



NetCracker Cable Industry Solution

The Operations Transformation Challenge

Cable operators face unprecedented opportunities. Advances in technology have enabled them to transform from distributors of television programming into next-generation communications providers offering a vast array of content and services. New services range from highly targeted digital content to voice, interactive, and mobile services.

With these exciting opportunities come challenges: operational challenges caused by interactive services and increased network complexity, and business challenges caused by demanding customers and competitive pressures. The infrastructure required to address these challenges, however, is frequently a maze of custom-built, silo systems inherited from acquisitions. Often there is little automation.

To take advantage of new service opportunities and remain competitive, cable operators must transform their operations environments. Transformation projects are complex, but the rewards are substantial — increased revenues, reduced operational costs, and stronger customer relationships.

From Mom-and-Pop to Multinationals

From its inception in the mid-twentieth century, when it improved the reception of television signals in remote areas, cable has been a community-driven industry. Over time, cable operators transformed their businesses by leveraging the ability to deliver broadcast signals over hundreds of miles. This enabled them to transform from conduits that delivered local programming into providers of next-generation communications services. At the same time, small cable operators — often family-owned businesses that targeted limited geographic regions — merged to become Multiple System Operators (MSOs). From these humble roots have emerged some of the world's largest media and entertainment companies, such as Comcast, Cox Communications, and Liberty Global.

Voice and Beyond

The majority of cable MSOs have committed to VoIP rollouts, and cable voice services are steadily capturing market share from incumbent landline operators. Cable operators are also offering high-speed Internet access, and they are penetrating the business market with services such as IP PBX, digital trunking, and Service Level Agreements.

By enriching their portfolios, MSOs have positioned themselves to offer service bundles. Surveys have

shown that customers are far less likely to churn when they subscribe to a service bundle, rather than to individual services. Bundled services are a powerful acquisition and retention tool that cable MSOs can leverage as they go head to head against Telco and wireless competitors.

The Cable Challenge

The cable challenge is to ensure that operations and IT systems can support rapid business growth. This requires significant infrastructure transformation to address the following issues:

Systems Consolidation: MSOs must manage a wide range of business, operations, and IT systems acquired through the mergers, acquisitions, and property consolidations that created today's largest operators. In addition, many operators have separate infrastructures for each of their services. The resulting system silos are difficult and expensive to maintain, and the lack of integration precludes end-to-end service views.

Lack of Automation: Many legacy cable systems were custom-built. Manual processes, and resulting high fallout rates, must be eliminated so new services can be provisioned rapidly and efficiently.

Home Network and Device Management: Cable companies must be able to provision, manage, and inter-work CPE, STBs, and the proliferating number of home networking devices.

Service and Customer Experience Management: Competition has made service and customer experience management critical to success. Cable operators must understand how their networks and services are behaving — but more importantly — how their customers are actually experiencing services.

The NetCracker Solution

NetCracker Technology enables Service Providers to deliver rapidly and manage effectively next-generation converged services. NetCracker is the global leader in managing and delivering transformation projects for cable, fixed, and mobile Service Providers. It has the largest number of Tier 1 transformation deployments worldwide — including successful implementations at UPC Broadband, cablecom, France Telecom, MTS, Sprint, TELUS, and Telstra.



“The flexibility of NetCracker's platform allows us to adapt quickly to changing market and customer needs. In addition, we are able to transform our Service Layer through NetCracker's Service Inventory module.”

Bonnie Gray, Chief Network Officer, **UPC Broadband**

NetCracker's Telecom Operations and Management Solutions (TOMS) Product Suite enables cable operators to speed the deployment of new services — and manage the entire customer experience. Its comprehensive portfolio of TOMS-associated products, all pre-integrated with NetCracker Framework, provides flexibility and scalability and allows rapid and seamless integration with existing systems.

The following NetCracker modules are particularly relevant to addressing the cable operator challenges outlined above:

Customer Information Management gives CSPs a holistic view of their customers and provides a better understanding of relationships and policies within customer hierarchies by accumulating multi-faceted information about end user personal, behavioral, buying, and spending details.

Customer Order Management facilitates the tracking and management of numerous customer orders in multi-service, multi-vendor environments.

Product Information Management gives CSPs a holistic view of and unhindered access to up-to-date product information stored in the integrated, unified, and centralized Product Catalog.

Service Inventory stores configuration information for all installed services, enabling operators to create an end-user service quickly and efficiently by combining service components.

Service Quality Management and **Service Problem Management** enable timely identification of network problems impacting individual customers and services as well as customer-centric problem resolution.

Service Order Management enables CSPs to automate provisioning of multi-vendor, next-generation products and services, provides functionality for service order decomposition, streamlines the execution of the order provisioning flow, and facilitates service order lifecycle management.

Service Activation enables automated service activation, completes the end-to-end service delivery process, and provides a unified approach to service activation regardless of specific vendor-dependent techniques.

Resource Inventory stores network configuration information and capacity management rules for equipment, locations, topology, and logical resources.

NetCracker's Value Proposition

Today's communications world is complex and demands rapid delivery of custom services over a wide range of Network and IT infrastructures. NetCracker brings order to this complexity through flexible and powerful software solutions combined with industry-specific expertise and professional services.

NetCracker's comprehensive solutions transform the Service Layer by linking customer services with the Network Layer. This holistic approach allows systematic analysis of end-user problems, whether they are related to a service or the network. The result is faster service delivery at reduced cost, the ability to provide any service over any network, and increased customer satisfaction.



“NetCracker's ability to provide end-to-end correlation between customers, their services, and the network elements they use allows us to offer high quality, SLA-based services to our business customers.”

Mitat Kizilelma, Head of Operations, **Cablecom**

NetCracker's unique approach to the market includes:

Customer Focus: NetCracker has a strong focus on its customers and works closely and collaboratively with them to ensure success.

Holistic View: NetCracker takes an end-to-end, business-centric view of customer needs, as opposed to a technology-specific or single-process view.

Broad and Mature Product Suite: NetCracker's powerful, feature-rich products are deployed by Tier 1 cable, wireless, and fixed carriers worldwide. They address mission-critical areas of fulfillment and assurance from order to activation.

Flexible and Scalable Solutions: NetCracker's flexible solutions allow operators to introduce new services quickly and to model, provision, and manage any network device. Its scalable architecture enables operations systems to keep pace with future business demands.

Leading Technology: NetCracker products are built on an open, n-tier architecture based on J2EE standards. On each tier, powerful applications ensure scalability and smooth integration.

Solutions Approach: NetCracker works with its customers to understand their unique business challenges and to identify the most appropriate solution and implementation strategy. NetCracker's Global Solution Delivery teams configure and deploy the software to meet customer needs and provide training to ensure successful adoption.

NetCracker delivers value to cable companies by combining its fulfillment, provisioning, and service management products with a solutions approach. NetCracker leverages its best practices and domain expertise to build automated and reusable service components, creating an end-to-end capability for fulfillment and service management.

By transforming their operations environments into flexible, scalable, and agile engines, cable operators can accelerate the order-to-cash cycle and create the foundation for delivering and managing compelling new revenue-generating services.

With NetCracker as a transformational partner, cable operators can increase revenues, reduce operational costs, and build stronger customer relationships.

Proven Operations Solutions

Speed service delivery with NetCracker product domains:

- Customer Management
- Product Management
- Revenue Management
- End-User Devices
- Service Fulfillment & Assurance
- IT Platforms
- Resource Management
- Network Management

NetCracker's innovative approach enables rapid integration with legacy IT and operations systems

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"NetCracker continues to adapt and expand its product set to prepare for the next logical step in service management. NetCracker benefits from its agility and commitment to customer requirements, establishing close ties to its customers in a consultative relationship."

Frost & Sullivan, *The Changing Face of Fulfillment: Integrated Fulfillment Solutions*, March 08