COMARCH

CUSTOMER SUCCESS STORIES
HOW TELECOM OPERATORS WORLDWIDE EMBRACE SUCCESS WITH COMARCH

COMARCH
THE FLEXIBILITY YOU NEED IN THE DIGITAL ERA

Comarch supports telecoms in facing the challenges of the digital era.
With our complete portfolio of IT products for telecoms we provide you with the flexibility you need with the flexibility they need in the world of constant connectivity, to dynamically adjust to the market reality and keep up with constantly changing customer expectations.

Comarch is a partner who enables telecom operators to launch new services quickly and cost-effectively, and to offer customers high quality digital services which are available anywhere, at any time.

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WHY COMARCH?

CONFIGURABLE SYSTEMS, FLEXIBLE APPROACH

- **Flexible and cooperative** approach
- Focus on **Customer-centric** focus
- Variety of **delivery models** (including managed services, SaaS and license-based)
- Customers' influence on the **system development**
- **Agile** organization
- High **modularity** of BSS/OSS suites

COMPLETE FUTURE-PROOF PORTFOLIO

- **Strong product roadmap** and vision
- **Feature-rich functionalities** combined with **high configurability** of products
- **Incorporating industry trends and advanced technologies** (AI/ML, blockchain, IoT, 5G, cloud, automation, software-defined, and E2EO)
- Enabling cooperation with **OTT players**

FIT FOR GLOBAL EXECUTION

- **Local teams** (globally)
- Network of **data centers**
- **In-house delivery** model (full control over quality)
- **Certification** (recognized globally)
- Network of **subsidiaries** (local commercial engagements)
- **Multi-tenancy** (ability to deliver single platform for multi-country organizations)
- **One-stop-shop** (end-to-end project delivery from research, software production and delivery to managed services)

BUSINESS STABILITY AND RELIABILITY

- **A reliable business partner** recognized by leading research companies
- **An active member of industry associations** (TMForum, MEF, O-RAN Alliance and ETIS)
- **Clients' recommendations** (from the telecom industry and beyond)
- High level of **R&D investments**

YEARS OF EXPERIENCE

- Presence on the telco **IT market since 1993**
- Proven track record in delivering projects **all over the world**
- **Numerous IT projects implemented**
- **Established brand** in the telecom industry

DIGITAL SECURITY

- **GDPR compliance**
- **Automated identification of potential fraudulent activities** thanks to **AI/ML**
- Systems configured with **an ability to protect and restore** critical data and services
- **Hybrid approach** using simple algorithms and advanced AI engines
- **Proactive** defense strategies

COST-EFFICIENT BSS/OSS TRANSFORMATIONS

- **Easy customization and configuration**
- **Products built in-house**, resulting in faster and cheaper integration
- **Good interoperability** with legacy systems
- **Flexible and easy changes and configurations of the data model**

ON THE ROAD TO 5G: THE FIRST 5G NETWORK LAUNCH IN THE WORLD | LG U+

THE BUSINESS NEED

In order to launch the first 5G network in the world, LG U+ needed an OSS transformation. The customer had several requirements, the most important of which were:

- A standards-based solution, aligned with TMF, ETSI and 3GPP

- Software to increase automation within the OSS environment

- An integrated, future-proof system

- A solution to allow domain siloes created around separate systems to be dismantled in the areas of both mobile and fixed network

THE IMPLEMENTED PRODUCTS

- **Network Inventory Management**
- **Configuration Management**
- **Network Planning and Design**
- **Performance Management**
- **Resource Order Management**
- **Service Quality Management**
- **Network Discovery and Reconciliation**
- **Customer Experience Management**
- **Fault Management**
- **OSS Service Desk**
- **Service Monitoring**
- **AI Control Desk**

THE CHALLENGES

We made the challenges work to our advantage:

- **Time zone difference was our friend** – we synchronized work in order to function during Korean and Polish business hours

- **Local presence wasn't a problem** – we opened a local Comarch office in Korea, and organized long-term business trips for our experts from Poland

- **Korean, the official project language, has motivated us to find optimal solutions** – we hired Korean-speaking employees, established cooperation with local interpreters, employed representatives, started Korean lessons for employees, and more

- **Efficient communication was possible** – including email and chat, and more secure ways of communication, such as Jira, PowerSource and Webex

- **Culture differences were exciting** – we arranged "cultural classes", so that we could gain more knowledge

THE RESULTS

- Improved position on a competitive market

- Shortened mean time to repair

- Reduced time to market due to automation of network provisioning

- Advanced functionalities available for business users

- Decreased cost of maintenance

- 5G-ready and future-proof OSS environment for convergent network

*At LG U+ we were using an OSS stack developed in-house.
The IT architecture was divided into silos, which entailed a number
of challenges regarding the introduction of new technologies
such as 5G and network virtualization.
The successful implementation of the comprehensive Comarch OSS
platform enabled us to realize digital transformation and become
a cutting-edge, customer-focused CSP.*

Hokyung Kwon
NMS Development Team Leader
LGU+

PUTTING ENTERPRISE CUSTOMERS IN CONTROL FOR IMPROVED EXPERIENCE | KPN

THE BUSINESS NEED

KPN launched the project in order to build a system to support higher order intake, improve customer satisfaction, reduce churn, shorten the time needed for customer implementation, reduce the number of KPN internal activities, and cut costs.

THE CHALLENGE

- Enable all customers, including end users and partners, to perform self-setup in the most efficient and convenient way, and to manage all telecom-related activities

- Ensure an insight into detailed financial and customer data through web services and B2B interfaces available across Europe, networks and technologies

THE IMPLEMENTED PRODUCT

A comprehensive BSS system was delivered in a software as a service (SaaS) model, where Comarch is responsible for full hosting and housing activities, as well as for all daily activities necessary to keep the whole system up and running. The implemented Comarch products included Convergent Billing, Corporate SelfCare, Billing Mediation, Reporting Tool and Enterprise Service Bus.

THE RESULTS

- Cost reduction: CAPEX and OPEX reduction thanks to the employment of an SaaS model and the automation of the service activation processes

- Minimized investment risks: Comarch shared the business risk of the project and was highly motivated to achieve KPN's business goals. The managed services model meant adjusting the equipment to assure appropriate service efficiency

- Improved customer experience: gaining full control over the order to cash process and the possibility to quickly verify the invoiced charges and optimize tariffs

- Flexibility: Comarch presented a flexible approach and provided a comprehensive offer of services and equipment – flexibly joining services, terminals and accessories

The components of KPN's previous BSS system required vast amounts of manual work being carried out by its users. Finally, a decision was made to purchase a new, integrated solution, and Comarch matched our requirements perfectly.

Cees Versteeg
Director IT and Operations
KPN

SIMPLIFIED MANAGEMENT OF A SHARED NETWORK THANKS TO OSS CONSOLIDATION
| NETWORKS! – T-MOBILE/ORANGE JOINT VENTURE

NetWorkS?

THE BUSINESS NEED

In July 2011, two leading Polish operators, PTC (the operator of T-Mobile Poland) and PTK Centertel (the operator of Orange Poland) entered a 15-year agreement for sharing a mobile access network. The joint venture company, NetWorkS!, was formed by the two operators to manage and develop their consolidated 2G/3G network and their 4G network in the future, with the aim of enhancing network coverage and quality.

THE IMPLEMENTED PRODUCT

The product was based on **Comarch Fault Management,** which can effectively monitor problems and defects in the entire telecom network. Through continuous monitoring of the operator's network resources, the system ensures the collection, visualization and tracking of event occurrences, creating a unified umbrella system over the various network element management systems.

THE CHALLENGE

- Centralize monitoring of the network that was initially composed of two independent environments

- Implement a unified umbrella system in the assurance area

- Improve customer experience. for both T-Mobile and Orange customers, based on the shared infrastructure

- Reduce costs by combining efforts at network management level

- Increase network coverage, both outdoor and indoor

- Assure high quality of network parameters and controlled access to information regarding third-party networks

THE RESULTS

- Assuring high quality of data and reducing the number of events in a centralized network inventory

- Automation of fault clearance processes (configured correlations and integration with trouble ticketing system)

- Rapid response to all kinds of problems regarding network infrastructure

- Significant part of the various configurations are carried out by the operator

Comarch Fault Management has all the necessary functionalities to support an infrastructure-sharing scenario, which has been already appreciated by numerous Tier 1 operators. Comarch has continuously maintained a very high standard of products and services, so it was natural to benefit from that experience and expand cooperation to the new structures.

Przemysław Żulewski
Mobile Systems Development Expert
NetWorkS!

SUPPORT FOR GERMANY'S LARGEST BROADCAST AND MEDIA INDUSTRY SERVICE PROVIDER IN THE RAPID AND EFFICIENT INTRODUCTION OF NEW TV SERVICES (UNDER THE BRAND NAME FREENET TV), BASED ON DVB-T2
| MEDIA BROADCAST

MEDIA BROADCAST

THE CHALLENGE

Media Broadcast, Germany's largest broadcast and media service provider, recently introduced the **DVB-T2/HEVC standard, which will allow the launch of a new terrestrial service via its freenet TV brand**. The company's aim is to offer premium digital content via CI+ cards and decoders distributed by resellers and a webshop application.

THE IMPLEMENTED PRODUCT

Comarch Smart BSS is a configurable solution for multi-technology, multi-network providers. It integrates with third-party systems and supports the management of all key processes, offering the flexibility to make changes as Media Broadcast's needs evolve. The system comprises CRM, Webshop API, Billing, Charging and Invoicing of any Service, Voucher Management, Product Catalog and Service Activation.

THE APPROACH

The aim was to implement and integrate Media Broadcast's BSS system, using Comarch Smart BSS. This comprehensive, pre-integrated solution lets the broadcaster manage all freenet TV business processes, and supports the introduction of new services based on DVB-T2 technology. **Comarch Smart BSS is delivered in private cloud**, with the equipment and platform at the Comarch data center in Dresden. High-security backup, including disaster recovery, is provided from Kraków. The contract was signed in 2015, and the project was divided into three phases. The first two were concluded by July 2016, with the third still in progress.

THE RESULTS

Media Broadcast was able to **launch paid freenet TV services based on DVB-T2.** The solution streamlined all BSS processes and ensured high quality support, maintenance, software and cloud services. It was integrated with legacy IT systems, and interfaced with partner systems. Using one attractively-priced platform **optimized operational costs.**

We chose Comarch as partner to support us in delivering the ultimate DVB-T2 service, due to the company's broad experience in similar projects supported by references from cable TV providers and broadcasters from all over the world.The implemented solution – Comarch Smart BSS - enabled us to manage BSS processes more efficiently, and to reach our goals in terms of quickly introducing new paid TV services onto the market. We are very pleased to implement a BSS system which at the same time is easy to integrate with third-party tools and ensures a wide spectrum of functions.

Henk van Es
Head of Technical Operations
freenet TV

BETTER CONTROL OF NETWORK OPERATIONS WITH UMBRELLA FAULT MANAGEMENT
| TELEFÓNICA GERMANY

THE BUSINESS NEED

For this project, Telefónica Deutschland did not restrict itself to acquiring a system that would act as a manager of managers, integrating with its already-existing management systems. Instead, the company wanted to completely replace the element management systems in use. This required a system with a direct interface to the elements of the multi-vendor network.

THE IMPLEMENTED PRODUCTS

An umbrella OSS system was composed of Comarch Network Inventory Management, Comarch Configuration Management, Comarch Fault Management, and Comarch Performance Management. Comarch offered the possibility to precisely tailor the system to the customer's specific requirements. In this case, among other things, this meant enhancing Comarch's system with a set of specific management consoles, each for a different type of network element.

THE CHALLENGE

- Replace the element management systems in use with a system with a direct interface to thousands of network elements from different vendors

- Equip the system with functionalities enabling the configuration of every network element

- Correlate and subsequently present data gathered from all the managed network elements in one consistent view

THE RESULTS

- Centralized and unified control across all network domains

- Information on network elements and their configuration gathered in one place

- Seamless integration with the existing environment

- Unified system for real-time network performance management and monitoring

- Improved network reliability

- Full automation of fault management tasks, including correlation

- Future-proof design (easy extensibility)

The introduction of Comarch OSS Suite was a giant step forward in optimizing operations thanks to integrating the management of our transmission technologies into one homogeneous platform.

Gűnter Kaufmann
Manager Operations Support Systems
Telefónica Germany

PAVING THE WAY FOR MACHINE TO MACHINE INNOVATION | A1 TELEKOM AUSTRIA GROUP

THE BUSINESS NEED

Looking to expand their business, Telekom Austria Group decided to enter the machine-to-machine (M2M) market and established a dedicated spin-off company for M2M in September 2011. The company mainly addresses B2B customers and solution partners with the objective of becoming the leading M2M boutique provider in the Central and Eastern Europe (CEE) region.

THE IMPLEMENTED PRODUCT

Comarch M2M Platform is a modular product based on Comarch COTS products from BSS and OSS domains combined with M2M-specific dashboards, processes and configurations. Comarch M2M Platform was honored with Pipeline's 2013 Innovation Award for "Innovation in Connectivity". Comarch has been recognized for M2M systems that enable mobile operators to provide "Intelligent Connectivity" and succeed in the M2M market.

THE CHALLENGE

Telekom Austria Group was looking to support their new business with a platform that would meet the following requirements:

- Provide the highest flexibility to fulfill the company's boutique provider strategy

- Offer superior efficiency to enable high volume and low margin business conditions

- Enable dynamic development of features

- Support automated, end to end business processes

- Deliver services in a multinational set-up supporting the group structure

- Ensure full operational independence

THE RESULTS

Telekom Austria Group gained independence in running their own M2M strategy with end to end process support regarding SIM card management, a single platform for all users and groups, different functionalities and GUI for different users, support for B2B and B2B2C models, as well as hosting and outsourcing in the managed services model.
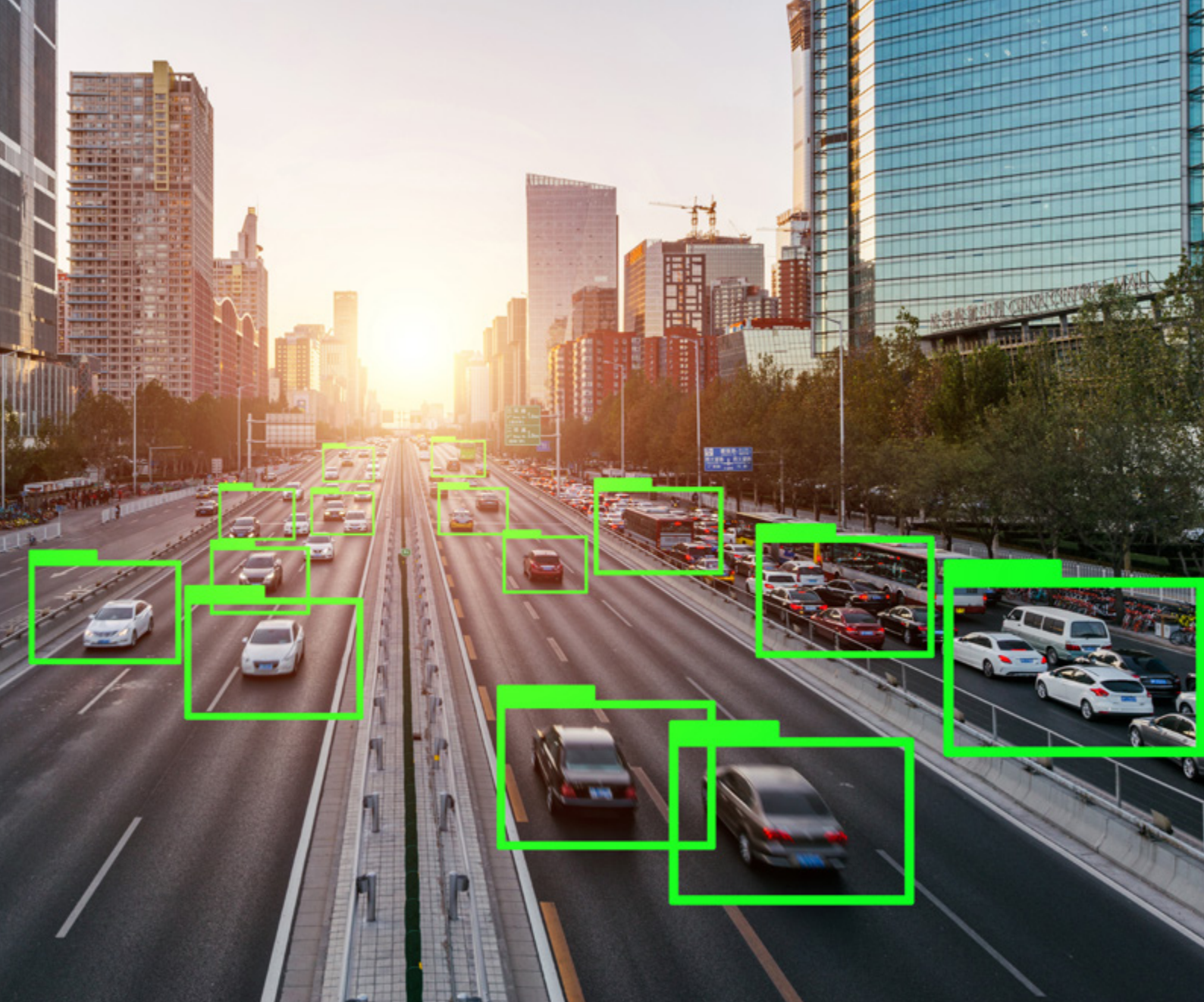
We chose Comarch because their existing product portfolio provided a good basis for the platform. More importantly, Comarch was able to prove their ability to quickly develop custom features upon request. We believe that, in dynamically growing markets, flexibility and customer orientation are the keys to success. The set-up we have chosen with Comarch helps us deliver just that.

Phat Huynh
Managing Director, Head of Marketing & Sales
Telekom Austria Group

INTEGRATING RESOURCE AND SERVICE LAYERS FOR AN END TO END VIEW OF SERVICES
| TELEKOM DEUTSCHLAND

THE BUSINESS NEED

Faced with the challenges of today's telecommunications world, Telekom Deutschland was consolidating its OSS landscape using NGOSS principles. The resource and service inventory (R&SI) is used to managed customer facing services, resource facing services, and resources used for these services coming from different Inventory and configuration management systems.

THE IMPLEMENTED PRODUCT

Comarch Network & Service Inventory acts as the master system for the creation of resources in some network domains, while in the others it holds only the read-only copies of the resources used for the creation of services. Integration with third-party systems was achieved by the common information present in the environment, which ensures the simplification of the overall architecture and reduces the number of interfaces.

THE CHALLENGE

- Optimize incident, problem and change management processes, at the level of resources and services

- Improve cooperation between the service inventory and different resource inventory management systems

- Design a system that offers integrated and flexible service modeling and a wide integration ability to seamlessly cooperate with other systems

THE RESULTS

- Improved incident, problem and change management processes thanks to end to end visibility of the services, smooth integration of service and resource layers and a consolidated overview of the ownership for services

- Setting a good starting point for a complex transformation of the operator's entire environment

- With an ongoing effort towards consolidation of the environment composed of multiple national operators, products developed by Comarch will play a central role in the future operations of Telekom Deutschland

Of all the vendors offering similar OSS solutions, only Comarch offered an already established product with a significant market position, together with the possibility of implementing specific functional requirements regarding advanced data sharing.

Thomas Kiemle
Head of Configuration & Provisioning Systems
Telekom Deutschland

NEXT GENERATION SERVICE ASSURANCE (NGSA) IMPROVES CORPORATE CUSTOMER SATISFACTION | VODAFONE

THE BUSINESS NEED

Decreasing revenue due to increasing competition and additional EU regulatory measures puts huge pressure on operational costs and process efficiency. At the same time, Vodafone's strategy to increase its corporate and enterprise customer market share places even more strain on operational teams, who must already face the strong demands of enterprise customers in terms of individual SLAs and customer-specific monitoring. To cope with all of the above and to provide a competitive advantage in the enterprise customer segment, Vodafone decided to start their "Next Generation Service Assurance" OSS consolidation and transition program.

THE CHALLENGE

- A vast amount of different, technology-oriented tools

- High license and maintenance costs, expensive and time consuming OSS integration

- The need to efficiently manage increasing service complexity (fixed/mobile/IT convergence)

- Increasing pressure on time to market and agility

- Limited capabilities for further automation (functional gaps and complex OSS architecture)

- Missing support for operations to evolve from network to service and customer-centric management

THE IMPLEMENTED PRODUCT

Comarch's service model-driven Next Generation Service Assurance (NGSA) product provides the OSS capabilities needed to cope with enterprise customer demands and enables advanced customer and service management. In addition, rich capabilities to automate processes ensure increased operational efficiency and cost reductions.

THE RESULTS

- Replacement of three existing fault and service management systems (monitoring more than 750,000 NEs) leading to a reduction of 47% CAPEX and 68% OPEX, plus >30% cost savings for future OSS integrations

- Fully integrated customer, service and resource monitoring for all network domains, enabling Vodafone to shift from resource-centric fault management towards customer-centric service assurance

- Proactive monitoring of corporate customer services based on automated service and customer impact analysis (initial service model incl. more than 200 services and more than 150 top corporate customers)

- Shorter problem resolution times and increased operational efficiency thanks to advanced alarm reduction and correlation and automation of manual processes of NOC and SOC teams

- Improved service quality and customer experience thanks to proactive monitoring of service performance KPIs based on integrated service quality management

- The NGSA system has proven to be scalable and a centralized platform that currently supports multiple Vodafone operators

With their modern and innovative OSS portfolio, Comarch has repeatedly demonstrated strong and reliable business partnering with Vodafone. Comarch has provided high quality COTS products, coupled with their impeccable services to implement solutions on time and within budget, adapting swiftly to new business requirements arising during and after implementation. Considering factors such as time to market, quality to market, attentive customer focus, agility, value and innovation, Comarch is a partner who invariably ticks all of the boxes.

Shane Gaffney
Director of OSS, Central Europe
Vodafone

OPTIMIZING FIELD SERVICE MANAGEMENT FOR BETTER CUSTOMER EXPERIENCE | VIASAT

THE BUSINESS NEED

Thanks to the acquisition of WildBlue Communications, ViaSat has become an important player in the satellite Internet market in the United States, delivering its services to places that other technologies cannot reach. The rapidly increasing number of new customers has raised new challenges in mobile workforce organization and efficiencies. As a result, ViaSat was looking for a system that would help the company satisfy customer expectations for excellent service and meet increased demand. for broadband services.

THE IMPLEMENTED PRODUCT

Comarch Field Service Management is a comprehensive product that ensures automated management of technical staff in the field, in accordance with availability of resources, and provides complete support for technicians, including mobile access to the system. The system enables reduction in the amount of paperwork and better accuracy of scheduling customer visits, as well as lower costs thanks to optimized routing. Fulfillment partner management, with a reporting functionality, ensures centralized management of work orders dispatched to different subcontractors, such as sales and fulfillment partners, and enables their performance to be monitored.

THE CHALLENGE

- Efficiently manage broadband services delivered over a large territory (across the United States), with many sales and fulfillment partners

- Optimize resource use planning and increase management tool flexibility

- Centrally manage work orders dispatched to different providers, including fulfillment partners and self-installing dealers

- Prioritize work orders and assess fulfillment providers smartly, and automate processes that clear executed tasks

- Determine during the first call how much time is required to install or repair customer equipment, and dispatch field work orders promptly, without manual intervention

- Gain insight into real-time information on work order status, and monitor key performance indicators (KPIs) for the company's services, and the performance of its fulfillment providers

THE RESULTS

- Faster scheduling of customer appointments and execution of escalation procedures

- Increased number of work orders executed daily, enabling new customers to enjoy ViaSat's services more quickly

- Full control over work order fulfillment – starting from the creation of a work order with a defined execution time, through dispatching, execution and closure of work orders

- Improved productivity of dispatchers' and technicians' thanks to an automated process of scheduling and processing work orders

- Efficient allocation of technicians and dispatchers based on their availability and skills

- Support for technicians in the field, with mobile access to detailed task lists and the option to report task completion

- Full control over field workforce performance thanks to automated reporting schedules and distribution enabling rapid analysis of field situations

Comarch Field Service Management enabled ViaSat to automate order and resource management processes, which has enabled us to provide an excellent customer experience in fulfilling customer orders.

Brian Crouthers
Director of Field Operations
ViaSat Inc.

IMPROVED EFFICIENCY OF NETWORK PLANNING AND OPTIMIZATION PROCESSES IN TELEFÓNICA SUBSIDIARIES IN LATIN AMERICA | TELEFÓNICA

Telefónica

THE BUSINESS NEED

In recent years, Telefónica has seen exponential traffic growth in transport networks, with the associated increase in network and operations investments and complexity. In order to overcome this challenge, Telefónica launched its new Transport Optimization Program, with the main goals of optimizing the current network and ensuring efficient future growth. The company chose Comarch as a trusted partner in their OSS transformation.

THE IMPLEMENTED PRODUCTS

Comarch was recommended as the system supplier by Telefónica's Global Headquarters, with the goal of delivering the project in five countries in South America. The framework-based system delivered by Comarch responded to the needs of Telefónica's multi-vendor and multi-technology environment and was composed of four connected modules: Next Generation Network Planning, Network Inventory, Configuration Management and Auto-discovery & Reconciliation.

THE CHALLENGE

- Minimalize the discrepancies between data in the systems and in the live network. The company's multi-vendor and multi-technology network infrastructure in South America is managed with a multitude of legacy systems

- Shorten time to market for new network resource deployments

- Enhance data synchronization with the network in a simple and effective environment

- Accelerate network planning processes

- Reduce the cost of creating and operating the transport network

THE EXPECTED RESULTS

- Cost savings in transport network creation and operation

- Synergy in purchasing new resources from suppliers, thanks to the deployment of global planning processes

- Simplification of planning processes and tools

- Shorter time to market and automation of new network resource deployments

- Better utilization of the currently deployed network resources

- Simplification of the IT environment in Telefónica subsidiaries

As part of Telefónica's strategy, our network and operation support systems play a crucial role as enablers of the services we provide to our clients. Implementing Comarch Next Generation Network Planning is a major step towards improving the efficiency of network planning and optimization processes in our subsidiaries in Latin America. Comarch was chosen as it has already proven to be a trusted partner of the Telefónica Group in Europe, and shown a great degree of flexibility in meeting our needs. The current implementation will provide an integration platform for a best of breed OSS solution, unified and reused across the group.

José González Díaz
Director of Transformation & OSS, Global CTO
Telefónica

MVNO TRANSFORMATION AND BSS OVERHAUL FOR THREE MOBILE VIKINGS NV BRANDS
| MOBILE VIKINGS

THE BUSINESS NEED

Mobile Vikings, part of DPG Media, was planning digital transformation of its mobile spectrum brands (Mobile Vikings, Stievie and JIM Mobile). The goal was to expand from a light MVNO to full MVNO in a cost-effective manner. This meant bringing together these brands, with a single, unified BSS to make business rules convergent. Comarch was chosen as provider due to its optimal coverage, extensive functionalities, best value for money offer, and experience in the telecommunications industry.

THE IMPLEMENTED PRODUCTS

Comarch Smart BSS and Wholesale Billing for Mobile Vikings includes CRM, Self-care, Billing System, Product Catalog, Voucher Management, Customer Lifecycle Management, Loyalty Management, and Application Integration Framework. These optimize charging, invoicing and billing, and support authorization, service provisioning, real-time authentication, subscription and voucher management, balance checks, top-ups and business relations.

THE CHALLENGE

Beginning with three distinct brands, Comarch's system had to deliver convergence through a single BSS, in a project involving migrating existing systems to one that could integrate easily and was flexible enough to facilitate new product requests.

The deployed system had to overcome challenges associated with integrating the online control session for prepaid accounts from two different vendors.

Mobile Vikings also faced regulatory pressure, with strict deadlines set down by the European Commission.

THE RESULTS

Comarch Smart BSS was built to replace the Stievie, JIM Mobile and Mobile Vikings systems, in just 18 months.

JIM Mobile & Mobile Vikings were seamlessly migrated to the new OCS without any customer interaction, with the Stievie migration taking place in between. Mobile Vikings' financial system was fully integrated, with comprehensive reporting for business KPIs and daily activities.

The Stievie was deployed in the Comarch Data Center in Kraków, in a manner flexible enough to add nView partner systems on demand. Comarch Smart BSS now handles over 300 million monthly charging records, supporting Mobile Vikings' strong position on the Belgian telco market.

To support our FMVNO transition, Unleashed was looking for a technology partner that could help us with a BSS system that offers the full administrative scope. This BSS should cover our current mobile operations, but also has to be ready for our future multimedia operations. After intensive workshops, we are convinced that the Comarch Smart BSS and IPB solutions offer the modularity and comprehensiveness to achieve these goals. Taking into account Comarch's international and professional experience, we believe this partnership can result in great success.

Koen Vermeire
BSS Program Manager

OPTIMIZATION OF FIELD SERVICE MANAGEMENT FOR A NETWORK COVERING MORE THAN 300 000 SQUARE KILOMETERS AND MORE THAN 20 MILLION SUBSCRIBERS
| ORANGE POLSKA

orange™

THE BUSINESS NEED

As the leading supplier of telecommunications services in Poland, Orange Polska was seeking to build on its reputation for the choice and quality of services offered to its 20 million-plus subscribers over a geographical area covering more than 300 000 square kilometers. The company wanted to reduce the costs of network service, simultaneously improving the quality of performed tasks. To this end, Orange Polska selected Comarch as partner for network service development.

THE IMPLEMENTED PRODUCT

Comarch Field Service Management was implemented in modular form. The solution supported field and back office employees, and included Dashboard, Automated Scheduling, Resource and Skill Management, Digital Map, Mobile Access and Reporting. Fully integrated with the Orange Polska environment, Comarch FSM was delivered with network inventory systems and trouble ticketing tools.

THE CHALLENGE

- To provide an automated system for independent, regional field units, in a way that was both comprehensive and decentralized.

- To address a complex project covering a large geographical area, and to establish new organizational attitudes

- To deliver well-defined, stable structures including mobile devices, geographical information systems and automated task scheduling

THE RESULTS

- Successful implementation of lean management methodology for field service operatives

- Higher efficiency among field teams and back office staff, including transport management

- Centralized management, monitoring and analysis of resource allocation, network management, field work and sophisticated orders

- Automated task dispatching

- Tools for real-time task management with focus on correcting network errors

Comarch's solution enabled us to introduce major improvements and streamlining in the organization. As a result, we could reduce operational costs. The system not only automated dispatching tasks but also, thanks to the integration, became a basic tool for completing the department's everyday work.

Krzysztof Zielosko
Director of Network Support Tools
Orange Polska

DEPLOYMENT OF COMARCH CONVERGENT BILLING SOLUTION | SÍMINN

THE BUSINESS NEED

Síminn needed to modernize its existing billing system, which was no longer being developed and didn't meet the company's operational requirements:

- Some processes were being resolved outside of the system (for example, in the mediation module)

- The system was expensive and complex in daily operations, maintenance and in cases of integration with surrounding systems

- It was not possible to separate wholesale and retail sales as required by internal regulations

THE IMPLEMENTED PRODUCTS

The solution we implemented is constructed on the basis of two Comarch products: Comarch Application Integration Framework – a solution that automates B2B (business to business) and A2A (application to application) integration for the proposed new billing system solution and the Síminn IT ecosystem. Comarch Convergent Billing System – a comprehensive billing system for post-paid and pre-paid convergence, installed with its post-paid modules only, in line with the customer's request.

THE APPROACH

The old system lacked key billing functions, which were developed outside. To address the problem of compounding technical debt, we decided to decrease the complexity of the legacy ICMS used by Síminn, increase system configuration flexibility, and shorten time to market. The project requirements called for a complex tariff plan configuration – many types of services, a long history of contracts with several contacts unmodified for many years, more than 2 000 products, 500 types of discounts, thresholds, ceilings and charge splits.

THE RESULTS

The implementation of Comarch Convergent Billing System and Comarch Application Integration Framework resulted in a general reduction in the number of systems that our customer is required to manage, increased automation, and caused a significant decrease in the total bill run time. Additionally, our solution obtained the following results:

- Easier and faster verification of invoicing process

- The whole billing functionality that had been implemented outside ICMS was configured in CBS

- A clear separation between wholesale and retail

- Time to market was shortened and complexity was reduced

Following a thorough selection process, we chose Comarch as BSS vendor to replace our existing billing system as the solution proposed by the company was the best fit to our requirements. It has to support not only contemporary but also future business models and market trends, with a strong focus on customer experience. In addition, we were impressed by Comarch's technical expertise and dedicated approach. We place great value on long-term relationships with our business partners, and we see Comarch as an agile organization that has a lot to offer for telecoms, especially in today's digital services era

Eric Figueras
Vice-president and CTIO
Síminn

ESSENTIALS OF TELECOM BUSINESS

AI/ML-DRIVEN NETWORK EFFICIENCY

To achieve higher efficiency in the BSS/OSS area, systems based on AI and ML are required. Deep automation of 5G operations helps reduce costs and shorten time to market. In this way, telecoms gain the ability to customize and innovate in their portfolios.
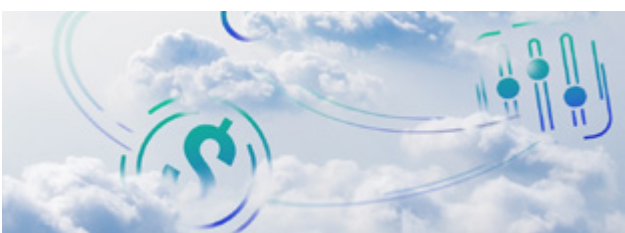
FULL NETWORK CLOUDIFICATION

Create digital telecom by providing E2E visibility, management and orchestration of modern clouds and networks. It enables CSPs to integrate across multiple vendors and technologies, making deployment of services and upgrades much faster thanks to telco cloud and DevOps.

COMPREHENSIVE NETWORK OVERVIEW

Utilize telecom resources effectively, and optimize performance and cost-effectiveness with a consolidated and consistent overview of the network. Comarch's product provides a network-driven inventory and minimizes the overall effort of maintaining an up to date network state.

5G-READY BUSINESS

To take advantage of 5G-driven services, telecoms need to implement future-proof OSS/BSS systems. A single platform based on 3GPP standards enables organizations to offer solutions tailored to meet customers' needs, based on intent-driven solutions for 5G network modelling and orchestration.

FUTURE-PROOF IOT BY DESIGN

Use Comarch's product for IoT monetization to manage IoT sales, billing, customer and SIM management processes. Build new IoT-driven services to address customers' needs – smart factory, smart metering, asset tracking, and services for other IoT verticals.

MONETIZING VERTICAL MARKETS

Comarch's cloud billing solution with multiple options of functionalities will boost telecom business and increase employees' productivity and performance. This flexible, end to end system can support monetization on markets such as e-health, entertainment, insurance and more.

BORDERLESS INTERNATIONAL COOPERATION

Manage the lifecycle of telco partnerships from onboarding to settlements. Model different services with automated business processes to address all enterprise customers' needs. Comarch's product provides support by creating flexible cooperation with various third parties.

OMNICHANNEL DIGITAL CUSTOMER ENGAGEMENT

Improve telecom customers' digital experience with Comarch's product by ensuring readable and easily digestible visual cues. Easy reporting, recommendations and personalization engines, along with a 360-degree view of operations, are key to successful customer journeys.

END TO END ORCHESTRATION AND NETWORK PROCESSES

A high level of network function virtualization and programmability is a must for digital telecoms that are focused on modern and multi-technology networks. Comarch BSS/OSS systems ensure end to end orchestration of network planning, optimization and operations.

AUTONOMOUS NETWORKS FOR UNLIMITED 5G USE CASES

Comarch's product for telecoms enables closed-loop network automation, self-healing and self-scaling – all automated and in real time. Increase network stability, reduce the occurrence of human-errors, react rapidly to network events, and simplify service design.

DIGITAL ENTERPRISE CUSTOMER EXPERIENCE

Increase digital enterprise customer experience (CX) by enabling managing relations with enterprises, covering all aspects of telecom services from simple ones such as mobile and fixed voice, and data, up to complex services such as VPN, data center and cloud.

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COMARCH

ABOUT COMARCH

Since 1993, Comarch's specialist telecommunications business unit has worked with some of the biggest telecoms companies in the world to transform their business operations. Our industry-recognized telco OSS and BSS products help telecoms companies streamline their business processes and simplify their systems to increase business efficiency and revenue, as well as to improve the customer experience and help telcos bring innovative services to market. Comarch's customers in telecommunications include Telefónica, Deutsche Telekom, Vodafone, KPN and Orange.

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