Netcracker is helping to build momentum in the telecoms industry for cloud-based development and delivery

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Justin van der Lande

The Netcracker 2020 portfolio, announced in June, reflects changing IT demands within the telecoms industry, as well as wider shifts taking place within other industry verticals. Netcracker is addressing these industry changes by focusing its strategic efforts on the following three objectives:

- to shift development to a microservices and DevOps-based approach
- to shift to cloud-based delivery models and a focus on the growing importance of digital marketplaces
- to increase the openness of solutions to ensure that new solutions are more-extendible and future-proofed.

To realise these ambitions, Netcracker has re-engineered its applications, created new organisational structures and partners ecosystems, and adopted different go-to-market strategies. These fundamental changes are likely to ultimately benefit both Netcracker and its customers.

Building a microservices application is not a business goal, but the rapid delivery of new functionality is

Netcracker 2020, which builds on its previous Netcracker 12 portfolio, is a cloud-native platform that utilises microservices and a continuous integration/continuous deployment (CI/CD)-based DevOps approach. DevOps implementations are now expected to seamlessly integrate suppliers' and customers' processes and to facilitate closer working relationships – something that communications service providers (CSPs) now demand. Long delays in development and release cycles (typical in older software releases as multiple smaller changes are rolled-up, tested and deployed) are no longer acceptable to customers. A shift to a CI/CD approach is needed so that development pipelines are transparent for both parties to view. In addition, CSPs want flexibility when it comes to who creates the code (either the vendor or the CSP customer) and to help address issues with vendor lock-in.

Netcracker is not alone, with other major vendors Ericsson, Nokia and Huawei adopting similar microservices-based approaches. For example, in February 2020 Ericsson announced the launch of its Intelligent Workspace to support shared workspaces with its customers. Huawei's Collaboration Workspace tool works in a similar way. Similar changes are also being made by companies for other verticals, for example Accenture and Tata Consultancy Services in IT and systems integration (SI), respectively.

A shift to cloud-based delivery is inevitable

Most OSS/BSS applications remain installed on customer premises, but this is rapidly changing. For example, many RFPs now mandate that applications are delivered on public or private cloud. Netcracker 2020 can be run on any public cloud platform including AWS, Google Cloud Platform and Microsoft Azure, as well as on-premises. Nokia and Ericsson have also recently announced partnerships with AWS and Microsoft Azure.

The major public cloud platforms offer developers access to a rich set of development tools and functionality, and the speed of application deployment on such platforms provides a compelling development environment for both vendors and CSPs. Cloud platforms give developers access to compute, storage and development capabilities, as well as analytics tools and a growing number of partners in their ecosystems to engage with. Partners can be easily accessed, for example through the digital marketplaces of companies such as AWS and Azure. Partners not only offer applications and software solutions but also provide professional services to support vendors' application development or AI requirements. Amdocs, for example, has recently announced the launch of its IntelligenceONE solution on Azure marketplace, which enables a simple implementation of its software tools.

Increased openness is needed

Netcracker 2020 has achieved greater openness and flexibility by enabling the use of OpenShift on any public Kubernetes-based container platform, which means that its applications can be ported to each public or private cloud platform easily while maintaining a single software source. In addition, Netcracker has, where possible, adopted industry standards, such as 3GPP's slice management for 5G orchestration and ETSI MEC orchestration functions. Container-based network functions are included in Netcracker's MANO (a network orchestration and virtual network function (VNF) manager) as well as in the Netcracker Cloud Platform.

CSPs are driving the need for a new approach for 5G and edge

In July 2019, AT&T announced its USD2 billion, multi-year partnership with Microsoft Azure to collaborate on cloud for AI and 5G. AT&T will use the Azure platform as their preferred partner for non-network applications. This partnership was extended in April 2020 to bring edge compute to joint customers in Azure Edge Zones. AT&T is also working with Google on edge compute offerings. Verizon in the USA made similar announcements in December 2019 with AWS, and CSPs in Europe (such as Vodafone) are working with AWS Wavelength for edge compute.

Swisscom is leveraging DevOps tools to build their OSS. Swisscom's CI/CD processes are being used in partnerships with Ericsson and Netcracker. The head of Swisscom's 5G programme, Patrick Weibel, claims a 65% reduction in opex has been made possible because of the cloud-based approach.

Netcracker has also announced a project with Etisalat to create a multi-vendor telecoms cloud platform for automated orchestration using their DevOps approach.