

A LotusFlare Customer Story

# Empowering Deutsche Telekom to Monetize Network APIs

# Summary

- Deutsche Telekom wanted to enhance their 5G Network and advanced CPaaS API monetization capabilities and expose its APIs to a wider developer community through different go-to-market channels.
- Powered by **LotusFlare Digital Network Operator® (DNO™) Cloud**, Deutsche Telekom successfully established a robust Service Exposure Platform enabling streamlined API monetization, improved developer experience, identity and consent management, and automated operational processes.
- LotusFlare leveraged its commerce and monetization platform, DNO Cloud, to provide the backbone of the Service Exposure Platform, integrating it with existing Deutsche Telekom systems to create an agile, multitenant solution for API monetization. LotusFlare is responsible for solution design, cloud infrastructure setup, development, integration, testing, training, and ongoing platform support.

# Background

In early 2024, recognizing the shift toward a software and developer-centric telecommunications industry, **Deutsche Telekom** launched the **Magenta API Capability Exposure (MACE)** business unit. This new unit was created to open up Deutsche Telekom's network capabilities to enterprise customers and developers, allowing them to build innovative solutions that leverage the company's advanced network infrastructure. To power this initiative, Deutsche Telekom chose LotusFlare to provide the underlying platform.

The movement to kickstart innovation with **Network APIs** and develop this nascent market is gaining momentum, supported by the standardization efforts of industry groups like **GSMA Open Gateway**, **TM Forum**, and **CAMARA**. In a further move to accelerate this initiative, Deutsche Telekom partnered with Ericsson and 12 other global Communication Service Providers (CSPs) to establish a joint venture branded Aduna. This new venture will create a global aggregation platform for CSP APIs. The trend has not gone unnoticed by analysts, with research firms predicting that revenues from Network APIs could reach anywhere from \$10 billion to \$30 billion by 2030.



# Challenges

As Deutsche Telekom began its journey, it recognized several challenges for CSPs to expose 5G network APIs:

- **Limited Go-to-Market Channels:** To achieve greater scalability and wider market reach, Deutsche Telekom realized one path to market was not enough. Deutsche Telekom aimed to expand its go-to-market channels to include multiple channel partners, such as aggregators, CPaaS providers, SIs, and hyperscalers, in addition to a direct sales portal.
- **Limited Monetization Capabilities:** To fully capitalize on its Network APIs, Deutsche Telekom needed to move beyond prepaid and postpaid billing and implement a range of advanced monetization options to meet diverse market needs.
- **Customer Data Ownership:** To enhance security, data governance, and customer relationships, Deutsche Telekom sought to gain direct ownership of critical customer data, including developer accounts, applications, subscriptions, and usage information.
- **Manual Operational Processes:** Key business processes, such as billing, Know Your Customer (KYC), credit checks, and MSISDN allowlisting, were manual, leading to inefficiencies and delays.
- **Need for Developer-Friendly Experience:** To attract and retain a wider developer community, Deutsche Telekom needed an easy-to-use self-service platform for advanced network services and 5G-enabled assets.
- **Need for Multitenant Solution:** Deutsche Telekom wanted a platform that would support its national subsidiaries (NatCos) in various countries as well.
- **Need for an Identity and Consent Management Solution:** A key challenge was the lack of a robust Identity and Consent Management Solution for Network API transactions.
- **Nascent Market:** As a new and evolving landscape, the solution needed to be exceptionally innovative and flexible, allowing for continuous experimentation and supporting the complexities of a multi-faceted ecosystem.

# Solution

LotusFlare was selected due to its proven track record of rapid outcome delivery, out-of-the-box product, and expertise in building API monetization platforms for CSPs. The modular, multitenant and cloud-native nature of DNO Cloud offered the agility and scalability required to meet the evolving demands of an API marketplace.

LotusFlare adopted a multi-phased approach, with a strong emphasis on automation and enhanced developer experience. The solution involved:

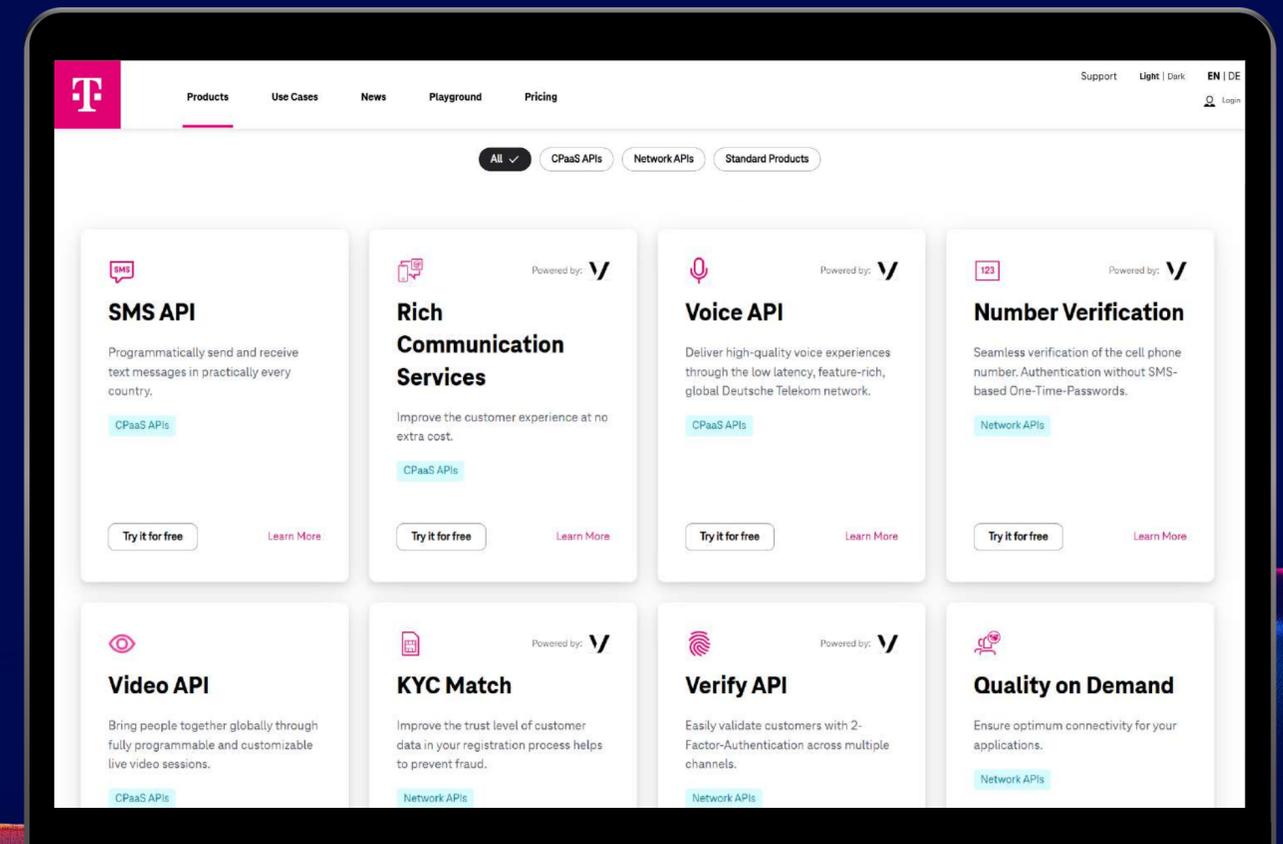
- **Product Purchase and Provisioning:** The platform streamlines subscription to APIs with automated provisioning in the API gateway.
- **API Provider Onboarding:** Fast, streamlined onboarding of API providers.
- **Authorization Service:** For developer onboarding, channel partner enablement, and product ordering.

- **Establishing a Service Exposure Platform (SEP):** DNO Cloud was integrated with Deutsche Telekom’s systems to create a comprehensive SEP with inbound and outbound interfaces, supporting various **API monetization models:**

Subscription	Volume-based
Dynamic pricing	Tiered pricing
Freemium	Session duration
Bundled pricing	Session data usage
Pay-per-use	API-request-parameter-based

- **User Identity Management:** To capture and manage the user identity, enabling Deutsche Telekom to own the majority of the data required to authenticate the customer identity.

- **Enabling Channel Partner Onboarding:** A suite of Operate APIs (TMF-931 compliant) was implemented to facilitate northbound integration with wholesale reseller channel partners, avoiding channel lock-in and expanding market reach.
- **Automating Billing and Usage Rating:** To streamline the billing process, DNO Cloud rates usage records from the API gateway and injects aggregated bill charges directly into Deutsche Telekom's Wholesale Billing System.
- **Enhancing Developer Onboarding:** LotusFlare developed an enterprise retail customer onboarding portal to automate KYC, credit checks, and MSISDN allowlisting validation, giving Deutsche Telekom greater ownership of customer data.
- **User Consent Management:** LotusFlare built a comprehensive, Network-API-specific solution to capture, manage, and store user consent, ensuring responsible data handling, regulatory compliance, and data control.



# Outcomes

- **Accelerated Time-to-Market for New Offers:** The LotusFlare Product Catalog enabled Deutsche Telekom to rapidly deploy and configure new API offerings, fostering innovation and responsiveness to market demands.
- **Expanded Go-to-Market Channels:** By integrating with channel partners via TMF-931 APIs, Deutsche Telekom unlocked new revenue streams and significantly broadened its reach beyond traditional channels.
- **Enhanced Operational Efficiency:** Advanced automation transformed previously manual, time-consuming processes into efficient, streamlined workflows, reducing operational overhead and accelerating business cycles.
- **Improved Customer Data Ownership:** The new onboarding portal allows Deutsche Telekom to gain greater control and ownership over developer and customer data, providing valuable insights and enabling more personalized experiences.
- **Scalable and Future-Proof Platform:** The modular and cloud-native architecture of LotusFlare DNO Cloud provides Deutsche Telekom with a flexible and scalable foundation to experiment with different monetization strategies, API offerings, and GTM channels, positioning them for continued growth in the evolving 5G API market.
- **Centralized Management with Local Autonomy and Data Security:** The multitenancy structure allows Deutsche Telekom Group to use a single, shared instance of the platform for cost-efficiency and standardized API exposure/monetization practices across the group, while data segregation by tenant ensures each NatCo maintains strict security, regulatory compliance, and control over its own critical customer and commercial data, crucial for separate business operations and competition in local markets.

LotusFlare continues to work closely with Deutsche Telekom, providing ongoing platform support and operations to enable additional capabilities and further expand the MACE platform's functionality, cementing a strong, long-term partnership focused on innovation and business growth.

“Deutsche Telekom saw the opportunity to drive innovation and deeper engagement with developers and enterprises using our advanced 5G network. We chose LotusFlare as our partner because of their advanced monetization engine and proven experience. LotusFlare is helping DT make the API experience seamless for developers through simple self-service access and payment.”

*Dr. Chathurangi Wickramasinghe,  
SVP Magenta API Capability Exposure*

# LotusFlare DNO™ Cloud

## Built to deliver valuable business outcomes

 **OUTCOME**

### Monetize Network APIs

Deutsche Telekom and T-Mobile US employ LotusFlare DNO Cloud as their API exposure and monetization platform. The platform allows for advanced monetization capabilities, frictionless onboarding, consent management, publication of API products, purchase, metering, billing, and support.

 **OUTCOME**

### Replatform Legacy BSS

Globe moved their premier brand GOMO to LotusFlare DNO Cloud hosted on AWS public cloud, migrating 3 million customers in under 5 hours, reducing the time to launch new offers from 6 weeks to minutes and achieving a 40% cost reduction.

 **OUTCOME**

### Offer eSIM Customer Experience

re:do is one the first communications service providers in Europe to embrace eSIM for customer experience, enabled by LotusFlare DNO Cloud. To date, over 70% of re:do customer acquisition is fulfilled by eSIM.

 **OUTCOME**

### Elevate MVNO Revenue Opportunity

T-Mobile US utilizes LotusFlare DNO Cloud as a customer-centric, multitenanted MVNE platform that supports a quick launch of custom-branded MVNOs. The hosts of the podcast SmartLess launched their own direct-to-consumer wireless brand on T-Mobile's MVNE platform powered by DNO Cloud.

 **OUTCOME**

### Launch Digital Fiber Business

Globe created a market-changing business line using LotusFlare DNO Cloud, the GlobeOne app and GCash to offer the only digital prepaid fiber broad-band service in the Philippines.

 **OUTCOME**

### Launch Digital Telco Brands

A1 Group used LotusFlare DNO Cloud as the cloud-native foundation to launch re:do, a new stand-alone digital network service brand.



Based in the heart of Silicon Valley, LotusFlare's mission is to simplify technology and customer experience to deliver valuable business outcomes to enterprises. LotusFlare Digital Network Operator® (DNO™) Cloud is an AI-powered, cloud-native business support system (BSS) for communications and media services providers.

Learn more at [lotusflare.com](https://lotusflare.com)

