



# Modernising CSPs' data architectures for network analytics/AI-driven automation



Adaora Okeleke

## About this report

This report provides an overview of some of the best practices and recommendations that communications service providers (CSPs) should apply to transform their data architectures so that they can support new network analytics and eventually AI-based use cases. These new network analytics/AI use cases are needed to help CSPs achieve their ambitions for autonomous network operations. The report shows how some CSPs are implementing these best practices, the benefits they are deriving from these implementations and issues that need to be resolved to futureproof their autonomous networks objectives.

This report is based on information gained from several sources including,

- Analysys Mason's desk research and observations from publicly available data, vendor announcements and interviews with CSPs
- interviews with CSPs' network analytics teams including A1 Group, BT, Orange Group and Vodafone Group
- interviews with vendors (telecoms independent software vendors (ISVs), software technology providers and public cloud providers).



### KEY QUESTIONS ANSWERED IN THIS REPORT

- What market factors and challenges are driving the need for CSPs to transform the data architecture for network analytics/AI-driven automation?
- What best practices should CSPs adopt when developing the new data architecture to support network analytics/AI driven automation?
- How are CSPs currently implementing these best practices and technologies to transform data architectures for network analytics/AI-driven automation?



### WHO SHOULD READ THIS REPORT

- CSPs' Network Big data, AI and analytics teams and IT teams that want to transform data architecture for network analytics to achieve autonomous network ambitions.
- Vendors that want to target the CSP market with modern data platforms and network analytics/AI-based solutions.
- Product marketing staff who want to position their solutions among those that can be used to enhance CSP data architecture for network analytics.



## Executive summary

Research overview

Drivers influencing the need to transform data architecture for network analytics

The data architecture for network analytics should be cloud based, open and driven by AI technologies

Early CSP adopters demonstrate how they implement these best practices

Appendix

About the author and Analysys Mason

## About the author



**Adaora Okeleke** (Principal Analyst) leads Analysys Mason's *Data, AI and Development Platforms* research programme. Her research focuses on service providers' adoption and use of data management, artificial intelligence, analytics and development tools to support the digital transformation of network, customer and other business operations. Adaora tracks vendor strategies for the telecoms industry to understand how they are evolving their product portfolios to include data, AI and development capabilities. She also provides key industry insights to operators and vendors on strategies for adopting these technologies.

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- Transport Network Strategies



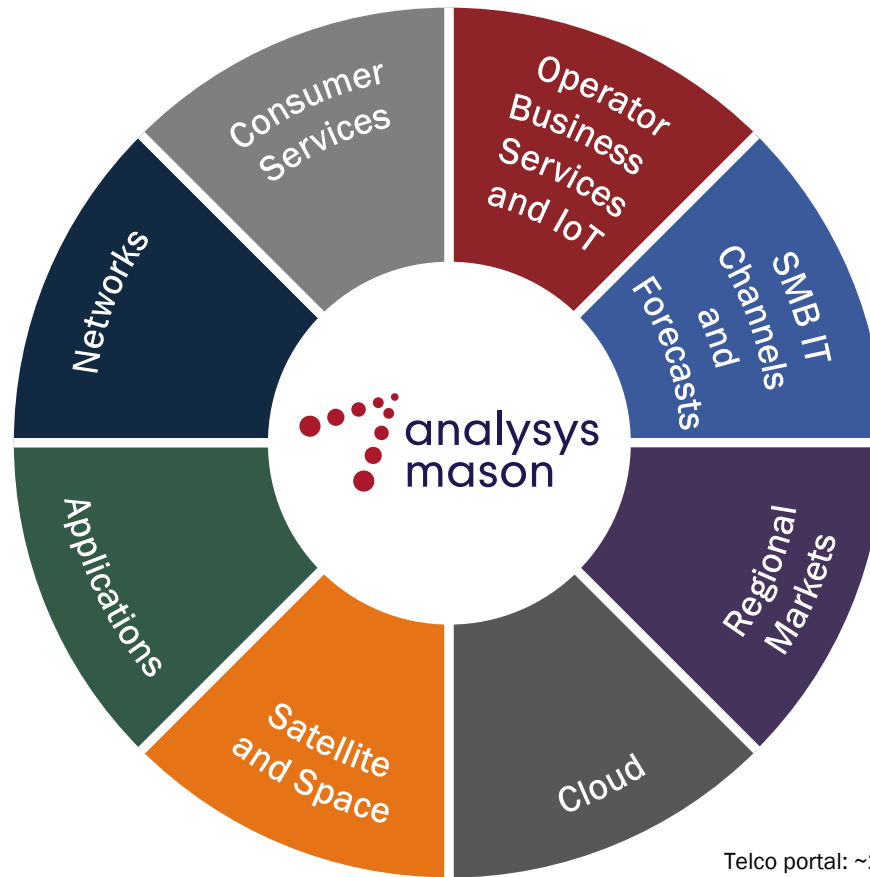
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- European Telecoms Market Matrix
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- SMB Technology Forecaster portal: ~120 000 forecast metrics

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