

FUTURE READY

INTELLIGENT TECHNOLOGY
MEETS HUMAN INGENUITY
TO CREATE **THE FUTURE**
TELCO WORKFORCE



FUTURE READY

Traditional Communications Service Providers (CSPs) are realizing that the rulebook they've followed for decades no longer applies. The profitability of core products and services is diminishing. Competitive barriers are collapsing. Customer loyalty is quickly becoming a thing of the past.

In this changed environment, many established CSPs struggle to remain relevant. The most successful are using the technological advances that are responsible for so much of the industry's upheaval to transform their core services and forge new paths to new sources of revenue and growth. Equally important, they are introducing smart technologies such as artificial intelligence (AI) and robotic process automation (RPA) to create a future-ready workforce that will guide them to growth.

Accenture's recent "Reworking the Revolution" research study, however, exposes a curious gap between CSPs' management and their workers when it comes to harnessing the potential of future technology. Workers are receptive and to and excited about the coming changes with 63 percent believing that AI will have a positive impact on their work. Their leaders, meanwhile, acknowledge the potential of new technologies but aren't being as strategic as they could be in planning for their implementation. Only 21 percent of CSP leaders surveyed highlighted advanced workforce planning for future skills needs as a top initiative. Bridging this digital disconnect is critical for any CSP's future.

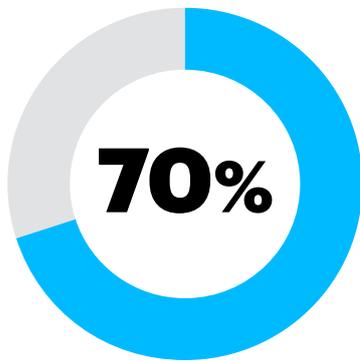
THE RISE OF THE DIGITAL TELCO

Incumbency no longer offers CSPs the advantages it once did. Digital disruptors are entering the scene at scale with customer-centric, data-driven services and products, and challenging both the consumer and the B2B revenues for the CSP. Based on digital platforms, ecosystems and new technologies, these new services are not only expanding the value equation beyond traditional communications services, but also redefining consumer and business expectations in the digital age.

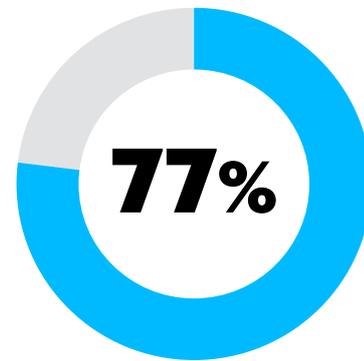
In response to this competitive threat, savvy CSPs are taking a page from the digital disruptors' rulebook to reimagine their structures, processes,

tasks and culture. And they are zeroing in on the advantages afforded by their proximity to consumers, experience of enterprise vertical markets, strong security reputation, trust, connectivity and data – and overlaying that with a digital growth mindset that encourages experimentation and innovation.

Equally important, they are adopting dual growth strategies – one focused on strengthening core capabilities and services, and the other targeted to new value-creation opportunities. Underpinning both is a newfound appreciation of the power of digital.



OF CSP EXECUTIVES EXPECT INTELLIGENT TECHNOLOGIES TO COMPLETELY TRANSFORM THE INDUSTRY



AGREE THAT INTELLIGENT TECHNOLOGIES AND AI WILL UNDERPIN THEIR ORGANIZATIONS' FUTURE COMPETITIVE ADVANTAGE¹



For US telecommunications company **CenturyLink**, an AI agent named Angie works with sales managers to identify the most promising sales leads. Angie engages with leads via email and interprets the interactions to determine which ones to drop or pursue. The solution generates **40 hot leads** for sales managers each month and so far **earns US\$20 in new contracts** for every dollar spent on the system.²

²CenturyLink using AI to boost sales efficiency.
Light Reading – 2017.

THE PEOPLE FACTOR

Forward-looking CSPs recognize that digital transformations are, at their core, people transformations and are taking time to re-imagine what work means in the digital age. They are reorganizing and reskilling their future workforces to capitalize on digitally-enabled growth opportunities. Above all, they are introducing

intelligent tools, not just to streamline operations and pursue new value, but to better support their employees and augment their skills. 73 percent of CXO respondents from our telco research sample were convinced that their organization would, to a large or very large extent, automate tasks and processes in the next 3 years.³



Verizon's investment in analytics and AI-driven technology means its predictive analytics algorithms monitor network service quality via data streaming from **millions of network interfaces**. Data translators play an increasingly critical role – and **demand is forecast to grow** for these workers. They can speak the data science language, but they also know the business.⁴

³Accenture Future Workforce: Reworking the Revolution Research, January 2018.

⁴The Amazing Ways Verizon Uses AI and Machine Learning to Improve Performance: Forbes, June 2018.



THE FUTURE TELCO WORKFORCE

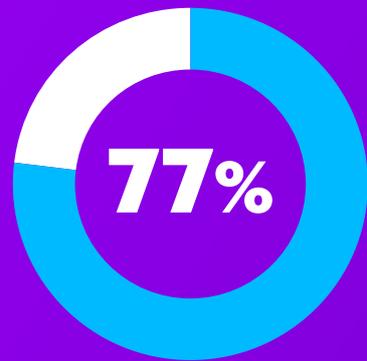
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THE DIGITAL DISCONNECT

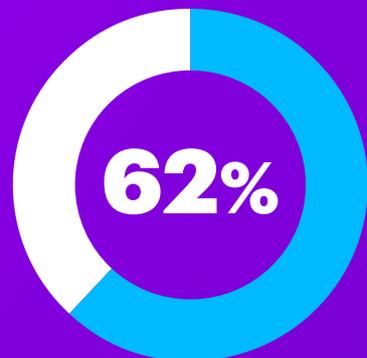
CSPs understand that digital technologies have redefined the way people work. AI is now taking the digital workforce revolution to the next level – not just augmenting the tasks people carry out but accelerating the pace of organizational change and value creation. AI delivers a host of benefits. It can enhance employee and customer experiences, enable agility, collaboration and personalization, and speed up decision-making. For CSPs, AI can also usher in new jobs and opportunities that allow intelligent workforces to shine. In fact, 63 percent of CSP leaders expect intelligent technologies to generate net job gains in the next 3 years.⁵

CSP workers are excited by the possibilities and ready for change. Eighty-two percent of them are confident in their abilities to work with intelligent technologies.

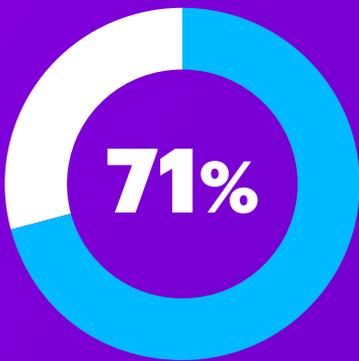
CSP WORKFORCES ARE LARGELY READY, WILLING AND ABLE TO EMBRACE AI



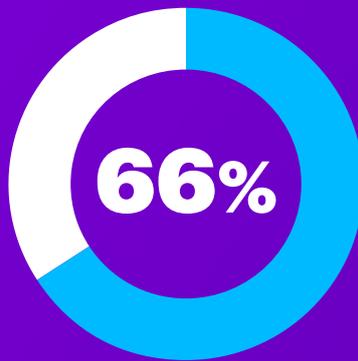
BELIEVE AI WILL MAKE THEM MORE PRODUCTIVE



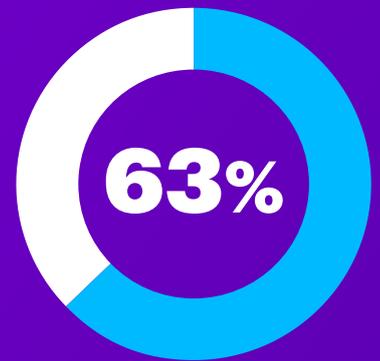
BELIEVE AI WILL SPARK CREATIVITY/INNOVATION



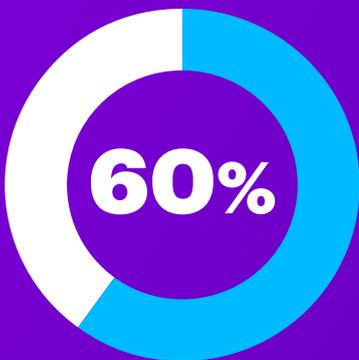
BELIEVE AI WILL MAKE JOBS SIMPLER



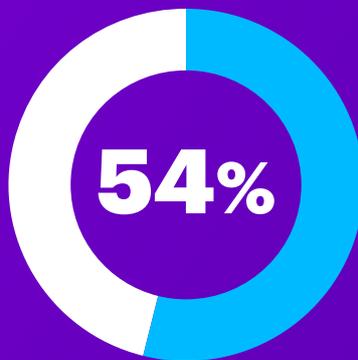
BELIEVE AI WILL IMPROVE WORK-LIFE BALANCE



BELIEVE AI WILL HAVE A POSITIVE IMPACT ON THEIR WORK



BELIEVE AI WILL MAKE JOBS MORE INTERESTING



BELIEVE AI WILL EXPAND CAREER PROSPECTS⁶

⁶Accenture Future Workforce: Reworking the Revolution Research, January 2018.



When we began our journey in **Vodafone Business Operations**, we already had an idea of how disruptive technology like AI would change the way we work. People continue to be at the centre of our business, with technology reducing repetitive tasks and giving them **more time back to speak to our customers**, to be creative. It's our workplace culture which is driving the **biggest improvements**.

Gary Adey, Group Commercial and Operations Director, Vodafone Business⁷

Executives, however, are less confident. CSP leaders believe that only 25 percent of their workforces are ready to work with AI. And 39 percent cite the growing skills gap as the top factor influencing their workforce strategy.⁸

This hesitancy on the part of CSP leaders extends beyond their impressions of workforce readiness. Specifically, while leaders may no longer question the value of AI, they are still unsure how they will bring the vision of intelligent technologies and intelligent workforces to life.

Our research revealed a number of examples of this digital disconnect:

- 73 percent of CSP leaders plan to automate tasks to a large or very large extent over the next three years. And 53 percent believe AI will be used to a large extent to assist with human tasks. Yet, only 21 percent are conducting workforce planning to take future skills needs into account.
- 96 percent expect the future workforce to comprise a blend of humans and machines. However, just 46 percent believe human-machine collaboration will be important to achieving their strategic priorities. Further, just 20 percent see the increase in human-machine collaboration influencing their workforce strategies.
- 47 percent believe intelligent technologies are making traditional job descriptions obsolete. But only 19 percent have taken steps to redefine jobs and roles. Similarly, 64 percent believe AI will improve workforce productivity. But only 19 percent see the adoption of intelligent technologies in work practices influencing their workforce strategy.
- Perhaps most strikingly, internal skills shortages are cited as the top challenge to creating an intelligent workforce. And 39 percent of CSP execs cite the growing skill gap as the top factor influencing their workforce strategies. Despite these concerns, only 6 percent plan to increase their training/reskilling investments significantly.

⁷Accenture Future Workforce: Reworking the Revolution Research, January 2018.

⁸Accenture Future Workforce: Reworking the Revolution Research, January 2018.

AI enables CSP leaders to shift their focus from workforce planning to work planning – from jobs to the fundamental nature of work.

BUILDING A FUTURE-READY WORKFORCE

To build an intelligent workforce capable of using intelligent technologies to grow the business, CSPs need to first gain clarity around what they hope to accomplish. Only then can they ready their intelligent workforces at scale, at speed, and on a continual basis.

Three actions will help ensure they are best positioned to capitalize on the significant growth opportunities intelligent technologies can deliver.

Re-imagine work. The most significant impact of AI on the workforce won't be on the number of jobs created, but rather on job content.

Three steps will help ensure a smooth transition.

- First, identify the new tasks that an AI-enabled environment either requires or supports. For example, CSPs moving to cloud will be deploying software-defined networking (SDN) technologies to facilitate network management and configuration. This assessment will help them determine how to allocate those tasks to people, machines or some combination.
- Second, create new roles and job descriptions that reflect the higher-value work that AI enables. DevOps engineers, for example, will play a key role in driving organizational agility. Incentivize individuals to develop new skills and a broader set of capabilities that will position them for success.
- Third, map new skills to new roles. This makes it easier to identify – and ultimately – fill gaps through training, upskilling or new talent acquisition.

Pivot the workforce. The nature of work is evolving quickly and will only accelerate as machines augment more human activities.

To prepare, leaders need to pivot the workforce not once, but twice. The first shift should focus on efficiency and agility. Taking advantage of human-machine collaboration and establishing multi-disciplinary and cross-functional teams are good first steps.

The second shift focuses on pursuing longer-term, transformational opportunities. This involves creating a culture of innovation and redesigning processes and organizational structures to enable fluid teaming. It also requires entirely new skills – many of which can't be taught in a classroom. **"It's Learning. Just Not As We Know It."**, a recent Accenture report, has revealed that for almost every role in the digital age, a combination of complex reasoning, creativity, emotional intelligence and sensory perception skills will be needed.⁹

Aligning the workforce to new business models and value streams, organizing for agility, and creating the new mindsets and skills needed to adapt to new markets are critical elements of a new workforce strategy.

Scale up "new skilling." The skills that are growing in importance, such as creativity and critical reasoning, are acquired through practice and experience. To work effectively with intelligent machines, workforces will need new large-scale forms of training that are flexible, tailored and relevant for long periods of time. Communications giant AT&T shows how it's done. As the company moved towards a fully digital business model, it launched a reskilling program for all 270,000 employees. To date, AT&T employees have completed more than 2.6 million mobile-enabled, self-guided training courses – all designed to help individual employees master jobs of the future. Indeed, approximately 40 percent of job vacancies at the company are now filled with internal, reskilled candidates.¹⁰

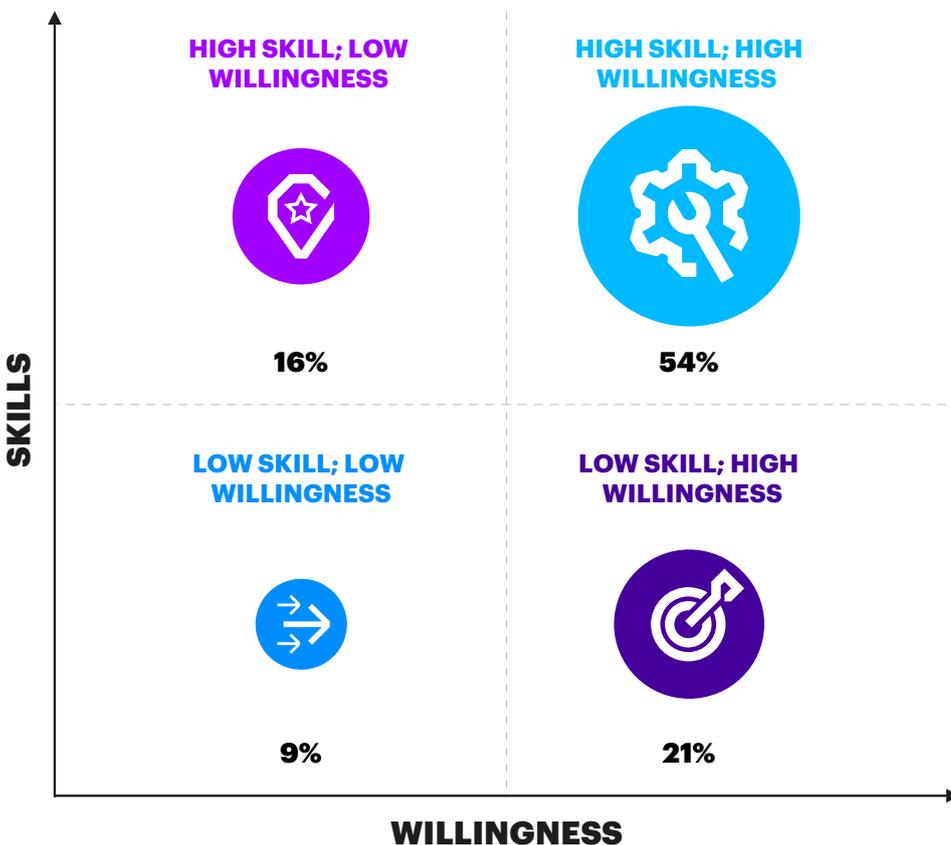
⁹Accenture, **"It's learning. Just not as we know it."** 2018.

¹⁰Ramona Schindelheim, **"Shaping the Future Workforce: AT&T's chief learning officer helps instill culture of lifelong learning."** Working Nation, January 29, 2018.

At present, many CSPs aren't focused on training as extensively as AT&T. But even CSPs with smaller training budgets can take steps now to build the workforce capabilities they will need. It comes down to sequencing the approach.

- The first step involves prioritizing the skills they need and zeroing in on "no-regrets" capabilities that will add value regardless of the CSP's future business model. In the area of technology, no-regrets skills may include automation design, AI delivery, DevOps, API development, data management and security. From a functional perspective, CSPs can't go wrong with enhancing skills in data monetization or industry insight development. And for those CSPs looking to build their competitive edge on innovation, investments in creativity, complex reasoning, emotional intelligence and sensory perception are safe bets.
- The second step involves aligning training to different levels of willingness and skill within the workforce. Our research has revealed that most workers across all industries (54 percent) have high aptitude in intelligent technologies and a high willingness to learn. Only 9 percent have low skills and low desire to change. Targeting training to meet the needs of a diverse workforce – particularly vulnerable learners in lower-skill roles – will help ensure all employees receive the type of training and support they need.
- The third step involves accelerating experiential learning. There are a number of ways CSP leaders can create an environment of "learning by doing." On-the-job training and apprenticeships are sure-fire ways to immerse workers in new situations. Similarly, virtual and augmented reality can provide realistic simulations to help workers master new tasks quickly and cost effectively. Gamification and contests can infuse the experience with an element of fun.

WORKERS CAN BE SEGMENTED INTO FOUR DISTINCT CLUSTERS BASED ON THEIR SKILLS AND WILLINGNESS TO ADAPT



UNLEASHING THE GROWTH POTENTIAL

There's a huge opportunity for CSPs to leverage AI and other intelligent technologies to drive new growth. But to do so, they need to harness the power of human ingenuity. Those companies that master the art of human-machine collaboration will find it much easier to achieve their digital growth objectives within their core operations and/or in entirely new markets.

ABOUT THE AUTHOR



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What will work look like in 5 years, 10 or even 15 years? We know it's going to look different than it has in the past but how quickly will technology advancements and the unprecedented speed in which digital is evolving impact the workforce and the way in which we work? That is at the heart of the work I do for Accenture and how we help sculpt and prepare the next generation workforce.

I have a deep interest in how people think, their motivators, how it drives their actions and what we can do at the intersection of digital technology and human connection to drive optimal performance.

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