G and fiber technology. Operators can achieve this by providing up-to-date operational technology that leverages the competencies of Gen Zers and millennials while ensuring that existing employees are included in any business changes being implemented. Both new and existing employees possess valuable skill sets that contribute to overall success, and their effective engagement through collaboration is essential. 🤝



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