

TAKE CONTROL OF 5G CUSTOMER EXPERIENCE

With 5G, CSPs are moving from 'best-effort mobile' to proactively managing service quality and customer experience in real time

"In 5G we finally have the framework to define service experience monitoring as opposed to network health monitoring."

Claude Robitaille
CTO, Accedian

5G Rollouts are taking a couple of approaches:

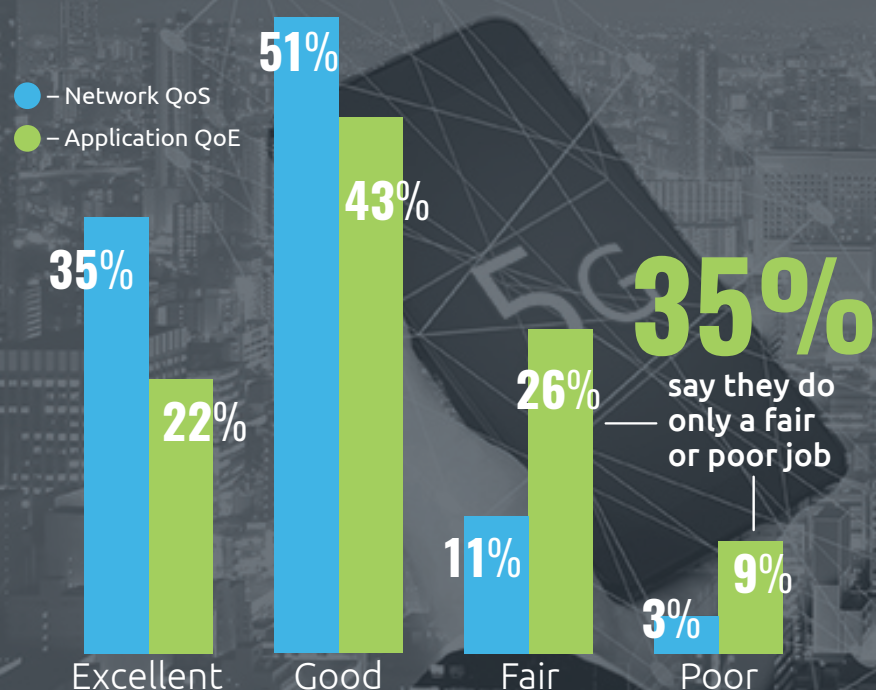


Non-standalone:
a 5G radio layer is installed over existing 4G core with small cells deployed in high-density cities.



Standalone:
5G infrastructure is all-new and separate from existing networks.

Either approach brings radical performance management changes ... it's all about managing the 'per-service and application experience'

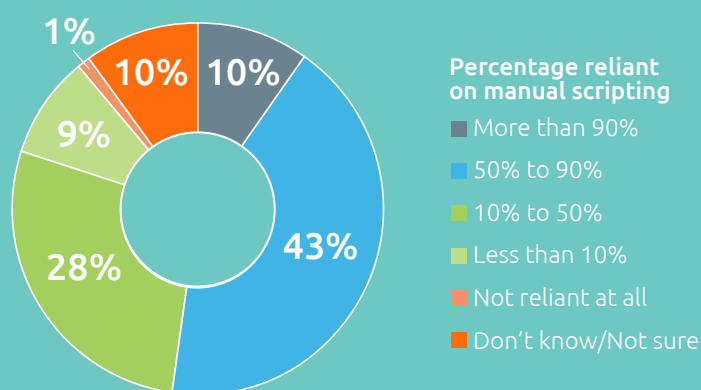


Only 1 in 5 operators rate their ability to do Application QoE as Excellent



Source: Heavy Reading 5G Operator Survey on Performance Monitoring, Autumn 2018

It's a journey to automation – operators rely extensively on manual network performance management today



10% of CSPs > 90% reliant on manual scripting

43% are 50-90% reliant on manual scripting

Source: Heavy Reading 5G Operator Survey on Performance Monitoring, Autumn 2018

5G Services & KPI Mapping

Class	Type	Throughput REQUIRED	Latency ALLOWABLE	Packet Loss SENSITIVITY	Local Compute REQUIRED	Examples	Performance level	Impact if not met
							● Not demanding	● Low
IoT NB-LTE-M/ LTE-IoT allow devices to communicate as rarely as once every 40 minutes	mMTC MASSIVE MACHINE-TYPE COMMUNICATIONS					sensors for agriculture, smart meters, connected car insurance, smart city lighting, lackage tracking and logistics	● Not demanding	Low
	uRLLC ULTRA-RELIABLE, LOW-LATENCY COMMUNICATIONS					real-time factory automation, remote patient vital sign monitoring, connected car collision avoidance / federated driving	● Challenging	High
eMBB EXTREME MOBILE BROADBAND	Real-Time COMMUNICATION/ INTERACTION					video/hologram calling, VR gaming, augmented reality, telematics, fixed line internet replacement	● Challenging	Moderate
	Streaming VIDEO/MEDIA					UHD 3D YouTube, VR movies & AR sporting events, 8k video	● Challenging	Moderate
	HTTP/HTTPS Internet/Web Services					content, visuals, client to server-based web applications and basic HTTP/HTTPS connectivity to web	● Challenging	Moderate

Source: GSMA

What is the ideal 5G performance management solution?

END-TO-END

Visibility and control of customer experience, from the application layer across all network domains, including compute infrastructure.

EDGE

Distributed monitoring and analytics coupled with monitoring of core, access AND cloud assets.

DYNAMIC

Orchestrated monitoring and service assurance that can be easily instantiated to measure service quality and can support a diverse set of on-demand services, applications and slices.

AUTOMATED

Intent-based service quality KPIs and automated processes to assure hybrid physical and virtual service components using a cloud-native micro-services platform.

More info at:
takecontrolof5g.com

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