

Nokia moves into the data management market with its AVA Data Suite to address CSPs' data curation needs

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Communications service providers (CSPs) will stifle the progress of their AI/analytics projects if they do not ensure that their users (including data scientists and analysts) can access high-quality data. Nokia recently launched¹ its Nokia AVA Data Suite to help CSPs to address this challenge. It is a library of curated network data assets (which currently run on-premises and in Google Cloud) and which can be consumed by CSP users to support their AI/analytics workflows. This launch creates opportunities for Nokia to position itself as a key solutions provider for CSPs' data access challenges. However, Nokia will need to forge more partnerships with other data platform players to drive revenue growth in the data management market for telcos.

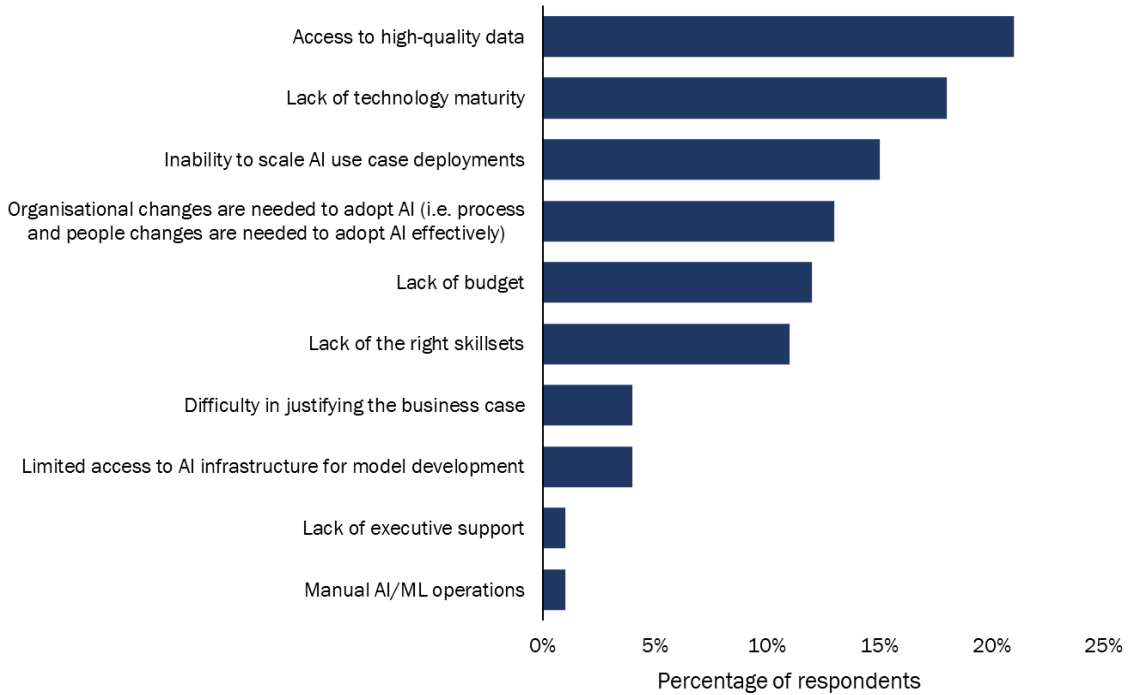
CSPs require high-quality data to support their telecoms-related AI and analytics developments but have face obstacles in this area

CSPs' AI (including generative AI (GenAI) and analytics projects require access to high-quality data. However, CSPs struggle to meet this requirement. Analysys Mason's recent survey of over 80 senior level CSP respondents worldwide² indicates that access to high-quality data is the highest ranked challenge that CSPs face when implementing AI projects (see Figure 1).

¹ Nokia (18 September 2023), [Nokia launches AVA Data Suite to run on Google Cloud to facilitate AI/ML development](#).

² Analysys Mason conducted a worldwide survey of 84 CSPs between September and November 2022, including top-tiered CSPs in North America, Latin America, Europe and Asia-Pacific.

Figure 1: Common challenges that CSPs face with telecoms-related AI projects (based on Analysys Mason's survey of 84 CSPs worldwide, conducted between September and November 2022)



This challenge has several causes including failed data pipelines, which can result in incomplete and inaccurate data being sourced from network infrastructure and systems. CSPs therefore need to spend a substantial amount of time and effort to cleanse and adapt these datasets to support AI and analytical use cases.

To overcome this challenge, CSPs must improve the management of data throughout its lifecycle, including the creation, ingestion, storage and deletion of data. This practice is known as data curation. CSP vendor partners can support CSPs' data curation efforts, which will help CSPs to derive faster returns on their AI- and analytics-related investments.

Nokia is stepping in to address CSPs' data curation challenges

Nokia has recently launched its Nokia AVA Data Suite to address CSPs' data curation requirements. The suite is a library of curated network datasets (that is, OSS and subscriber transactional data) generated from all network domains, including raw and derived data (in the form of aggregated or calculated datasets). Nokia provides toolsets to cleanse, filter, enrich and transform these data sets before they are exposed to users to facilitate analytical and AI workflows.

The Nokia AVA Data Suite adopts a data-as-a-product approach, where each data set is treated as a separate product that is supported by a series of capabilities including discoverability, security and trustworthiness. This approach ensures that CSP network data is reusable and is backed by the relevant data access and governance control policies.

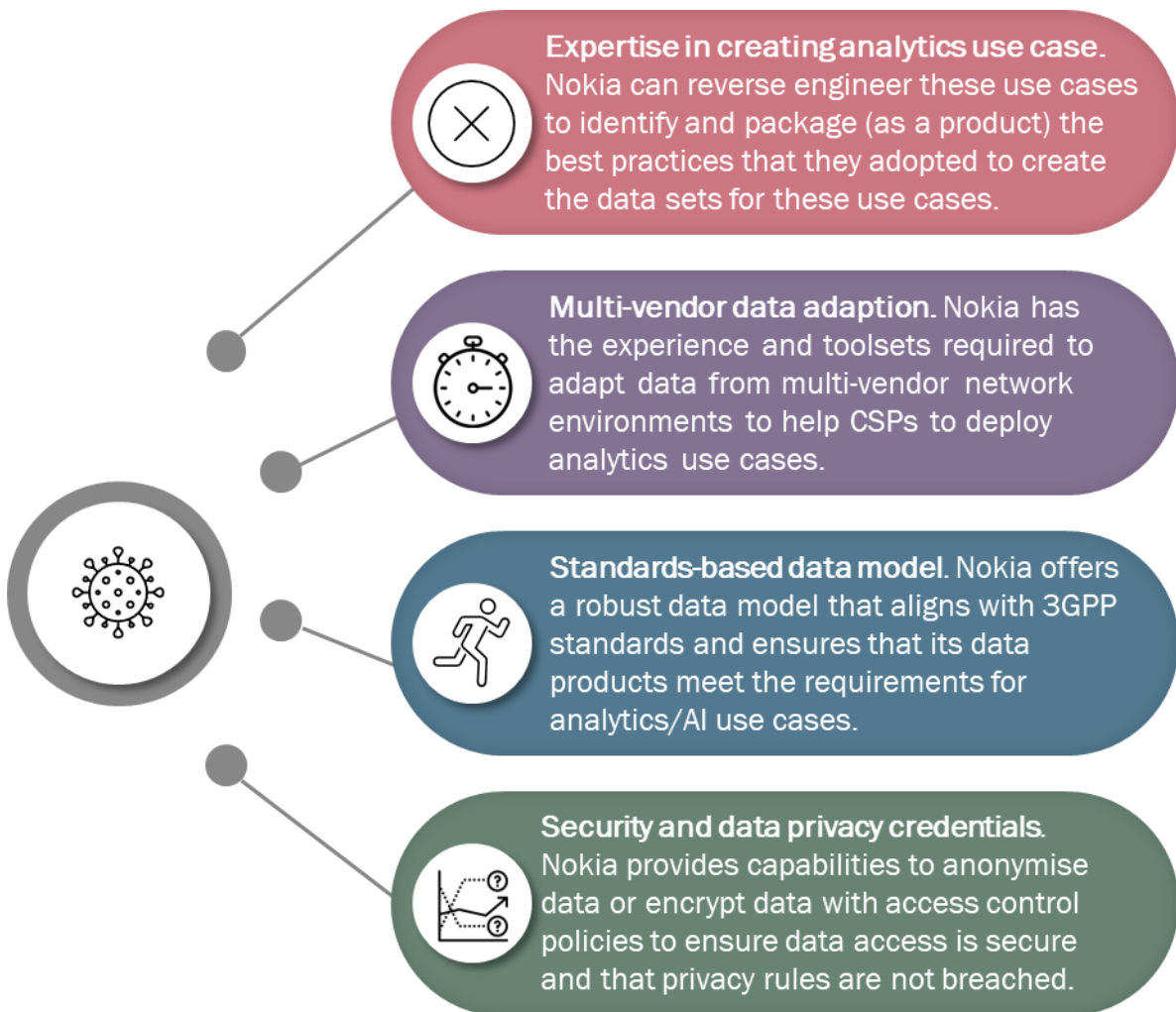
The Nokia AVA Data Suite comes with multi-vendor capabilities and so can provide curated data sets based on data from third-party network vendors. Consequently, the Nokia AVA Data Suite can serve as a common

network data layer that can be sold as a standalone product that performs the preprocessing and transformation functions of a data platform.

The launch of the Nokia AVA Data Suite will position Nokia as a key player in the telecoms data management market

Through this launch, Nokia is making a bold statement that it can play in the data management market as well as the analytics and AI applications market. Figure 2 illustrates the credentials that Nokia has that will allow the vendor to participate in the telecoms data management market.

Figure 2: Nokia's data management credentials



Source: Analysys Mason

Nokia had previously marketed its Nokia AVA analytics applications portfolio as a complete suite of telecoms-related AI/analytics applications with integrated data management capabilities. However, CSPs are shifting to cloud-native telecoms-related AI/analytics solutions, with the data management layer disaggregated from the AI/analytics application logic. Nokia recognises the negative impact that this trend will have on the demand and positioning of its AI/analytics offerings, which come with pre-integrated data management capabilities. To

remain competitive, Nokia is transforming its product strategy and disaggregating and repositioning itself as a data management and analytics/AI applications provider.

Several telecoms network analytics players possess similar data management credentials, including Ericsson, Huawei and Netcracker. However, these companies integrate their data management and analytics capabilities and do not expose their data management capabilities as separate products. We expect these vendors to make similar changes to their analytics/AI product strategies.

Nokia's engagement with Google Cloud is an indicator of the value that Nokia can bring to data and AI platform providers

The Nokia AVA Data Suite currently runs on Google Cloud and is integrated both with Google's BigQuery data warehouse and Vertex AI platforms to store curated network data and to make the data available to support AI/ML model lifecycle management. Through this integration, Nokia offers Google Cloud the opportunity to step up its data and AI engagements with CSPs and vendors/providers of telecoms applications.

- **CSPs.** Google Cloud can offer CSPs a data platform that effectively curates and stores IT and network data sets (from multiple sources, not just Nokia's own sources). According to [Analysys Mason's research](#), CSPs' adoption of Google Cloud's data and AI platforms for IT data workloads have more than tripled between 2020 and 2023. CSPs have also started to migrate their network data and AI workloads to Google Cloud as confidence, expertise and the value gained from running these workloads on Google Cloud increases. Nokia's network data curation capabilities will complement Google Cloud's data and AI platform capabilities, which will ensure that the public cloud provider (PCP) meets the data-quality requirements for network data.
- **Telecoms analytics application vendors.** Google Cloud can offer these vendors a common data layer that includes all the data required to support analytics/AI workflows. This means that telecoms analytics application vendors are no longer responsible for the investment and management costs associated with offering these capabilities to their CSP customers.

Other data platform providers such as Snowflake and Cloudera can also explore these opportunities and should work with Nokia to ensure that they can also access high-quality network datasets as CSPs co-locate network and IT data within the same data environments.

To continue to grow its market presence and opportunities in the data management domain, we expect Nokia to extend its data curation capabilities to data platform providers that do not have the expertise or toolsets to prepare, enrich and expose analytics/AI-ready CSP network data.