REPORT REPRINT

Nokia and Gigamon partner for 5G network visibility

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With 5G underway, now comes the difficult part of monetizing 5G investment and ensuring high-speed, ultra-low-latency performance for users. A new approach combines Nokia's AVA AI as a service with Gigamon's network traffic visibility & analytics to deliver quality of experience outcomes for emerging 5G services.

Introduction

With the 5G era officially underway, now comes the difficult part of monetizing 5G investment and ensuring high-speed, ultra-low-latency performance for users. In the digital age, customers are growing increasingly impatient with slow network performance and have high expectations for 5G. According to 451 Research's latest Voice of the Connected User Landscape: Endpoints & IoT, Consumer Population Representative Survey, the top three capabilities that respondents seek in a 5G network are faster downloads (37%), greater 'on the move' network connectivity (26.5%) and higher video resolution (25.5%). (See figure below.) A 5G deployment will not be immune to network anomalies and as a result, operators are turning to AI in order to help manage issues before they affect quality of experience (QoE) for users. Nokia's partnership with Gigamon is focused on QoE, combining Nokia's AI offering (AVA 5G Cognitive Operations) alongside Gigamon's network visibility and analytics capabilities to focus specifically on video and gaming QoE.

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Telecom operators have started the process of investing billions of dollars to bring 5G to market globally, but 5G will disappoint users if it doesn't deliver premium experiences. In these early days of 5G, it is especially critical that service experience is excellent to catalyze demand and put the business case on secure footing. The disaggregation of user plane and control plane data traffic introduced in LTE and expanded in 5G brings several benefits but also visibility challenges. These environments require new tools, automation and workflows that work to ensure QoE can be ascertained and improved, if necessary, at the per-user session level. Gigamon's ability to process user traffic at line-speed combined with Nokia AVA's machine learning (ML) algorithms creates logical synergies. While not an exclusive partnership, the combined functionality will be especially attractive for joint customers and could open the door for creating pull in each direction in telecom accounts where only one is present.

Details

Four years ago, Nokia introduced its AVA (Automation, Virtualized and Analytics) ML and analytics platform to help customers proactively identify network issues and act to boost reliability and QoE. In March, Nokia announced a new AI as a service, branded AVA 5G Cognitive Operations, which brought AVA into the 5G era via support for capabilities like 'slice' management. As ever, AVA 5G Cognitive Operations leverages AI/ML to identify network failures and service degradations in 5G networks before they occur, with which Nokia has stated that network failures can be predicted up to seven days in advance. If a network issue does arise, Nokia also claims that AVA can solve it 50% faster. Most important to 5G QoE and monetization is the intelligent slice provisioning system. Nokia claims that trialists of AVA 5G Cognitive Operations have seen a 20% reduction in customer complaints and a 10% reduction in site visits. While the offering is currently run on Microsoft Azure, it is interoperable with other public cloud platforms and is set to be commercially available sometime in Q2 2020.

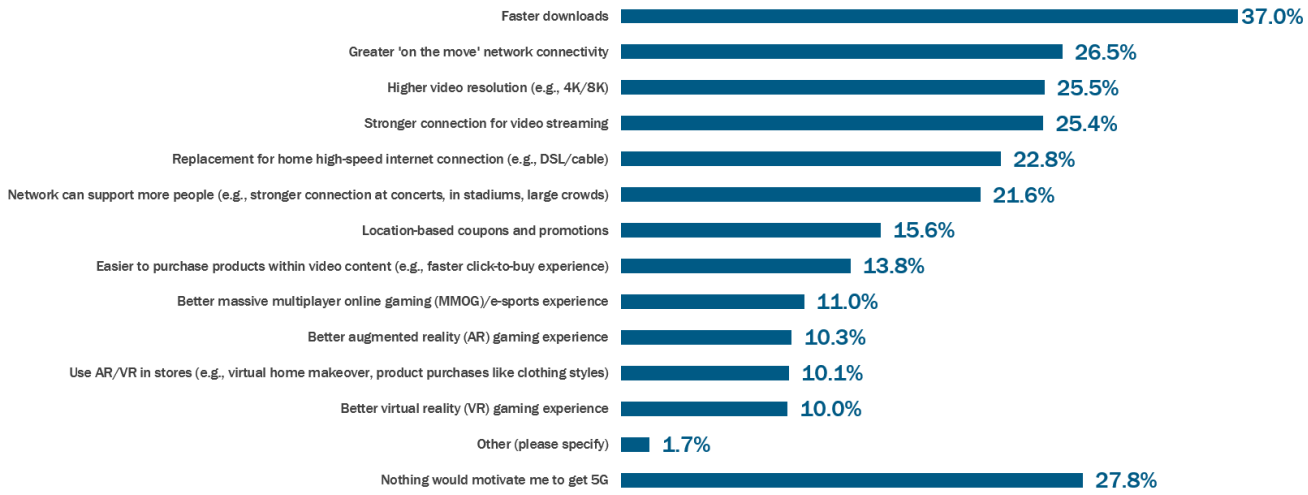
Gigamon is a privately held company founded in 2004 and headquartered in Santa Clara, California. The company specializes in network visibility analytics and threat detection. In the telecom segment, Gigamon specializes in high-speed packet capture on network interfaces up to 100Gb, along with the ability to intelligently transform, filter and forward traffic to any destination for analysis. Its flagship product is the Gigamon Visibility and Analytics Fabric, which captures raw network data and performs analytics on top of it via the company's intelligent packet broker services. Gigamon currently has over 900 employees and serves more than 3,500+ customers in the public sector, financial services, healthcare and service provider verticals. Gigamon claims to have secured business with nine of the top 10 mobile network operators globally including Softbank and Telefonica and over 80 of the Fortune 100. In April, Gigamon released 5G subscriber-aware traffic-forwarding capabilities, including whitelisting, sampling and load-balancing, which expands on existing GTP correlated traffic forwarding, DPI-based application filtering, advanced flow slicing and packet deduplication as well as generating application metadata for non-packet-based monitoring and security.

AVA 5G Cognitive Operations is currently being tested by a few select customers including Telenor, Taiwan Mobile and TPG. The companies announced that Gigamon is already enhancing Nokia's Predictive Video Analytics service, which helps reduce buffering impact on video streaming services by up to 60%. The companies will work together to ensure acceptable QoE on any applications with a low tolerance to latency and network delays including eMBB consumer applications like mobile gaming, AR/VR, and any others as devices, applications, and demand materialize.

Capabilities That Respondents Seek in a 5G Network

Source: 451 Research's Voice of the Connected User Landscape: Consumer Population Rep Survey, Endpoints & IoT, Q3 2020

Q. Which of the following 5G capabilities would most likely motivate you to get 5G network coverage on your smartphone in the future? (Check all that apply)



Sample Size = 1,218

Base: Respondents who haven't subscribed to a 5G network