

White paper

# Ensuring telco provider flexibility and launching continuous digital transformation: Nexign and MegaFon case

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nexign



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Vitaly Lyaper, MegaFon's digital services architect, and Maxim Nartov, business development executive at Nexign, share their experience of merging the operator's and the vendor's teams to attain business flexibility and competitive

edge as well as maintain the continuing digital transformation that started with the Unified Billing project.



**Maxim Nartov,**  
Business development executive  
nexign

Maxim joined Nexign in 2017 as BSS Product Director. Now in the role of Business Development Director, Maxim leverages this experience and his deep understanding of CSPs' needs to further extend Nexign's presence in its target regions, with a focus on new customer wins. Maxim brings to Nexign a strong knowledge of OSS/BSS and over 20 years of practical experience in a number of areas, including R&D, Sales, and implementation projects from both the vendor and the telecom operator perspective.



**Vitaly Lyaper,**  
Digital services architect  
MEGAFON

Currently Vitaly Lyaper is a Chief Architect of Megafon's Open Ecosystem Program leading overall e-commerce implementation in the company. He is responsible for solution architecture and project governance. Vitaly has wide experience in different fields, including project management and software development for the IT and telco Industry, solution architecture, delivery and information security. His areas of interest include innovative initiatives in a field of virtualization, machine learning, IoT and e-commerce.

At the dawn of mobile telecom, it sufficed for telecom operators to sell minutes and megabytes to their customers. Nowadays, in order to retain profitability, ensure customer loyalty, and expand clientele, telecom operators have to closely follow ever-changing customer demands and offer products and services that have never been part of telecom before, such as concert tickets, movie rentals, or food delivery. This caused telecom operators to directly compete with pre-existing digital service providers. Spending months on developing and releasing new products, while market conditions demanded their delivery within weeks, was no longer an option.

A few years ago, during the early phases of the Unified Billing project, MegaFon and Nexign mostly focused on accelerating the development and release rates for future services. Still, their main goal was to support the operator's transformation into a full-fledged, flexible digital service provider. In 2020, the project was successfully finalised, and its goals were attained. For MegaFon's digital transformation, however, it was only the beginning.

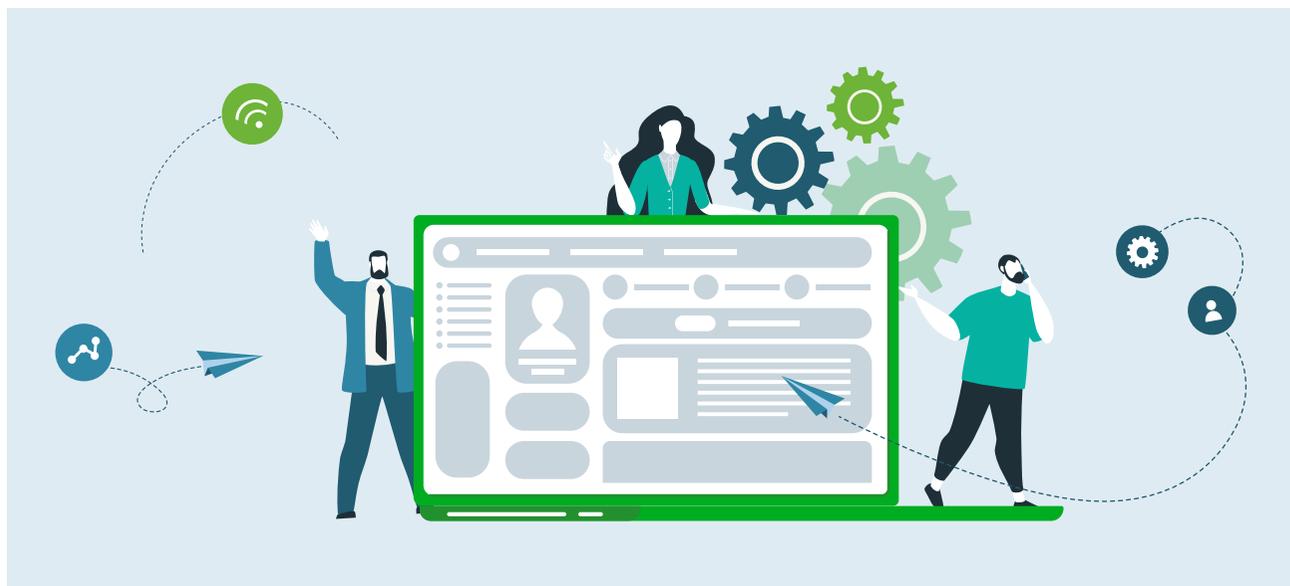
## Multi-Layer Open Ecosystem

Creating an open ecosystem that enables the operator to sell its own services, along with those provided by the partners, was an important area of further development for MegaFon and Nexign. The system they created maintains short integration cycles for partners and new products as well as keeps MegaFon vendor-agnostic.

The open ecosystem relies upon three-layer architecture. Layer one is the modernised and fine-tuned billing that powers up the entire structure. It ensures all business subdivisions work under a single set of rules, while customers from any Russian region enjoy equally good service. Still, the first layer is substantial as a foundation for the middle layer, which hosts microservices and streamlines the underlying system's operation. Partner services connect to the system via the middle layer, as it creates the best conditions for integration and cooperation. Partners use it to expand their clientele through MegaFon's infrastructure, while MegaFon uses the partner channels to promote its own services.

The third layer is the frontend, updated on a daily basis. It includes the customer's personal account, call centre, internet store, self-service offers, and basically everything that has to do with customer care, releases of new products, and comprehensive user experience.

While all three layers are crucial for the system to work properly, it is the middle layer that sustains further digital transformation.



## Middle Layer as the Key to a Successful Digital Ecosystem

This importance relies on the continuous development and deployment of enabler systems by MegaFon and Nexign. Among them are the federated catalogue to configure different product types; the order generation system Order Capture; and Customer View 360 enabling secure partner access to customer info required for product operations, which guarantees the safety of personal data. Another important enabler is called Federated SSO, and it focuses on the assignment of internal access privileges for MegaFon's internal functions and services.

The same level also hosts what is known as the integration layer, enabling fast connection of partners

and supporting the most frequently used scenarios for third parties. As an example, it can be an addition to a new service or data processing during authentication.

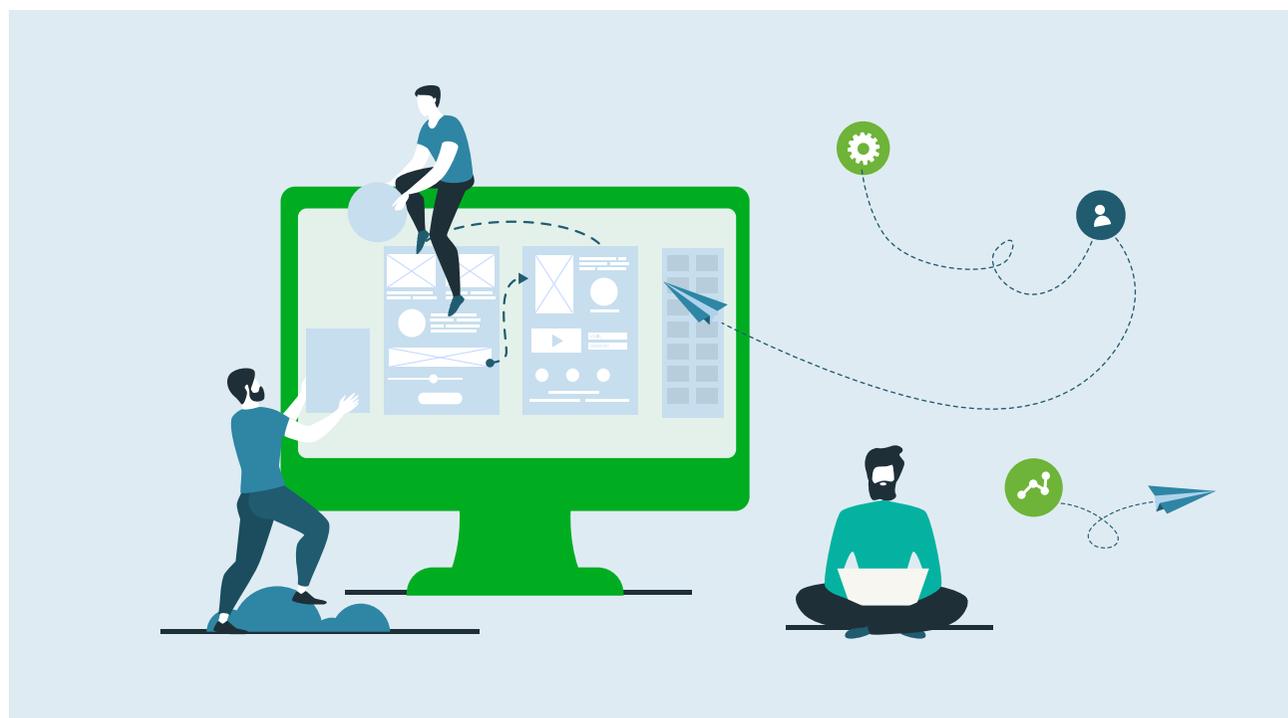
Those new options give the telecom operator the ability to react to user needs on the go and roll out new services long before its competitors. This swift reaction to new market demands enhances customer loyalty and, therefore, the operator's eventual profit. The customers, in turn, can enjoy purchasing digital services in the familiar environment provided by their Telco operator.

## A Team for Digital Transformation

But technology isn't everything. The entire process of digital transformation is underpinned by a paradigm shift in business thinking. To gain a greater competitive edge, MegaFon had to reinforce the ties between IT and business departments while ensuring the technical team supported business requirements. This process demanded the development and implementation teams' increased involvement, too. That is why MegaFon focused its efforts on innovating the very process of team creation.

MegaFon and Nexign abandoned the standard customer-contractor model in favour of business and IT synergy, opting for an almost symbiotic relationship. The companies formed joint teams of key experts in each specific area and organised their work on DevOps principles. As a result, such joint teams started mutually enriching and completing each other's expertise and skills.

In this union, Nexign focuses on development and integration, while MegaFon offers telecom know-how; sales, marketing, and architectural insights; and provides prompt feedback in the final phases of each integration cycle. As a result, the development chain runs uninterrupted — from source code to the final product's release. All updates that MegaFon gets are duly tested, delivered on time, and automatically integrated into the existing solutions. Efficiency this high is unthinkable in the traditional paradigm of business relations deeply rooted in the old customer-contractor model.



MegaFon and Nexign use common tools and common project management space as well as common auto-deploy and collaboration systems. It works as a unified knowledge-sharing domain enabling transparent interaction within the shared information field and ensuring continuous integration and deployment, which accelerates development.

On top of that, the partners also successfully tackle business objectives, such as increasing employee engagement rate, improving error management, and creating common corporate values for all parties.

As a result of all those transformations, new products are now rolled out within 2 to 4 weeks instead of 4 months, and the number of partners has doubled in a single year. The estimated quality of products has grown as well, across the entire production chain, from source code to frontend.

MegaFon and Nexign have created a platform for innovations and built an open ecosystem that enables continuous digital transformation.

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## About MegaFon

MegaFon is a pan-Russian provider of digital opportunities and a leader in the Russian and global telecommunications market.

MegaFon combines all IT and telecommunications areas: mobile and fixedline services, mobile and broadband Internet, digital TV and OTT services, innovative digital products and services across Information and Communication Technologies (ICT), the Internet of Things, Big Data analytics and processing, cloud solutions, cyber security, financial services, digital advertising and marketing, e-commerce, and converged IT solutions in system integration.

The company and its subsidiaries provide services in all regions of Russia, as well as in the Republic of Abkhazia, South Ossetia, and Tajikistan. At the end of 2018, the total subscriber base had 76.9 million people.

## About Nexign

Nexign, a part of Intellectual Computer Systems Holding (ICS Holding) and a leading Business Support System (BSS) provider, has been delivering value-driven, high-performance product solutions since 1992.

Nexign has an experience of transformational projects of all scales, and a proven track record of achieving revenue boosts for CSPs through systems consolidation and a faster go-to-market time for new services after modernisation. Nexign has an ability to make transformation modular and stress free and ensure customers' sustainable growth. The company takes pride in its partner-centric approach to working with customers. For nearly 30 years, Nexign has delivered on its promise of unlocking value in the short-term while ensuring customers' investments are future-proof and support long-term growth.

Headquartered in St. Petersburg, Nexign employs more than 1,800 people. The company has offices and subsidiaries through Russia, the Commonwealth of Independent States, the Middle East, Africa and LATAM.

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## Contact us

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if you have any questions or suggestions**