

# Introduction

Currently, one major strategic topic dominates the concerns of CSPs: How to manage the operational paradigm shift from traditional network to cloud-native and software-driven operations. This shift is compelling CSPs to reinvent themselves so they can participate in the digital economy, digital value chains and partner ecosystems.

Traditional communications services, cloud-native services, as well as external digital content service components must be composed or mashed together into product or service bundles.

These models also need to provide more competitive personalized services, many of which consist of third-party digital content and components.

Finally, they need to manage adequate customer experience across the end-to-end internal and external system environment. **In other words, in the new digital world the customer takes center stage. The underlying technology is a given.**

As a result of this evolution, the operational complexity has grown exponentially. CSPs have adopted sourcing patterns to cater to these changes.

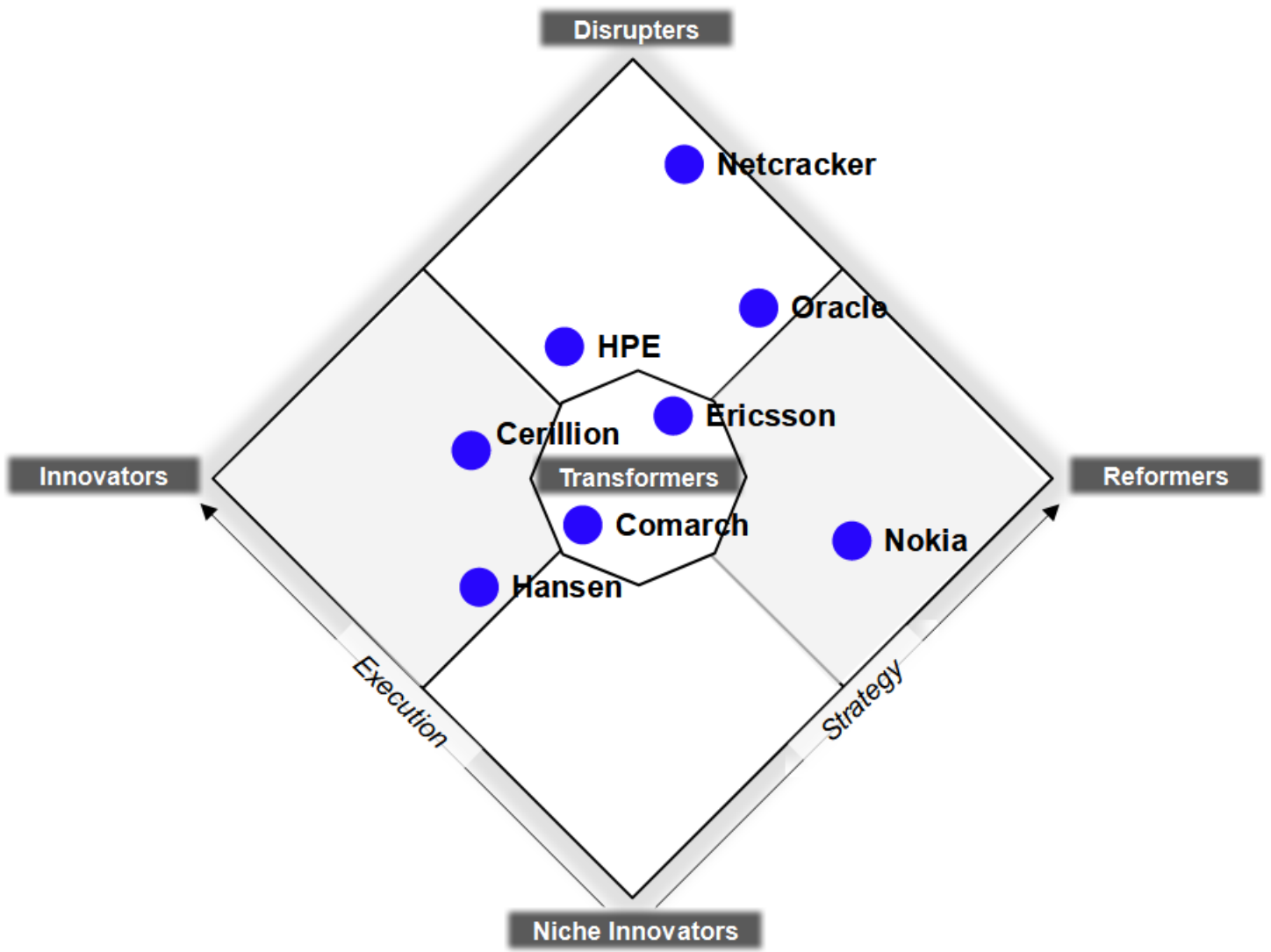
The trend is to source OSS and BSS to support business needs and to cover business processes. This development is mirrored in the vendor landscape.

Telco Republic observes continued consolidation in the marketplace and end-to-end, integrated operations and business support solution offers, in the report referred to as NG-TOBS.

**Telco Republic is launching the Disrupter Quintant (DQ) for Next-Generation Telecom Operations and Business Support Systems (NG-TOBS) to provide guidance to CSPs how to navigate this emerging market, and how to make the best technology buying decision.**

This is the inaugural edition of the DQ. It fills a white space in covering this important market that has been neglected by mainstream industry reporting and analysis.

**Figure 1. Disrupter Quintant for Next-Generation Telecom Operations and Business Support Systems (NG-TOBS)**



Source: Telco Republic, 2022

Note: The following vendors met the inclusion criteria but did not participate in the RFI and declined to review their profiles: Amdocs, Beyond Now, Huawei.

# Netcracker

## Who Should Consider Netcracker

The following CSPs should consider Netcracker:

- Large tier 1 CSPs looking for a single vendor leading their end-to-end OSS/BSS transformation.
- CSPs that lack in-house resources to lead and manage complex transformation projects.
- CSPs that are looking to incrementally move from traditional networking to cloud-based and digital business-driven operations across ecosystems.

## Disruptive Differentiators

Netcracker is placed in the **Disrupters** quintant and differentiates itself as follows:

- Ability to support multi-domain and multi-technology orchestration scenarios across all layers of a CSP's (hybrid) infrastructure, from the core and 5G to the edge.
- A mature multi-cloud strategy. Its comprehensive partnerships with major hyperscalers will position the company well at the forefront of the fast-growing market for OSS/BSS cloud service delivery, also enabling as-a-service models such as B2B2X.
- An end-to-end OSS/BSS solution portfolio coupled with transformation leadership capabilities centers on a strong professional services methodology, as well as operational KPIs suited for digital business and enterprise service delivery scenarios.

## Company Facts

Netcracker has been a wholly owned subsidiary of NEC since 2008 and a global provider of CSP operational technology software and services. Originally a provider of service and resource management, it became a full-stack OSS/BSS vendor through its acquisition of Convergys' Information Management business unit in 2012.

Netcracker has CSP customers of all tiers, types, and sizes worldwide.

It is headquartered in Waltham, Massachusetts, with subsidiaries on every continent.

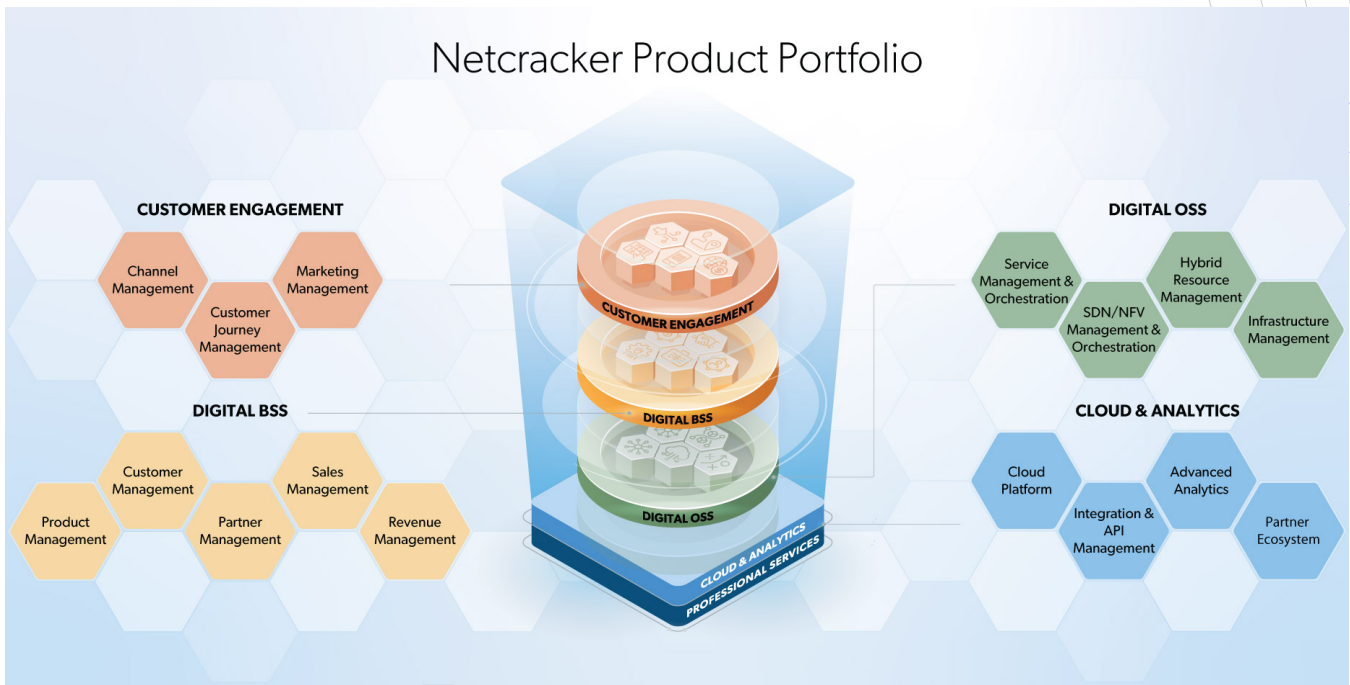


## NG-TOBS Portfolio Overview

Netcracker's Digital Product and Services Portfolio is a complete, mature service fulfillment, assurance and customer management and monetization product suite. It is based on a modern, highly configurable solution architecture that has been developed from scratch. It is driven by continuous, solid R&D investments that put it in a prominent industry position as a cloud-native and microservice-based digital platform provider.

The portfolio is TMF, ETSI, MEF, ONAP, OSM and O-RAN compliant and can be deployed in a best-of-suite or best-of-breed fashion on-premise, in the private cloud, the hybrid cloud and the public cloud (AWS, Google Cloud, Microsoft Azure).

Figure 7. Netcracker's NG-TOBS Portfolio



Source: Netcracker, 2022



## Strengths

### Five-Year Innovation

Netcracker's innovation strategy addresses multi-vertical 5G (6G) services, providing NG-TOBS capabilities to enable automation and monetization for multi-domain 5G networks. It provides AI/ML-driven, personalized, digital customer engagement, as well partner-ecosystem and digital marketplace solutions. Its multi-cloud operations strategy (telco cloud, public cloud and edge cloud) will allow CSPs to holistically manage specific services, ensuring OSS/BSS requirements in terms of reliability, scalability and security across the end-to-end infrastructure.

### Product or Service

Netcracker's integrated digital platform provides a full-fledged, cloud-native, end-to-end NG-TOBS solution. Along with its business requirements driven approach, it suits the scenario of many CSPs foraying into new digital business models and partner ecosystems. Its mature solution allows CSPs to tap into connected industries and vertical markets of 5G, IoT and B2B2X, positioning the solution to expand market share in cloud-native NG-TOBS.

## Challenges

### Operational Innovation

CSPs expect their software vendors to step up to some of the change management challenges related to digital transformation, such as interdisciplinary adaptive end-to-end processes, namely market requirement driven development and operations (BizDevOps). This requires additional leadership from Netcracker beyond traditional software implementation, and demands working in a synchronized fashion with the client service delivery organization.

### Sales, Channel and Pricing

While Netcracker succeeded in creating synergies between the customer-facing and network-facing pillars of NG-TOBS, its commercial offer also comes at a premium price. The overall TCO might become a deal breaker and be unaffordable for smaller CSPs.



## Strengths

### Customer Impact

Netcracker has been providing NG-TOBS for early mover digital innovators in the telco industry, such as Rakuten, NTT and Etisalat. Netcracker also has a strong transformation leadership track record, related to modernization of service provider business and operations environments for telcos such as Deutsche Telekom, T-Mobile and Vodafone. This also includes end-to-end transformations (for example at Andorra Telecom) and telco as-a-service (for example at Telefonica Mexico).

## Challenges

### Vertical Approach

Netcracker is deeply rooted in the telco industry and has signed up a number of high-profile clients in other industries. However, it could extend its market reach with a more targeted strategy focusing on industry verticals that have similar requirements for functionality and scale as telecom providers.