Amdocs introduces 5G Value Plane as vendors turn their focus to monetization.
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Summary

Policy control and charging will play an important role in enabling new business models and monetization strategies for 5G. Amdocs recently launched the 5G Value Plane powered by out-of-the-box monetization capabilities, such as 5G policy control, charging, a product catalog, and a business bridge, to empower CSPs to explore new 5G monetization strategies. Omdia projects that vendor monetization revenue will grow by a CAGR of more than 4% through 2025 as the industry turns its focus toward an ROI on 5G.

Will customer experience be the killer use case for 5G?

The service-based architecture introduced for 5G standalone (SA) represents a monumental change not just in the architecture of the network, but also in how it can be leveraged to create services. The 5G network consists of components known as network functions, such as the session management function (SMF), policy control function (PCF), and charging function (CHF), which operate as independent services via well-defined 3GPP APIs. Each network function coordinates with other functions in the network to deliver or consume its services. This introduces a network architecture that is modular and enables CSPs to have better control over how network resources are used, combined, and allocated.

This more modular network, combined with new (e.g., network slice selection function [NSSF]) and enhanced (e.g., CHF) capabilities, will enable CSPs to deliver use cases built around the customer experience. By taking advantage of network-embedded services or “service levers,” such as latency, mobility, throughput, and others, CSPs can create experience-differentiated services.

Fueled by the high precedent set by Netflix, Amazon, and others, today’s consumers demand that service providers deliver a personalized experience—no matter how niche. As CSPs seek out viable monetization strategies for 5G, experience-driven services have the potential to be the secret sauce CSPs are seeking.

While policy control itself will play a significant role in provisioning specific network-embedded services (e.g., guaranteed quality of service [QoS]) within a network slice, it is the business-driven coordination of PCF and CHF that will enable CSPs to monetize experience-differentiated services. The PCF relays the “quality of connection” provided in a given network slice to the CHF, where this information can be rated and charged accordingly. This will allow the CSP to price services that require more or higher priority network resources, such as autonomous driving or Industry 4.0 use cases, at a premium over more simplistic services, such as internet browsing. It is this focus on making possible and accessible what is necessary to deliver the customer experience during the creation and delivery of services, as well as the ability to price them accordingly, that will enable CSPs to monetize 5G and generate an ROI in the network.

Amdocs introduces the 5G Value Plane

Aiming to bridge the gap between the enhanced capabilities available within 5G SA and the need to generate an ROI in the network, Amdocs introduced the 5G Value Plane in April. The concept behind the 5G Value Plane is that while 5G SA includes a user plane and a control plane, these alone do not generate revenue for the CSP. To generate revenue from 5G, CSPs need a “value plane” that provides them with a range of capabilities to monetize the network.
Amdocs introduces 5G Value Plane as vendors turn their focus to monetization

5G Value Plane is a cloud-native, 3GPP-compliant solution powered by a range of Amdocs’ 5G monetization capabilities. Bearing the fruits of the 2020 acquisition of Irish vendor Openet, the offering plays in between the network, monetization, and engagement layers of the CSP IT ecosystem. It combines policy control and charging (acquired from Openet) and a product catalog with a "business bridge" that includes a network data and analytics function (NWDAF) and a network exposure function (NEF), which uses APIs to expose network capabilities to CSP partners.

This launch reflects Amdocs’ goal to help CSPs become more like and share in the success of their internet content provider (ICP) competitors by embracing partnerships and exposing high value aspects of the business via APIs.

Part of what makes ICPs, such as Google or Spotify, so innovative is their ability to expose business capabilities to partners using developer APIs and software development kits. CSPs will need to take a similar approach and use APIs to expose the network to partners so that they can create services on top of the network. By seeing the network as a platform on which innovative services can be created, CSPs can use partners to expand their reach, offer innovative services that speak to the specific needs of their customer base, and extend their reach within the 5G value chain.

The other benefit of exposing network elements via APIs is the opportunity to drive the adoption of high value network services, such as those that require a certain level of latency, mobility, or any other capability that can be configured within a network slice. For instance, a developer creating a new gaming application on the network is likely to require a certain combination of network attributes to ensure that its users have the best experience with the app. Amdocs’ monetization solutions power the 5G Value Plane and deliver the tools CSPs need to monetize these scenarios by providing the NEF, which acts as the business bridge that exposes these network capabilities to enterprises and partners for developing 5G-enabled services.

Once the services are created, Amdocs 5G Monetization allows CSPs to dynamically manage the configuration of the user entities, sessions, or network slices via 5G policy control. Pricing schemas and charging parameters can be set with the solution’s 5G-compatible convergent charging system, and a centralized product catalog ensures consistency in services and pricing offered across channels. The combination of all these elements provides CSPs with "5G monetization out-of-the-box" that aims to enable partner ecosystems and experience-driven monetization strategies, including support for network-as-a-service, network slicing, and B2B2X business models.

Vendors turn their focus to monetization as 5G deployments top 130

Amdocs 5G Monetization, and the 5G Value Plane it empowers, is just the latest in several recent vendor announcements of 5G monetization solutions. With more than 130 global deployments of 5G, vendors are beginning to turn the discussion toward monetization strategies, and rightfully so. Omdia’s ICT Enterprise Insights 2020/21 Survey found that 97% of CSPs see investment in 5G-compatible monetization systems as an important IT priority for 2021. Moreover, Omdia’s 5G World 2020 Global Insights Survey found that among the CSPs that had already launched 5G, nearly 60% stated that creating a profitable business case for 5G was the biggest challenge they faced.

There are many challenges facing CSPs, and the vendor community is hoping to lead the way with new product launches. What are the viable use cases for the network? How can CSPs create and monetize partner ecosystems and cloud hyperscalers? How do CSPs migrate users from legacy networks to 5G and generate an ROI?
With no shortage of questions to be asked around monetizing 5G, there is also no shortage of solutions emerging in the market. Omdia forecasts that vendor monetization revenue will reach $4.5bn in 2021 and will grow at a CAGR of 4.1% through 2025, due in part to the urgency with which CSPs are investing in these systems.

Clearly, the approaches to 5G monetization will require a commitment to change—in technology, strategy, and culture. Those vendors and CSPs that embrace the new capabilities of the network, understand the needs of the market, and act quickly have everything to gain—and those that do not have everything to lose.

Appendix

Further reading

*Ericsson focuses on network slicing and automation with 5G Core Policy Studio launch* (April 2021)


*OSS/BSS Evolution Survey – 2021* (November 2020)

*Telecoms IT Vendor Revenue Forecast 2020-25* (September 2020)

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