End-to-end network automation: ambitions and progress within the telecoms industry

To find out more about the research findings, please see the related thought leadership report here.

Most telcos are automating to drive cost efficiencies and improve customer experience

Main drivers for network automation

- 81% of operators have cited efficiency & cost reduction as their key driver
- 45% of operators automate to enhance CX
- 45% of operators want better accuracy in their networks

Other drivers include:
- Better resilience & reliability
- Better employee retention & satisfaction

The most pervasive challenges slowing down telcos’ automation efforts are not technical

- Building the right network infrastructure
- Interoperability across different systems
- Driving a consistent data lake strategy
- Ownership & accountability
- Coordination challenges
- Building the business case
- Cultural barriers
- Skills & knowledge
- External pressures (e.g. government)

Many telcos have prioritised network automation efforts on new and ‘high cost’ legacy areas

Opportunity to provide greatest value to the business

- New deployments: All “new” by default must be automated, Easier to automate based on standards for future technology
- Tackling biggest legacy burdens: Heavy manual aspect, prone to human error, Meeting immediate customers’ needs, Heavy network opex and capex spend

Most operators are at relatively early stages of the journey, exploring the “what”, “how” and “which use case”. Few are looking at automation holistically.

Other areas of legacy
- Ringfenced prior to phase-out
- Legacy rather end-of-life
- Seen as not worth investing into

There are four key ways for telcos to drive and accelerate their network automation journeys

1. Have a clear people, culture and change management vision so employees understand how their roles will evolve with automation
2. Build automation into products and services from inception in order to reap the full rewards of network automation
3. Ensure cross-team collaboration so common goals and issues are dealt with coherently and cohesively
4. Embrace closed-loop automation and establish clear governance for accountability

Source: STL Partners research programme, report published June 2020