

Digital Transformation Platforms: Competitive Landscape Assessment

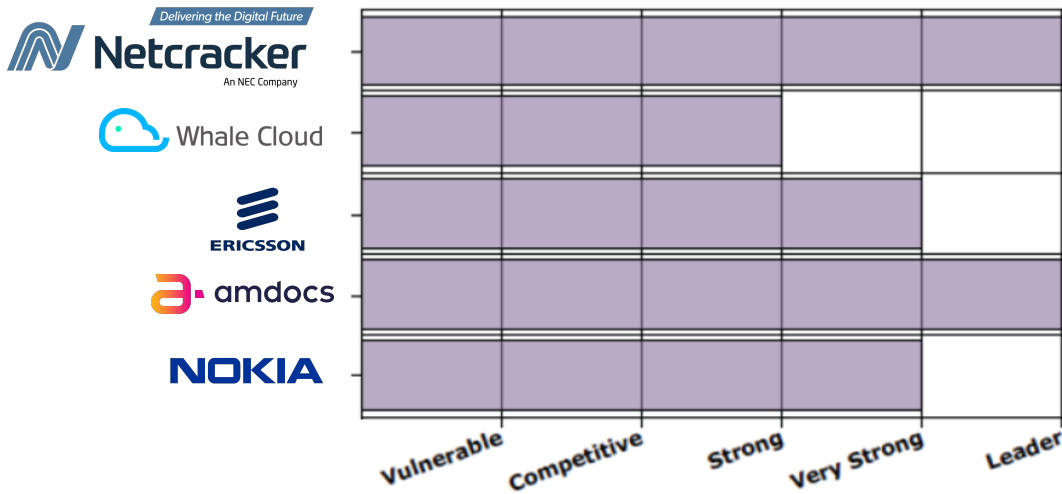
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COMPETITIVE LANDSCAPE ASSESSMENT - DIGITAL TRANSFORMATION PLATFORMS

REPORT SUMMARY:

Digital transformation platforms are helping CSPs become more agile, efficient, and customer-focused, while also opening up new revenue streams in areas like cloud computing, IoT, and 5G services.

PRODUCT CLASS SCORECARD



MARKET OVERVIEW

Product Class	Digital Transformation Platforms
Market Definition	<p>Digital transformation platforms are comprehensive software solutions that enable CSPs to transform their operations, processes, and customer experiences through the integration of digital technologies. These platforms typically include capabilities such as advanced analytics, artificial intelligence (AI), automation, and cloud computing.</p> <p>The products in this market address the problem/opportunity of CSPs needing to modernize their operations and stay competitive in a rapidly evolving digital landscape. These platforms provide a framework to implement digital technologies and strategies that can improve efficiency, enhance customer experiences, and create new revenue streams. By leveraging digital transformation platforms, CSPs can transform their business models, operations, and services, and stay ahead of the competition.</p>

Rated Competitors	<ul style="list-style-type: none"> • Amdocs CES23 • Ericsson Digital Services/Digital Monetization Platform • Netcracker Digital Platform • Nokia Software Suite • Whale Cloud Digital Business Enablement Suite
Additional Competitors	<ul style="list-style-type: none"> • Huawei • Oracle
Changes Since Last Update	<ul style="list-style-type: none"> • April 2023: Ericsson and Intel signed a MoU to accelerate digitalization in Malaysia through the development of advanced 5G use cases. • March 2023: Whale Cloud announced that Malaysian service provider Sarawak Digital Economy Corporation (SDEC) signed a three-year contract with Whale Cloud to implement its BSS to accelerate its digital transformation. • March 2023: Nokia and Indosat Ooredoo Hutchison (IOH) signed a MoU to accelerate Indonesia's digital transformation. As a part of agreement, Nokia's private wireless solution will be deployed across Sumatera and Kalimantan in Indonesia.

MARKET ASSESSMENT

CSPs are investing heavily in digital transformation to improve their operations, enhance customer experiences, and capitalize on emerging technologies and markets. Some of the areas where CSPs are investing the most in digital transformation platforms include 5G networks, customer experience, automation and AI, edge computing, and cloud services.

Vendors are playing a critical role in helping CSPs navigate their digital transformation journey. In the OSS/BSS space, they provide a comprehensive set of tools and technologies to enable CSPs to transform their operations and develop new products and services. These tools include features like network planning and optimization, order management, service activation, and billing. The integration services they provide help CSPs integrate digital solutions with their existing OSS/BSS systems and infrastructure, ensuring a seamless transition to digital operations, which essentially means managing cloud-based services and infrastructure. Data analytics and AI are another set of tools that help CSPs extract insights from their OSS/BSS data, enabling them to make data-driven decisions about their operations and services. This includes areas like network performance, customer experience, and revenue management.

CSPs also face challenges in their digital transformation journey including outdated and complex legacy systems and infrastructure that are difficult to modernize and integrate with new digital solutions. Some of the technologies that pose challenges for CSPs include:

Cloud Computing: CSPs are migrating their legacy systems to the cloud to reap the benefits of cost savings and scalability. However migrating to public cloud raises concerns around data security, privacy, and regulatory compliance.

Internet of Things : IoT devices generate vast amounts of data that CSPs need to store, manage, and analyze. Managing this data requires significant investment in infrastructure and analytics capabilities.

AI: AI has the potential to revolutionize CSPs' operations by automating processes and improving the customer experience. However, implementing AI requires significant investment in data analytics, machine learning (ML), and natural language processing (NLP) capabilities.

CSPs are ramping up their B2B, B2C, and B2B2C models through digital transformation platforms in several ways:

B2B: CSPs are using digital transformation platforms to offer their B2B customers new services and solutions. They are leveraging IoT technology to offer enterprise customers innovative solutions like fleet management, asset tracking, and supply chain optimization. CSPs are also partnering with B2B vendors to offer their customers end-to-end solutions that leverage the CSPs network and the vendor's expertise in a specific domain.

B2C: CSPs use digital transformation platforms to enhance the customer experience and offer new services to their B2C customers. They use AI and chatbots to provide personalized and real-time customer support. They are also offering innovative services like mobile payments, mobile banking, and mobile entertainment to attract and retain customers.

B2B2C: CSPs are using digital transformation platforms to create new business models and offer new services to their B2B2C customers. They are partnering with third-party providers to offer customers bundled services that combine mobile, broadband, and content services. They are also using digital platforms to create new revenue streams by offering advertising and sponsorship opportunities to their B2B2C partners.

MARKET DRIVERS

- **Increasing Customer Expectations:** Customers today expect seamless and personalized experiences across various digital channels. Digital transformation platforms enable CSPs to meet these expectations by offering enhanced services, improved customer support, and personalized offerings.
- **Evolving Technologies:** Advancements in technologies such as 5G, IoT, AI, and cloud computing are driving the need for digital transformation. CSPs and vendors are leveraging digital transformation platforms to capitalize on these technologies and unlock new opportunities for innovation and revenue generation.
- **Growing Competition:** The telecom industry is highly competitive, with new players entering the market and traditional boundaries blurring. Digital transformation platforms allow both vendors and mobile operators to differentiate themselves by offering innovative services, optimizing operations, and creating new business models.
- **Cost Efficiency and Operational Optimization:** Digital transformation platforms enable CSPs to streamline their operations, automate processes, and optimize resource allocation. This leads to cost savings, improved efficiency, and faster time-to-market for new products and services.
- **Data-driven Insights:** Telecom companies generate vast amounts of data from their networks, customer interactions, and operations. Digital transformation platforms leverage data analytics and AI technologies to extract actionable insights from this data, enabling better decision-making, predictive analytics, and personalized services.
- **Partnerships and Ecosystem Collaboration:** Digital transformation platforms facilitate partnerships and collaboration with other industry players, enabling telecom companies to create innovative solutions and tap into new markets. These platforms provide the foundation for ecosystem development and enable telecom companies to offer bundled services and integrate with third-party providers.

BUYING CRITERIA

- **Portfolio Breadth:** In order to assess true portfolio richness, GlobalData assesses each vendor's focus across three main areas: OSS/orchestration, BSS, and customer-facing channels. In addition, the degree of support for various public cloud platforms, notably Amazon Web Services, Microsoft Azure, Google Cloud Platform, and Alibaba Cloud is weighed. Other factors considered include prime systems integrator capabilities; support for operations outsourcing; testing and certification outsourcing services; and degree of support for passthrough/B2B2X services offered to consumers and/or enterprises.
- **Capabilities and Expertise:** Within this area, GlobalData examines the vendor's total workforce devoted to digital transformation, including for various functions such as consulting and systems integration, user experience/design, and training. It also assesses how vendors might reduce their workforce when they acquire AI and automation capabilities. GlobalData also examines vendor support for relevant certifications, including those related to customer care, network, and retail. Additional criteria include analysis of the most relevant digital transformation partnerships; digital transformation-related R&D and intellectual property assets; and any cutting-edge technologies such as blockchain being used.
- **Tools and Methodologies:** GlobalData assesses vendors' utilization of AI and analytical tools and methodologies to enhance their digital transformation capabilities, as well as any tools being offered to assist CSPs in managing third-party ecosystems in support of digital transformation goals. Finally, the degree to which agile development and other relevant tools or methodologies are used to provide unique value to customers.
- **Delivery and Commercial Flexibility:** Analysis focuses on flexibility of business models being enabled by vendors, including support for "as-a-Service" and "pay as you go" delivery models; support for risk/reward and outcome-based delivery models; and joint innovation models in cooperating with CSPs. A vendor's flexibility in terms of offering modular support to cater to customers not ready or willing to embrace a full stack of digital transformation software platforms or functionalities is also parsed.
- **Stability and Momentum:** GlobalData assesses vendor stability by analyzing recent financial performance, including revenue and margin performance, debt profile, and other factors indicating corporate stability. Momentum is analyzed by referencing total digital transformation customer base; recent momentum with "showcase" customers; and new badges as well as expanded customer relationships in the past year.

VENDOR RECOMMENDATIONS

- **Integration with Legacy Systems:** Digital transformation platforms often need to integrate with existing legacy systems and diverse network architectures. Vendors need to provide seamless integration capabilities, resulting in simpler and shorter implementation times.
- **Need for Customization:** Vendors need to provide enough customization and flexibility in their digital transformation platforms to meet the unique needs and requirements of CSPs. Instead of relying on custom coding for each customer, vendors should enable customization through configuration whenever possible.
- **Intuitive User Interfaces:** Vendors should prioritize intuitive user interfaces, streamlined workflows, and user-centric design to ensure that the platforms are easy to use and require minimal training. No- and low-code platforms empower businesses to develop and deploy features and offerings rapidly, without relying heavily on traditional software development processes.

BUYER RECOMMENDATIONS

- **Gauging Vendors' Integration Capabilities:** CSPs should assess the vendor's integration capabilities to ensure that the digital transformation platform can seamlessly integrate with their existing systems, applications, and infrastructure. Compatibility with legacy systems and the ability to handle diverse data sources are critical considerations.
- **Roadmaps:** Vendors should demonstrate a commitment to ongoing innovation and future-proofing the digital transformation platform. CSPs should evaluate the vendor's roadmap, research and development efforts, and partnerships to ensure that the platform will continue to meet their evolving needs and leverage emerging technologies.
- **Total Cost of Ownership (TCO):** CSPs should consider TCO, including upfront costs, implementation expenses, licensing models, ongoing maintenance and support, and potential scalability costs. It is important to assess the long-term value and return on investment provided by the vendor's digital transformation platform.

FEATURED COMPETITOR

Product Name	Netcracker Digital Platform
Current Perspective	<p>Netcracker Digital Platform has been successfully implemented across numerous CSP networks. T-Mobile, Vodafone, Rakuten, Zain, Verizon, and Etisalat are among those who have chosen to deploy the Netcracker Digital Platform.</p> <p>Netcracker's Digital Platform is built upon the foundation of Netcracker 2020, specifically designed to foster innovation and accelerate agility in driving new business value within the digital ecosystem. The platform enables rapid adaptation to evolving market and business requirements through features like swift multicloud onboarding, broader adoption of Software-as-a-Service (SaaS) offerings, continuous updates, increased automation, and accelerated internal digitalization. It empowers CSPs to not only innovate within their own organizations but also collaborate with partners to deliver compelling services and cultivate immersive customer relationships that create additional value beyond the network infrastructure. Every component of the platform is equipped with open APIs that seamlessly integrate with AI/ML technologies, ensuring the highest levels of security and privacy.</p>
Buying Criteria Rating	<p>Capabilities & Expertise Leader</p> <p>Delivery & Commercial Flexibility Very Strong</p> <p>Portfolio Breadth Very Strong</p> <p>Stability & Momentum Leader</p> <p>Tools & Methodologies Leader</p>
Product Scores	Leader

Strengths	<ul style="list-style-type: none">• The Netcracker Digital BSS/OSS portfolio targets multiple pain points for operators embracing cloud-native digital transformation initiatives.• Netcracker benefits from NEC's expertise and the companies often collaborate on joint projects to develop new technologies and solutions.• It offers a dynamic product catalog management system that allows CSPs to create, configure, and launch new digital services rapidly.
Limitations	<ul style="list-style-type: none">• Netcracker faces competition from both traditional players and new digital disruptors, which could impact the company's growth and profitability.• CSPs may not disaggregate network solutions as fast as anticipated limiting Netcracker's ability to offer its vendor agnostic IT solutions.• Cloud-native solutions have limited customization options compared to on-premise, which limits the ability to tailor solutions to specific business needs.