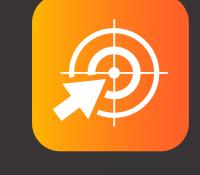


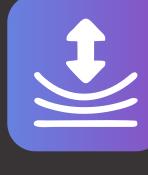
COMMUNICATIONS SERVICE PROVIDERS

Speed Dial to the New Reality

Time to leverage and build upon the strong heritage of being resilient, secure and reliable in an uncertain world

Communications, Media & Information Services



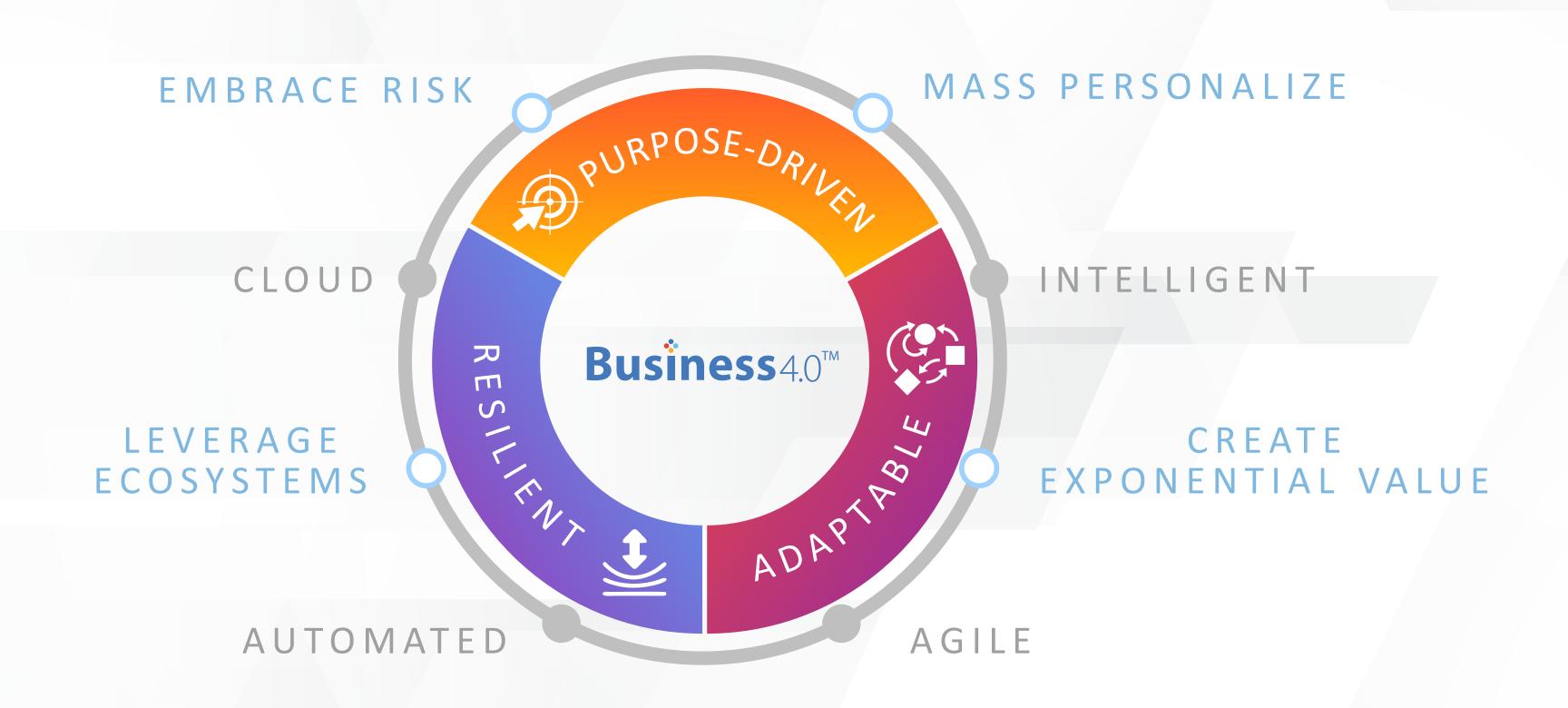






PURPOSE-DRIVEN, RESILIENT & ADAPTABLE

with Business 4.0TM















As essential services, health, education, entertainment and work went online and work-from-home became the new reality, the role of Communications Service Providers (CSPs) has never been more critical in keeping enterprises and customers connected and functioning amid the coronavirus lockdown.

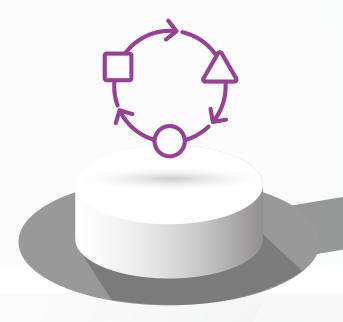
CSPs have displayed resilience and reliability as they quickly adapted to the sudden shifts in demand. They now need to build on this bedrock of being secure, resilient and reliable service providers. They need to reimagine their strategies to meet the changing customer needs and expectations in the post-COVID world.

We see CSPs as orchestrators of secure, resilient and reliably connected purpose-centric ecosystems. This entails a shift from being pure-play connectivity providers to connectivity-extended or connectivity-embedded solution providers (see figure 1 on the next page).



Figure 1: Business 4.0TM Continuum for CSPs to Ring in the New Reality

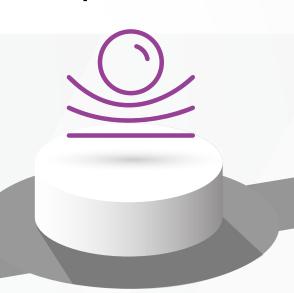
Standing Tall



Adaptation

- Adopting to the sudden change
- Adapt enterprise processes in a distributed and touchless environment

Strengthening your Adaptive Core



Focus on Resilience & Adaptability

- Scale network & service capacity to changed demands
- Scale Al & automation to strengthen enterprise processes and operations

Enabling Customers to be Resilient and Reliable



Focus on New Products & Services

 Products & Services augmented and re-engineered for experience and to empower governments, societies, citizens, enterprises and consumers to function in a distributed and 'touchless' world

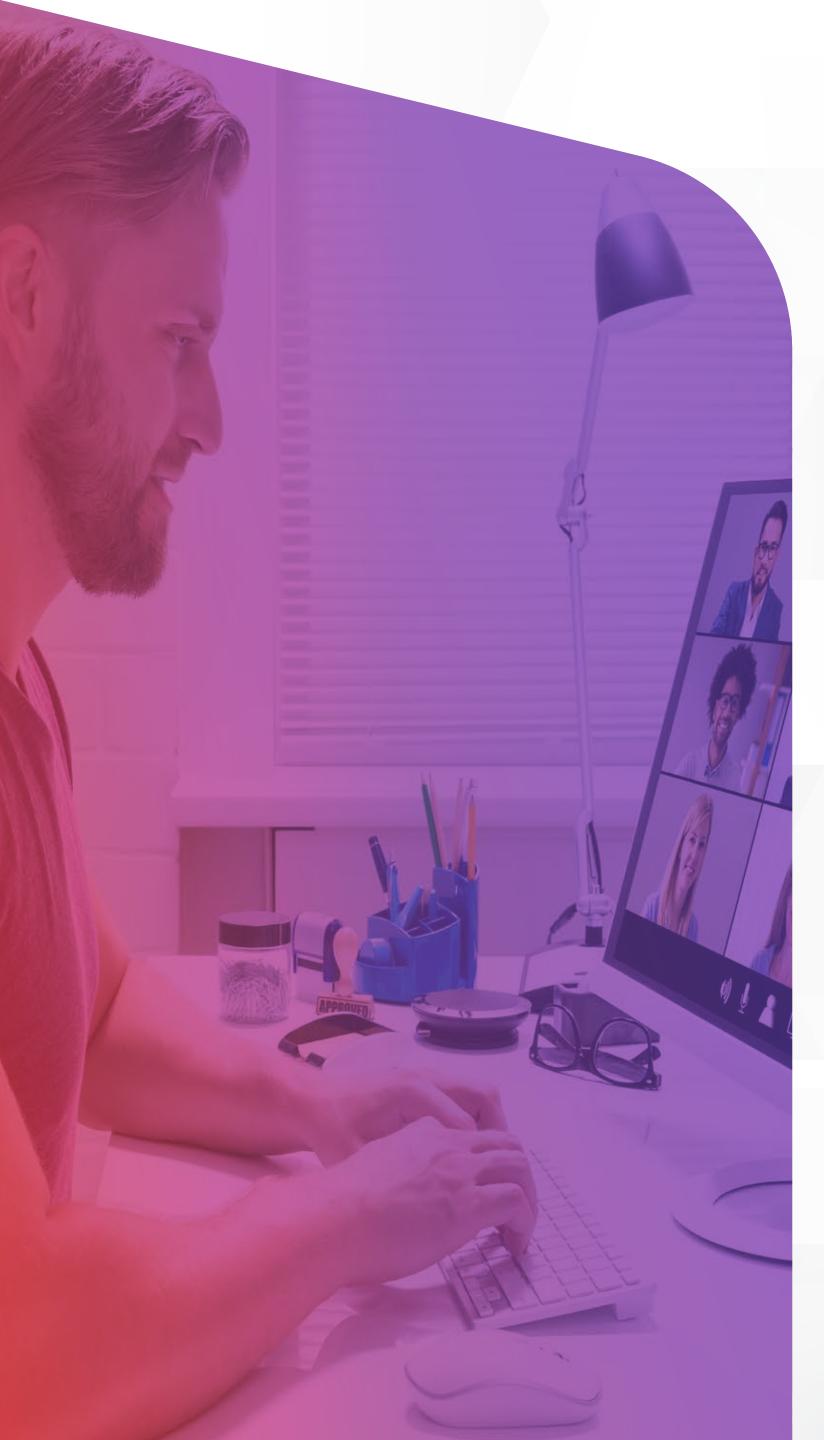
Orchestrator of Purpose-Centric Ecosystems



Capitalizing on the Renewed Brand Equity

• Innovate on new Business models and services as a Product/Platform company with combinatorial capabalities of 5G, Cloud, IOT, Security and AI

Building on the CSPs' Brand Ethos of Secure Reliable and Resilient!





Coping in the COVID-19 Context

Operational adaptability and scale agility as cornerstones of CSP response to changing demands

COVID-19 triggered social distancing and lockdowns have impacted CSP customers across segments. CSPs are pulling out all the stops to keep customers of all segments connected and their businesses running in these constrained scenarios (See figure 2).

New collaborations: The pandemic saw CSPs partner with government agencies, health care providers and local bodies for emergency communication management and prioritizing critical citizen services. Customer location data from CSPs provided the central enabler for solutions being co-developed with government and health care agencies for containing and coping with the crisis. Examples include Austria's A1 and Deutsche Telekom providing anonymized mass data to help health officials to visualize the movements of groups.¹

Figure 2: The Here and Now-- Crisis and Transition Back Phase

Crisis Phase

- Move customers onto upgraded, flexible and affordable product profiles
- Prioritize critical citizen services healthcare, emergency services, law and order, legal, surveillance
- Strengthen service operations to manage rapid shift in consumption
- Repurpose available personnel towards critical customer service operations

Transition Back Phase

- Progressively restore customer service channels
- Targeted retention as customer profiles are restored
- Cash flow and collections management defaults, business shutdowns, bereavements
- Strengthen and scale network capacity



Being customer-centric: Given the considerable shift in consumption demands for content, gaming and work communication, CSPs have enabled seamless migration of their consumers to affordable plans, and in some cases significantly discounted or even uncapped data plans. Similarly, for businesses, they were able to move them to profiles which enabled delayed payment options and product features with enhanced collaboration and security to manage a distributed workforce. Verizon, for example, has waived late fees for residential and small business customers, added an additional 15 GB of high-speed data automatically for wireless customers and created a new affordable Fios Home Internet option for low-income households.²

Scaling network capacity: Considerable work is being done behind the scenes to dynamically strengthen and manage network and service operations including capacity enhancements and service modifications. For instance, AT&T's network has seen a 40% increase in mobile traffic and a 100% increase in Wi-Fi calling since the pandemic began.³

Smart allocation of resources: Given the lockdown and the need to enable remote working, most telecom operators mobilized and redeployed staff from across their organizations to manage customer service impacts and mitigate customer service degradations even as stores are temporarily shuttered and contact centers lay vacant. Non-essential service calls were diverted to digital channels or alternate unmanned channels or to offline environments to ensure that available capacity was well utilized.

During this unprecedented time, the perception for CSPs has changed to garner a positive mindshare with consumers, enterprises and governments alike. Telco brands now stand for resilience, security and reliability.

As we transition from the crisis into a post-COVID world, CSPs will continue to be the critical backbone of emerging societies, markets and industries in their slow, measured and incremental recovery.

Targeted contact, marketing and retention efforts will be required to wean consumers off discounts, payment deferrals and service freebies during this transition period. Customer context sensitive approaches will be key to revenue and collections management while handling scenarios of defaults arising from personal and business losses.

Given the uncertainties in timescales and rate of change, CSPs will need to sustain significant operational agility during this prolonged period while anticipating the emerging patterns of demands. The full extent of possible repercussions and long-term impact of COVID-19 is yet to be known. However, in the short term, given the multifold increase in demand for reliable connected services, considerable focus will be on strengthening and scaling network capacity, and on new service provider partnerships for secure connected services.

The transition period provides CSPs a unique opportunity to better equip themselves to the world beyond COVID-19.

^{2]} Verizon.com, Verizon response to COVID-19, accessed 18 May 2020, https://www.verizon.com/about/news/our-response-coronavirus

^{3]} INFORM, Telcos take on coronavirus (March 2020), accessed 20 May 2020, https://inform.tmforum.org/insights/2020/03/telcos-take-on-coronavirus/





Beyond COVID-19

The orchestrator of purpose-centric ecosystems

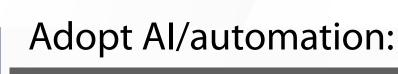
Consumers and businesses will move into the post-COVID period with a focus on reinforcing resilience and redefining business models with dimensions and features critical for the new landscape. In anticipation, CSPs will also need to recalibrate their business strategies to enable customers to accomplish this. The fundamental business strategy for CSPs should be to re-position themselves around resilience, security and reliability and be at the heart of purpose-centric ecosystems (see figure 3).

Figure 3: Repositioning of the Brand - Resilient, Secure and Reliable in a Post-Pandemic World

Post-COVID Phase • Enhance resilience, security and reliability of products and services • Leverage positive sentiments to expand customer segments • Be at the heart of purpose-centric ecosystems • Re-imagine customer engagement • Diversify product services mix across markets and segments • Technology as the pivot for business transformation • Zero touch products and services

Digital technologies and Business 4.0 tenets will continue to be the bedrock for the adaptive and resilient core around which the portfolios will pivot to serve the new expectations of consumers and businesses.

While investments on 5G might be delayed in the short term, significant opportunity exists in unlocking the platform economy with 5G and becoming a true orchestrator of ecosystems for enterprises and societies in the future.



Going forward, products and services will have Al-based automated self-heal capabilities. Channels will be embedded within products to support automated processes including diagnostics, self-care and chat interfaces. Services to the enterprise segments will be cloud-native for effective deployment in distributed and scaled environments. All products and services will become app-enabled, accessible anywhere through any trusted connectivity channels. Critical business services will be augmented by wireless alternative connection endpoints to enhance reliability of services.

Embrace purpose-centric processes:

Changes in the ways of working during the COVID-19 crisis period (reduced contact center staff and leverage of digital channels, etc.) would provide opportunities to reimagine an enterprise's business processes and reinforce resilience in the fabric. Contact center operations will move to a paradigm of purpose-centric customer engagement, proactive and predictive rather than reactive. Technology becomes the fundamental lever to pre-empt, eliminate, automate and divert customer interactions to the right channel. Zero-touch will be the new mantra of this adaptive core as Al and automation will become front and centre to bulk of the enterprise business processes including service operations (IT, network, service, security), fraud prevention and risk assessment.

Scale capabilities:

As enterprises are transitioning back from the pandemic era, the focus will be on scaling up capabilities to manage a distributed workforce, bring security and reliability to operations and to automate. This presents unique opportunities for CSPs to go beyond the realm of pure play connectivity to provide connectivity-extended solutions like cloud contact center services, collaboration platforms, store fronts as experience centres and IOT platforms which enable critical automation capabilities including smart factory, remote operations and smart logistics.





CSPs need to evolve from their positioning of resilient and reliable providers to be the fundamental orchestrator of emerging purpose-centric ecosystems, moving from being a connectivity provider to enabling your customer to be resilient and reliable. Given the shift in consumption behaviours of consumers and enterprises, CSPs can choose to redefine their product and services portfolio for their customer segments by becoming smart connectivity providers, digital services players, ecosystem players and platform players, the avatars described in Making the Smart Call: Telcos Plot Their Digital Future.⁴

Offer integrated product suites:

Tremendous opportunities will emerge for CSPs to provide purpose-centric, industry vertical specific solutions for the business and government segments, in the trail of COVID-19 recovery. Citizen services including digital surveillance, elderly care and smart health services, education solutions for remote learning, smart cities solutions for holistic coverage and governance, IOT-enabled supply chain solutions, and digital market places are a few examples of potential integrated product suites that can add to CSPs' portfolio, in partnership with the respective players in the ecosystem.





Conclusion

Pivot the business strategy around reliability, resilience and security

To conclude, CSPs have adapted very well during the crisis, becoming a critical and necessary mainstay of the connected digital economy. They will no doubt play an important role for people, societies and enterprises in a post-COVID reality. However to emerge even stronger, CSPs will need to fast track future-proofing the adaptive core and ensure that reliability, resilience and security continue to be at the foundation for new growth. Technology-enabled operational model changes and new partnerships for innovation will help in reimagining CSPs as product-led organizations and as orchestrators of purpose-centric ecosystems for consumers, enterprises and societies in the new reality.







About the Author

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CTO - Communications, Media and Information Services Business Unit Head - Industry Advisory Group

Shanky Viswanathan brings 25 years of strong industry knowhow, domain expertise, technology innovation and cross-industry best practices together to help CXOs drive and sustain business leadership. As CTO, Shanky explores how technology disruptions can be harnessed to power enterprises into the future. As Head of Industry Advisory, Shanky helps the C-Suite navigate disruption and transformation in the age of ecosystems.

Shanky holds a master's degree in Computer Science & Engineering from Anna University, Chennai, India, and has co-authored several patents.



About Tata Consultancy Services Ltd (TCS)

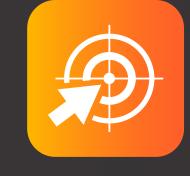
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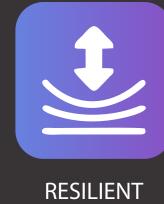
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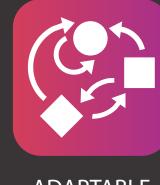
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