YOUR DIGITAL NETWORK.
YOUR FUTURE.

Building the Pervasive Network

accenture consulting
BUILDING THE PERVERSIVE NETWORK

We are entering an innovation renaissance unlike any we have seen in our lifetime with the promise of a much smarter world by connecting machines, humans, sensors and entire environments.

As technology advances at exponential speeds and the number of connected devices, from clothing to appliances to cars to homes increases, communications service providers (CSPs) can become digital businesses if they capture the power of the Pervasive Network. The goal of pervasive computing, which combines existing network technologies with wireless computing, voice recognition, Internet capability and artificial intelligence, is to create an environment where the connectivity of devices is embedded in such a way that the connectivity is unobtrusive and always available.

The backdrop to this opportunity is that the equipment and carrier model of the past has evolved swiftly, along with the expectations of the digital consumer and digital enterprise as a whole. In addition to the classic problem of decreasing revenue and increasing costs, CSPs also face a completely new class of over-the-top competitors, boosted by the “softwarization” of the network, which changes customer operations as well.

To succeed in this new environment and generate significant new revenues, CSPs must make some tough choices and be prepared to reorient their businesses to create new digital experiences for customers and redefine their operations and underlying technology platforms. Despite making good progress, the communications industry continues to face challenges when trying to make the pervasive network a reality. Although the idea is that using the network is simple and ubiquitous, the truth is that it is a difficult task and there are many bumps in the road ahead yet.

Accenture believes that to survive and thrive in this new hyper-connected world, CSPs must break down the complexity of trying to make sense of everything at once and focus on three different areas:
This is simply non-negotiable. Next generation platforms, software-defined networks (SDN) and network functions virtualization (NFV) powered ecosystems must be created to provide the foundation for a digital business. Without that, the CSPs future stability and ability to provide the right networks, and to meet customer demand, could be in jeopardy, forming a risky journey ahead. In-step with the foundation of next generation networks, an application programming interface (API) environment should be put in place. This will allow for open automation amongst multiple vendors, and this platform ecosystem is the foundation for new value creation in the digital economy, which will in turn ensure the continued relevance and longevity of the future CSP business.

Reinforcing the new network models is the ability to execute and deliver with agility and reliability. To enable better collaboration and delivery, a DevOps and Agile approach should be put in place. This will ensure that a culture is created and can be fostered where building, testing and releasing software can happen rapidly, frequently and fundamentally, more reliably. This approach enables CSPs to rotate to the new, digital world whilst protecting and growing the core business to drive maximum revenues. Building overlay solutions that underpin this smooth migration path is one of the many solutions CSPs need to deploy to achieve a dual speed mode of operation and provide the critical balance between the core and the new.
TO REMAIN RELEVANT TODAY AND IN THE FUTURE, CSPS MUST DEVELOP AND LAUNCH NEW CONSUMER-FACING SERVICES TO MARKET, AT SPEED AND AT SCALE

As the digital disruptors move into new markets and connectivity increasingly becomes a commodity, it is critical that CSPs continue to innovate and launch new services to market. This ensures they remain relevant to customers and drive new revenues, and should be the single highest priority on the CSP agenda.

More importantly than ever before, CSPs today need to offer consumer-facing services around next generation enterprise, IoT integrations, 5G and within the connected home including services such as home security. This is in many ways, an entirely new business model and process for CSPs and while it is the prime opportunity for them to drive new revenues, it also creates new challenges and complexity. As a result, it is important that advanced analytics and collaboration tools and processes are put in place internally to help drive efficiencies through enriched and streamlined processes.
While rotating to new business models and the use of digital technology, CSPs must maintain and enhance existing processes throughout the journey. It's simply not an option to stop using current systems and start using new systems and processes. For example, implementing robotics-powered operational processes and tools to enable real-time service delivery can leverage best-in-class digital consumer service experiences to create the ultimate customer experience with the smallest operating footprint. It is a question of skilfully balancing present-day business priorities with the vision and needs of the future.

By producing efficiencies like this, the focus can remain on the longer-term strategy of making the journey to become a platform-based, digital CSP, ensuring the strength of the business for the future.

As CSPs proceed along these three dimensions, understanding a big mind-set change is required for it to be successful, across these five areas:

• Treating platforms as a set of processes, people and technologies that provide standard and reusable services to internal and external clients
• Implementing a lean operating model that is based on multispeed IT and the use of Agile DevOps methodologies across the organization
• Supporting a great customer experience for consumers, enterprises and the internal workforce by making complex systems easy to use
• Adopting new metrics that include digital and liquidity indices to measure the effectiveness of the new digital organization
• Achieving a culture shift that places a customer-centric culture and workforce at the core of the unit

Ultimately, the dimensions of people, process, metrics, operations and platforms will all have to change materially to achieve the pervasive network. But if they start the journey now and plan and execute well, CSPs can feel assured that they will remain relevant and competitive in the market place for many years to come.
About Accenture

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions – underpinned by the world’s largest delivery network – Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With more than 411,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com.